Department of Environment and Natural Resources
Environmental Management Bureau
MIMAROPA Region

November 30, 2023

ECC-R4B-2310-0008

Mr. WALFRIDO FRANCISCO R. SUN
Managing Officer
PERRC CONSTRUCTION AND DEVELOPMENT CORPORATION
Unit 302 and 703 OMM Citra Building, San Miguel Avenue,
Ortigas Center, Barangay San Antonio, Pasig City

Subject: **ENVIRONMENTAL COMPLIANCE CERTIFICATE**

Dear Mr. ***Sun***:

This refers to your application for an Environmental Compliance Certificate (ECC) for the proposed **PATRICK-VIGA RIVER DREDGING PROJECT** to be located at **Patrick-Viga River, Barangays Claudio Salgado, San Agustin, Pag-asa, Lagnas, Victoria, Paetan, San Francisco and Tagumpay, Municipality of Sablayan, Occidental Mindoro.**

After satisfying the requirements of Presidential Decree No. 1586 and its Implementing Rules and Regulation, this Bureau has decided to grant an ECC for the above-mentioned project.

In this regard, the proponent is expected to fully implement the measures presented in the Environmental Impact Statement (EIS), to protect and mitigate the project's predicted adverse impacts on community health, welfare, and the environment. Environmental considerations shall be incorporated in all phases and aspects of the project.

This Certificate does not create any right nor be used as an authorization to implement the project; you may proceed with the implementation only after securing **all** necessary permits and/or clearances pursuant to **DENR Administrative Order (DAO) 2020-07** entitled "***Rationalizing Dredging Activities in Heavily-Silted River Channels Pursuant to the DENR-DPWH-DILG-DOTR Joint Memorandum Circular No. 1 Series of 2019***" and as required by other pertinent Government Agencies/Offices that have administrative jurisdiction over such projects/operations (i.e. DENR, EMB, MGB, LGU, DPWH, etc.). This Office shall be monitoring the project periodically to ensure strict compliance with the stipulations cited in the attached ECC.

Please be guided accordingly.

Very truly yours,

JOE AMIL M. SALINO
Regional Director

Digitally signed by Environmental Management Bureau-MIMAROPA Region
Date: 2023.11.30 21:03:13 +08'00'

Received by:
Ron A. Lazaro
PERRC Const. & Dev. Corp

ENVIRONMENTAL COMPLIANCE CERTIFICATE
(Issued pursuant to Presidential Decree No. 1586 and its IRR)

ECC-R4B-2310-0008

THIS IS TO CERTIFY THAT THE PROPONENT, **PERRC CONSTRUCTION AND DEVELOPMENT CORPORATION**, represented by its Managing Officer, **WALFRIDO FRANCISCO R. SUN,** is granted this Environmental Compliance Certificate (ECