Second Additional Information (AI)

Proposed Busuanga River Dredging Project

Barangays Adela and San Pedro, Municipality of Rizal and Barangays San Agustin and Central, Municipality of San Jose, Occidental Mindoro

Module	Findings/Specific Description	Response	Page in EIS
ENGR. JOSE REYNATO M. MORENTE (CHAIRPERSON)			
Project Description	The total volume to be extracted is 18,703,066.07 cubic meters (at a depth of 10 meters over a 12.4-kilometer stretch). The Approved MDP indicated in the summary quantities of 3,876,537.17 cubic meters (at Sta 1+050 to Sta 9+000) and 662,148.85 cubic meters (at Sta 0+950 to Sta 3+550). Please clarify the discrepancy.	This was corrected as below: The initial volume of materials needed to be dredged to a level that will enable the carrying capacity of the river to handle 100-Year storm without overbanking / flooding was estimated at 4,538,686.02 m^3. This is broken down into the main channel (STA. 1+050 TO STA. 9+000) @ 3,876,537.17 m^3 and the branch (STA. 0+950 TO STA. 3+550) @ 662148.85 m^3. For the navigation zone, the total volume of sand materials to be initially dredged out to create a navigable lane was estimated at 2,536,078.67m^3.	*Section 1 Project Size Page 1-56*
	The following were not discussed: 1. Components of the project 2. Identification of the impact areas 3. There is no discussion on the sensitive ecosystems that may be affected or likely to be affected by the dredging operations (especially those areas categorized as Pas and/or RAMSAR Site in accordance with DMO 2023-001) 4. Types and quantity of waste to be generated 5. discussion on pollution/waste management was not discussed.	These are provided as below: 1. Section 1.4.3 Project Components The major project components are: • River dredging zone • Navigation zone dredging • Buffer zone • Handling and transport of dredged materials • Cost recovery through sale of dredged materials • Office, staging area, stockpile area and other support facilities 2. Section 1.1.13 Primary and Secondary Impact Areas 3. Section 2.2.1.2.2 NIPAS Areas 4. Section 1.4.8 Description of Waste Management, System for Hazardous Wastes 5. Section 1.4.9 Description of Wastewater Management System	*1. Page 1-49* *2. Pp 1-13 to 1-16* *3. Pp 2.2.1-5 to 2.2.1-7* *4. Page 1-55* *5. Page 1-55*
Assessment of impact	There is no baseline data (water, hydrology, bathymetric and oceanographic studies, etc.)	• Baseline for water quality sampling was conducted on May 16-17, 2023 and October 10, 2023. This is discussed in *Section 2.2.2.3 Water Quality.* • Bathymetric Survey was conducted on July 13-23, 2021 and October 9, 2023. This is discussed in *Section 2.2.2 Water.* • Oceanographic Studies (field survey) was conducted on October 9, 2023. Please see *Section 2.2.2 Physical / Oceanography*	• *Pp 2.2.2-64 to 2.2.2-72* • *Pp 2.2.2-8 to 2.2.2-32* • *Pp 2.2.2-33 to 2.2.2-64*
Carrying Capacity Assessment	The chapter is incomplete. The framework, description and listing of environmental management goals and indicators were not	Section 3 - Carrying Capacity Assessment was fully revised.	*Whole section – 28 pages*

Module	Findings/Specific Description	Response	Page in EIS
	discussed in the draft EIS Report.		
	There is no carrying capacity analysis	The carrying capacity analysis is discussed at Section 3.2.	*Pp 3-3 to 3-28*
Environmental Management Program	As the carrying capacity assessment chapter is not comprehensive, the review of the EMP in the draft EIS report can be undertaken. The EMP is dependent on the carrying capacity assessment.	Please see fully revised Section 4 Environmental Management Program (EMP) All major items have been incorporated in the thoroughly revised EIS. Please refer to the Table of Contents for quick reference.	*Pp 4-1 to 4-15* *All pages*
	Include major items/sections as described in the agreed Technical Scoping Checklist.		
Environmental Compliance Monitoring	EMoP must be summarized using Annex 2-20 of RPM for DAO 2003-30	Please see Table 6-1	*Pp 6-2 to 6-4*
	Please re-write the entire chapter on EMoP consistent with the identified impacts in the EMP.	Please see fully revised Section 6 Environmental Compliance Monitoring (ECM)	*Pp 6-1 to 6-5*
MARIA LOURDES Q. MORENO, PH.D.			
Baseline Assessment	There is no baseline assessment for the freshwater, terrestrial, and marine module	Respectfully noted. The following were conducted as directed and to enhance the EIS studies/report: • Freshwater Ecology Baseline Assessment - October 16-17, 2023, discussed under *Section 2.2.2.4 Freshwater Ecology* • Terrestrial Ecology Baseline Assessment - October 9, 2023, discussed under *Section 2.2.1.4 Terrestrial Ecology* • Marine Ecology Baseline Assessment - October 16-17, 2023, discussed under *Section 2.2.2.5 Marine Ecology*	• *Pp 2.2.2-77 to 2.2.2-99* • *Pp 2.2.1-21 to 2.2.1-50* • *Pp 2.2.2-100 to 2.2.2-132*
	There is also no baseline assessment for the sociology/people module.	Please Note that the People Module was completely rewritten. The results of the Perception Survey serve as the baseline. Also part of the data are the issues and concerns gathered during all the public participation activities. Secondary data were also gathered through online and CLUP.	*All pages of Section 2.2.4*
People	No results on the perception survey were presented	The Perception Survey was conducted on October 18, 2023 in Barangays Adela and San Pedro, Municipality of Rizal and November 9-10, 2023 in Barangays San Agustin and Central, Municipality of San Jose. The results are presented under *Section 2.9.4.2 Perception Survey.*	*Pp 2.2.4-21 to 2.2.4-25*
	Who are the owners of the farms/crops planted in the areas that will be dredged?	*Section 2.2.1.3. Possible Tenurial Issues* There will be agricultural lands that will be affected by dredging based on the Approved Dredging Master Plan. Note that these are within the river regime, but planted to crops nonetheless. As such, the owners of the planted crops shall be determined post-ECC and shall be approached by RC-GPC for possible agreements with the intention of offering just compensation and possible alternative livelihood. According to the General Notes of the DMP Section E, *"As-Staked" Plan shall be prepared by the owner. The preparation of the "As-Staked" Plan*	*Page 2.2.1-19*

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		shall comply with the provisions of DPWH D.O. No. 15., Series of 2016. This is to be conducted once the NTP is issued by DPWH. Only then can the proponent determine the owners of the planted crops to be affected. Please note that this is a very sensitive issue that has to be handled with certainty before the proponent approaches the owners. The identification shall be done in coordination with the Barangay LGU and the concerned units of the Municipal LGU.	
Ecology	What are the present uses and ecosystem services being provided by the river and how will the operation of the project affect these provisioning services?	*Sec 1.4.1 Total Area and Water Use:* In terms of surface water classification, Busuanga River is Class C, wherein the intended beneficial uses are: Fishery Water for the propagation and growth of fish and other aquatic resources; Recreational Water Class II – for boating, fishing or similar activities; and For agriculture, irrigation and livestock watering. The actual uses observed within the project area are for agriculture and very minor domestic use. The nearshore fisheries in the coastal waters fronting the Busuanga River Project is about 1 km from the shore and are largely of pelagic nature. On the other hand, offshore fishing in the Mindoro Strait is more common as it usually yields greater catch rates. However, there is no definite fishing area. Fishers transfer from 'open' (meaning there is no territorial use rights in fisheries in the Philippines as yet) fishing grounds anywhere in the nearshore area where "fish bites" are reported to be good and where schools of fish have been sighted. In the nearshore area fronting the estuary, fisheries operation is conducted anywhere in coastal sea between 1 to 3 kilometers from the shore. There is no 'commercial' fishing boats (as defined in the Fisheries Code) operating nearshore. Bigger municipal fishing boats (not more than 3 GT operate farther offshore, again shifting from one fishing site to another, depending on the prevailing monsoon season and seasonal surges of certain species of fish. The Busuanga River is one of the streams that supply water and irrigation for agricultural purposes to the Rizal and San Jose. There are existing irrigation canals around the project site while more are being built. According to the barangay officials and residents of Adela, the construction of the irrigation system is not yet complete. Water flows through the canals only when there is precipitation. According to Mr. Arevalo of NIA Occidental Mindoro (KII), NIA operates several Communal Irrigation Systems (CISs) along the river. He mentioned that dredging should be undertaken in order to avoid future inadequacy of irrigation water resources. The water inlet is located far upstream of the project area, and therefore, the Project shall not impact on the water quality of this irrigation system though there may be minimal effects in terms of supply volume as the surface water level is eventually lowered.	*Pp 1-31 to 1-32* *Page 2.2.2-33*

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		Lastly, the IAC has established the alluvial sections of this river system as a River Dredging Zone as a flood mitigation measure, this is considered to be the future major activity within the lower Busuanga River in the coming years. *Sec 2.2.2.1.3 Depletion of Water Resources / Competition in Water Use* There are proximal house clusters (with shallow and/or deep wells) surrounding the site but there shall be no groundwater abstraction to be associated with the project activities. Hence, no impact is foreseen in the groundwater resources in terms of both quality and quantity and there shall be no competition in water use. In terms of surface water, there are fishermen nearshore and offshore and a few sustenance fishers along the river, especially near the estuary. There is no competition since the dredging operation shall be done by phases (in small area) and the fishers can still have access to the rest of the project area that are not in active dredging phase. For the irrigation water, the inlet is located far upstream of the project site, and there shall be no adverse effect on the water supply. In fact, dredging is seen to be beneficial in enhancing the irrigation water supply.	
Social Development Plan	The SDP should be based on the baseline assessment results.	Please see fully revised Section 5, Table 5-1 Social Development Plan (SDP)	*Page 5-2 to 5-3*
Impact Areas	On page 35, what is shown is figure 4 not figure 3. What is the basis for the delineation of primary and secondary impact areas/barangays? From the illustration, it is clear that 4 barangays will be directly affected by the project.	*Section 1.1.1.3 Primary and Secondary Impact Areas:* This was fully revised. The 4 impact barangays are barangays Adela and San Pedro, Municipality of Rizal and barangays San Agustin and Central, Municipality of San Jose. The basis for the delineation is presented in the next item below.	*Pp 1-13 to 1-20*
ENGR. DAN GOODWIN S. BORJA			
2.1 (35) Study Area Coverage	Please state clearly the basis of determination of primary and secondary impact areas.	*Section 1.1.1.3 Primary and Secondary Impact Areas* The primary project impact areas for land and water are: the project area (onshore), which is the 538.29-ha area downstream of the bridge to the river mouth of Busuanga River defined by coordinates in Table 1-1 within barangays Adela and San Pedro, Rizal and barangays San Agustin and Central, San Jose; the 70.82 ha area of the river delta for navigation zone; and the 1.5 ha area for stockpile and camp, office and other support facilities. These areas will be the primary receptor of changes due to Project activities. (Figures 1-10 and 1-11) In addition, primary impact areas for water is considered for the following: where water quality is projected to be affected or where considerable turbidity from dredging operations would occur (coastal waters up to 500m from shore and from edge of navigation zone); and where streamflow and sediment transport would likely be affected (Sta 9+000 of channel up to 3km upstream of Busuanga River). See Figure 1-11. In terms of the People Sector, the primary impact area includes the residents within the floodplains in immediate vicinity of the 4 barangays mentioned above as they will be the primary beneficiaries of the SDP and the first priority in local hiring. Also to be directly	*Pp 1-13 to 1-20*

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		impacted are the local sustenance fisherfolks, nearby residential areas, farmers of the adjacent rice fields/agricultural areas, and other users of river water as they will be affected in any changes in freshwater quality and/or quantity. The productivity of sustenance fishing will likely be affected as the fish population in the area adapts to the physical and ecological alterations of the river. Likewise, changes in turbidity of river water may temporarily affect the fertility of the rice fields in case of spill overs, which is usually the normal case in the area. (Figure 1-12) On the other hand, the secondary impact areas for land include the Busuanga River floodplains farther from the project area in barangays Adela and San Pedro, Municipality of Rizal and barangays San Agusting and Central, Municipality of San Jose. These areas will eventually experience reduction in the frequency, extent and depth of flooding over time, as the Project effectively de-clogs the highly-choked alluvial channels of Busuanga River and the flood drainage of the river will gradually improve. The impacts in these areas are considered secondary as these will only manifest after sufficient river sediments have been dredged and effects of the flood management measure is perceptible (Figure 1-10). The LGUs of Rizal and San Jose can be regarded as secondary impact area in terms of people, as they will be the recipient of taxes, royalties, and permit fees to be generated from the project. Ultimately, both municipalities and their residents shall benefit from the projects of the LGUs brought about by increased revenues. They may also benefit from either SDP or Corporate Social Responsibility programs of the proponent. (Figure 1-12)	
2.2.1 (39) List of ECA and Relevance to the Project Site	Please clearly state and expound the proximity of the proposed project to MPAs, RAMSAR sites, etc.	*Section 2.2.1.2 Encroachment in Environmental Critical Areas (ECAs)* **NIPAS Areas** The nearest NIPAS site is Mounts Iglit-Baco National Park (MIBNP) in Occidental Mindoro, and Calavite and FB Harrison Game Refuge and Bird Sanctuary about 17.57 km and 36.74 km away from the project site, respectively. The nearest Marine Protected Area is Ilin-Strait Mariculture Park, about 20 km away from the project site. Since the environmentally critical areas are far from the project site, the Project is not expected to have a significant impact on these areas. Moreover, the nearest RAMSAR site is the Labangan to Calalayuan Point in San Jose, which is located 14.98 km to the southeast of Busuanga River. Please refer to ***Figure 2.2.1-2****. Distances of Project Area and Protected Areas Relative to Project Area* This is likewise presented in *Table 2.2.1-2. Summary of ECAs*	*Pp 2.2.1-5 to 2.2.1-7*

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		Applicability.	
2.2.1 (42) Geology/Geomorphology	• Please clearly cite the source of geologic map. • Please expound on the subsurface investigation by Totowao (if possible, attach as an Annex)	In the thorough revision of this EIS, the items/sections are now based on the Approved Scoping Checklist, wherein which Geology/Geomorphology is not part of and hence, deleted. Nevertheless, the Totowao report is attached as part of **Annex 2-D.** Results of geological investigations conducted are discussed in **Annexes 2-D and 2-E.**	*Annexes 2-D and 2-E*
2.2.1 (44) Ground Shaking	Please expound on the methodology and parameters in the slope stability analysis performed	*Section 2.2.1.2.4 Natural Hazards* **Slope Stability Analysis** In relation to slope stability of the riverbanks, which could be susceptible to landslide, creep, and/or erosion, a numeric slope stability analysis is presented below and in detail in **Annex 2-A: Detailed Engineering Studies**. The methodology is briefly outlined below: Earthquake analysis : Standard Verification methodology : Safety factors (ASD) Safety Factors: Permanent design situation: SF_s = 1.50 - Seismic design situation: SF_s = 1.10 - Stage of Construction 1 Earthquake: not included Design situation: permanent Stage of Construction 2 Earthquake: not included Design situation: permanent Stage of Construction 3 **Earthquake** Horizontal seismic coefficient : K_h = 0.2000 Vertical seismic coefficient : K_v = 0.0000 Design situation: seismic The stability analysis was done in 6 sites along the riverbanks. The soil parameters applied are given in **Table 2.2.1-4** while the slip surface parameters for each site are given in **Table 2.2.1-5**. The results of analysis are given in **Table 2.2.1-6**.	*Page 2.2.1-17* *Annex 2-A*

Module	Findings/Specific Description	Response	Page in EIS
2.2.1 (44) Pedology	Same comment as Section 2.1 (35)	In the thorough revision of this EIS, the items/sections are now based on the Approved Scoping Checklist, wherein which Pedology is not part of and hence, deleted.	
2.2.1 (48-52) Riverbed Erosion and Deposition	Please expound on the methodology and parameters in the simulation of Busuanga River's channel velocity and determination of deposition.	This is discussed in *Sec 3.2.3 Sediment Transport Analysis* The one-dimensional sediment transport calculation of the HEC-RAS program is used to estimate the scour and deposition for the 100-yr floods. The sediment transport potential is computed by grain size fraction, thereby allowing the simulation of hydraulic sorting and armoring. Please refer to this section in the EIS for more details.	*Pp 3-20 to 3-28*
2.2.2 (54-58) Water	Insufficient discussion on the dredging methodology and its potential impacts on water quality of Busuanga River and its existing water use. Will there be impact to water quality of the components of the dredging project (e.g. domestic wastewater from employees' quarters)	*Section 1.3.2 Technology and Design (Preferred Option)* For the process technology, dredging by cutter suction dredger (CSD) in tandem with land-based backhoe and truck were deemed the most suitable for the site. A Cutter Suction Dredger (CSD) shall be used to initially break up a navigation channel at the delta towards the river mouth and then to the silting / catchment basin, and to remove the surplus deposits at the dredging channel. Conventional land-based dredgers such as the excavators (in backhoe mode) and dump trucks will be used in tandem for upstream dredging or in the shallow river sections where dredging by CSD is not feasible. The dredging activities will strictly follow the detailed engineering design plans for the dredging project duly approved by the DPWH Region 4B and will start from downstream and progress upstream. There will be no on-site processing. Moreover, no spoil area is required under the Project because all of the dredged materials will be transported by a belt conveyor to the dump ship and transported to the mother vessel that is anchored offshore. The CSD will first be used from the offshore dredging area towards the river mouth. The vessel will pump the sand from the dredging segment area and will be loaded directly to the loading barges through an extended hose from the dredging mechanism. At the point where the CSD cannot navigate the channel because of lack of depth, conventional mechanical dredging will be used. Backhoes will be used to extract the sand from the river and will be loaded onto the dump trucks. These trucks will then transport the sand to the main stockpiling area. This process will be done repeatedly. The CSD and mechanical dredging will be done simultaneously. The CSD will be stationed in the river mouth moving towards the inner part of the river while mechanical dredging operations will be conducted from the other end (upstream) of the dredging zone moving towards the sea. *2.2.2.1.1 Change in Drainage Morphology…..(Impact Analysis on*	*Page 1-28* *Page 2.2.2-30*

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		Drainage Morphology and Flooding) The proposed Busuanga River dredging project is designed to alter the drainage morphology, stream flow, and ultimately the carrying capacity of the river. The preceding characterizations, modeling, and discussions point to the deepening of the riverbed, which will result to the lowering of the water surface for Q100 from the mouth going upstream towards the end point of the project area. These denote an increase in the carrying capacity of the river, and hence, an enhancement effect on the flooding susceptibility of the area as it will be lessened after some time. Majority of the numerous sandbars that are clogging the channel shall be dredged out and the river bed is deepened. This is in effect, a river restoration or improvement. In the natural evolution of any floodplain, the river can and will always reclaim its old abandoned channels within that plain in any event that its present course presents more resistance to passage of water. In cases of heavy rainfall and therefore voluminous runoff, the river will choose the easiest passageway to empty its load into the sea. The channel of Busuanga River has changed throughout the years with constant course shifting, and the alternating deposition and scouring of sandbars. It should be noted that some changes occur in a single flooding event while some are through the normal occurrence of erosion/deposition cycles. In the simulated flood scenario implementing the proposed flood control measure (dredging), the possible improvement in the flooding situation in the project area is very visible wherein the inundation after dredging will be mostly contained within the pilot dredging channel, thus, resulting in a significant reduction in flooded areas. It can therefore be said that the morphologic change/s that will be brought by the dredging activities is designed to improve the carrying capacity of the river and restore it to its most favored form especially in terms of mitigating flood hazards.	
4.3 (20) Water Quality Monitoring Plan	• Busuanga River is officially classified as Class C water by the DENR and the water quality results should be assessed based on its official classification. • Expound on the methodology in gathering the water quality results presented in Table 4.3.1	*Section 2.2.2.3 Water Quality* Noted, the assessment was based on Class C water. The results and discussion for freshwater quality analyses are in *Section 2.2.2.3.2* and **Tables 2.2.2-10 and 2.2.2-11**. We have supplied in the revised EIS the ambient baseline water quality covering Surface Freshwater, Groundwater and Marine Water of the Busuanga River. We have also attached the water quality sampling map covering the study area and representative sampling stations. **Methodology**	*Pp 2.2.2-63 to 2.2.2-76* *Pp 2.2.2-73 to 2.2.2-74* *Pp 2.2.2-64 to 2.2.2-71*

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		A total of five surface freshwater quality stations were established by the Proponent within Busuanga River on May 16-17, 2022 sampling. Data were gathered by conducting onsite or grab sampling. The river characteristics were derived from the Digital Surface Model obtained from the JAXA Earth Observation Research Center (EORC). The collected samples were submitted by the Proponent to CRL Environmental Corporation (a DENR accredited laboratory) in Clark Freeport Zone (CFZ), Pampanga for pH and Biological Oxygen Demand (BOD) analysis. An additional ten (10) water quality sampling stations were established during the October 10-11, 2023 sampling: 1 groundwater station, 4 surface freshwater and 5 coastal marine water stations. The groundwater sample was taken in Brgy. Adela - the local community covering the proposed navigation zone (delta) and the estuarine portion of Busuanga River. The surface freshwater stations were collected along the stretch of Busuanga River within the project area, representing its upstream, midstream and downstream portions. The marine water stations shall represent the coastal marine water quality of the navigation zone. Water quality collection and handling procedures were based on the procedures prescribed in the DENR-EMB's Water Quality Monitoring Manual (Volume I) - Manual on Ambient Water Quality Monitoring issued through Memorandum Circular 2008-08. The analysis method was adopted from Standard Methods for the Examination of Water and Wastewater published by the American Public Health Association, American Water Works Association, and the Water Environment Federation. Grab samples were collected manually from the selected sampling locations using clean containers (Plates 2.2.2-1 to 2.2.2-10), and were chilled using ice packs in a closed container- styro box for submission to Elarsi Inc., a DENR accredited laboratory for analysis. The pH, temperature and conductivity were measured in-situ employing a portable Milwauukee pH meter and a digital ECC meter, respectively.	
EIA SECTION			
ES Page 5	Please state the covered brgys. and/or municipalities.	*Section ES.1.1 Summary of Project Description based on Dredging Master Plan* The proposed project is the dredging works along the lower reaches of Busuanga River in barangays Adela and San Pedro, Municipality of Rizal and barangays San Agustin and Central, Municipality of San Jose, all	*Page ES-1*

<table>
<tr><th>Module</th><th>Findings/Specific Description</th><th>Response</th><th>Page in EIS</th></tr>
<tr><td></td><td></td><td>within the Province of Occidental Mindoro. This area and vicinity are likewise the study area.</td><td></td></tr>
<tr><td>ES Page 6</td><td>Provide a list of equipment to be used during the dredging operations and indicate their capacities.</td><td>Section 1.4.4 Description of Dredging Activity, and Description of Support Facilities Including Dredging Equipment

The detailed descriptions are presented in Section 1.4.4.

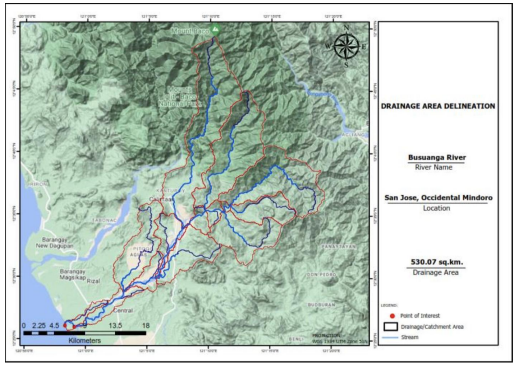
Table 1-3. List of Major Equipment
<table><tr><th>No. of Units</th><th>Description</th><th>Capacity</th></tr><tr><td>2</td><td>2 Cutter Suction Dredger</td><td>12,000 m^3 / day</td></tr><tr><td>5</td><td>5 Hydraulic Excavator</td><td>1.0 m^3</td></tr><tr><td>15</td><td>15 Dump trucks</td><td>20 Tonner</td></tr><tr><td>1</td><td>1 Payloader</td><td>3 m^3</td></tr><tr><td>4</td><td>4 Service Vehicles</td><td></td></tr><tr><td>1</td><td>1 Hauling Barge (small)</td><td>3,000 m^3</td></tr></table>
<u>Other Support Equipment</u>
• Air compressor
• Welding machine
• Pressure washer
• Hydraulic pump
• Generator set (50 kVa)</td><td>Pp 1-51 to 1-53</td></tr>
<tr><td></td><td>The stated volume is not consistent with the approved volume in the Dredging Master Plan.

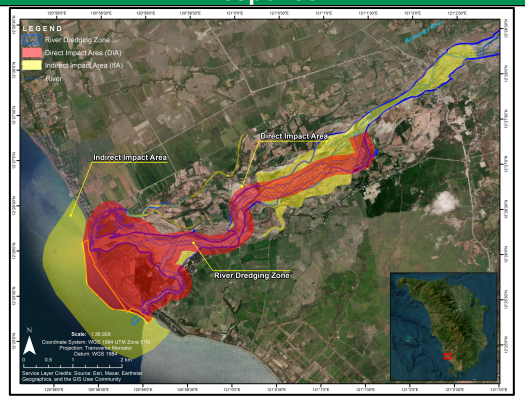
EIS: 18,703,066.07

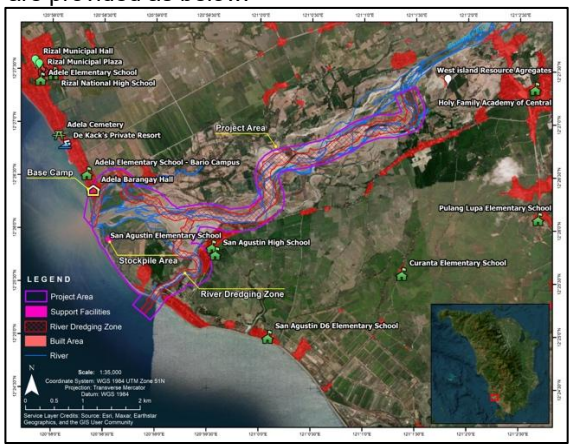
DMP:
Section 1- 3,876,537.17
Section 2- 662,148.85</td><td>Section ES 1-1 Summary of Project Description Based on Dredging Master Plan
Resource and Extraction Rate
Based on the Approved Dredging Master Plan, the computed volume of aggregates that needs to be extracted within the entire river dredging area to handle a storm with 100-year average return interval without overbanking / flooding is at least 4,538,686.02 m^3. Since there will be continuous replenishment of sediments from upstream, these replenished materials within the dredging zone needs to be extracted as well in order to maintain the designed width of dredging channel and riverbed elevation (depth). This is broken down into the main channel (STA. 1+050 TO STA. 9+000) @ 3,876,537.17 m^3 and the branch (STA. 0+950 TO STA. 3+550) @ 662148.85 m^3

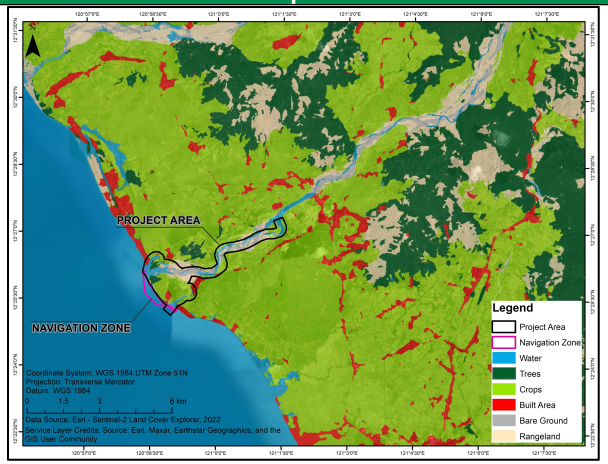
For the offshore area, the estimated volume of sand and gravel materials to be dredged is 2,536,078.67 m^3 to be extracted for the first 6 months of</td><td>Page ES-3</td></tr>
</table>

Module	Findings/Specific Description	Response	Page in EIS
		the project operation. Please note that the volume to be extracted per section of the river shall always be in accordance with the approved dredging plan, be it the initial removal or the maintenance phase wherein newly-deposited materials are to be removed again for an efficient flood control operation to take effect.	
Page 20	In the approved DMP, there are 2 sections. Kindly show the delineation of these two sections.	*Section ES 1-1 Summary of Project Description Based on Dredging Master Plan* Inside the onshore project area is the River Dredging Zone which covers 175.69 ha along 10.55 line km divided into 2 sections as bellow: Section 1 - Main Channel (Sta 1+050 to Sta 9+000) Section 2 - Branch (Sta 0+950 to Sta 3+550)	*Page ES-2*
Section 1.5.	No discussion on the following items in the Technical Scoping Checklist: 1.4 c, d, and e	Item c: • This is given in Section 1.4.4 Description of dredging activity, and description of support facilities including dredging equipment Item d: • Discussed in Section 1.4.5 Identification of infrastructure requirements such as power and water supply. Item e: • Explained in Section 1.4.6 Description waste management system for silt	*Pp 1-51 to 1-53* *Pp 1-53 to 1-54* *Pp 1-54 to 1-55*
Page 37	There is no description and map showing the study area coverage and its proximity to any WQMA and freshwater and marine ecosystems.	This is discussed under *Section 2.1.2 Water (Study Area).* The project area is limited to the lower reaches of Busuanga River, and therefore, the main study area (**Figure 2.1-2**). In terms of hydrological studies however, the whole watershed (**Figure 1-14**) was covered. The Busuanga River Basin is the largest watershed system in the SAMARICA area of Occidental Mindoro with a watershed area of around 530.07 km^2. Its main channel, the Busuanga River, forms the boundary between the municipalities of San Jose and Rizal. It originates from multiple tributaries draining across the central mountain range of Mindoro island, that converge southwest to form the main river. The river generally flows in a southwest direction traversing through the hilly landscape of the San Jose-Rizal area, then into the broad alluvial plain of southwestern Mindoro, and exits at Apo East Pass. It traverses the barangays of Manoot, Monte Claro, Batasan, Pitogo, Santo Niño, and Adela in the municipality of Rizal, and barangays Central and San Agustin in the	*Pp 2.1-1 to 2.1-2* *Page 1-34 (Fig 1-14)* *Page 2.1-4. (Fig 2.1-2)*

Module	Findings/Specific Description	Response	Page in EIS
		municipality of San Jose. The lower reaches of Busuanga River, particularly the 10-kilometer stretch from its outlet point, displays a meandering pattern with generally low sinuosity but occasionally forms sharp bends. Farther upstream, the river shows prominent braided morphology as evident in the presence of multiple unvegetated, frequently shifting channels that converge and diverge within a very wide floodplain. The alluvial zone is a meandering and braided river traversing across the floodplain with extensive accumulation zones that are in the form mostly of point bars and narrow, elongated island bars. There are no Water Quality Management Areas (WQMAs) in the whole Province of Occidental Mindoro, hence, water quality baselining shall be based on primary data gathering. The areas for freshwater sampling covered include the project site itself while the marine waters about 240 to 645 meters from the coastline. The Freshwater Ecology baseline studies cover the lower reaches of the river downstream of the bridge, or the entire project area and immediate vicinities. Marine Ecology studies cover the coastal area to approximately 3 km from the river mouth.  *Figure 1-14. Busuanga River Watershed*	

Module	Findings/Specific Description	Response	Page in EIS
		 *Figure 2.1-2. Study Area Indicating Impact Area -Water* In addition, there are several maps under Freshwater Ecology and Marine Ecology sections that illustrate the ecology. Example below:  *Figure 2.2.2-48. The Busuanga River and Dredging Site*	*Pp 2.2.2-78, 2.2.2-87 to 88 (Freshwater)* *Pp2.2.2-108, 2.2.2-110 to 111, 2.2.2-115, 2.2.2-118, 2.2.2-122, and 2.2.2-124 (Marine)*
	There is no description and map showing the proximity of the study area to the nearest communities and settlements	*Section 1.1.3 Description of the Vicinity and Accessibility of the Project Site* The immediate vicinity of the project site is generally sparsely inhabited except for a few house clusters/ built-up areas that are located very near the riverbanks. The nearest house clusters are two in Brgy. Adela, Rizal (adjacent to northern limits of project area near the coast and 140m east of the main channel RDZ), and three in Brgy. San Agustin, San Jose (2 are adjacent/SE of the RDZ branch and 1 is 150 to 250 to the north of the branch or inside the “island”). See **Figure 1-7**.	*Page 1-21*

Module	Findings/Specific Description	Response	Page in EIS
		The nearest vital infrastructures are Busuanga Bridge (1.95 km) and the various (at least 6) flood-control structures (FCs) within the vicinity of the project area, The nearest critical facilities are: Adela Brgy. Hall (57 m NW of RDZ) Adela Elementary School Barrio Campus (270m) and San Agustin Elem School (29m). Other critical facilities are in relatively safe distances from the project site such as: Rizal National Highschool (2.024 km N); Adela Elementary School (2.079 km N); Rizal Municipal Hall (2.285 km N), San Pedro Elem School (2.42 km N); Sto. Niño Elem School (1.39 km N); Holy Family (2 km E); Pulanglupa Elem School (2.6 km SE); and Curanta Elem School (2.35 km SE). The land surrounding the proposed project area is mainly agricultural (**Figure 2.2.1-1**). This is likewise tackled under *Section 2.2.4.1.2 Impact Assessment on In-migration / Proliferation of Informal Settlers* The maps are provided as below:  *Figure 1-7. Vicinity Map of Project Area*	*Pp 2.2.4-9 to 2.2.4-10* Page 2.2.1-3.

Module	Findings/Specific Description	Response	Page in EIS
		 *Figure 2.2.1-1. Project Site vis-à-vis the 2020 Land Cover Map*	
Others	Kindly provide a discussion and a map showing the area of conflict with the West Island.	*Section 2.2.1.3 Possible Tenurial / Land Issues* Based on the records of EMB-4B, six ECCs were issued to West Island Aggregates Inc ("West Island") covering various projects in the same project area being applied for by RC-GPC. However, 3 among the 6 ECCs issued are now under issue because they were previously subject of a Memorandum of Agreement (MOA) with the Provincial Government of Occidental Mindoro. The MOA has already been revoked by the Provincial Government of Occidental Mindoro in a letter addressed West Island and dated March 4, 2020. Copies of the Revocation Letter, 3 ECCs - ECC-R4B-1003-0044, ECC-R4B-11060082, ECC-R4B-1003-0042 - Letter of Revocation, Letter from EMB Central Office are attached under **Annex 2B**. Hence, Royal Crown has all the legal rights to proceed with this ECC application and in fact, the it has been awarded the Busuanga RDZ and DPWH 4B has approved its Dredging Master Plan (**Annex 1-B**). This Project will coexist with any and all valid prior rights in the river that overlap with the Proposed Project site. Small-scale sand and gravel quarrying were evident. Nevertheless, it is explicitly stated in DAO 2020-12 that no other quarrying permits shall be operational within the project site once the dredging project is in operation and this shall be an exclusive River Dredging Zone (RDZ)..	*Pp 2.2.1-19 to 2.2.1-20*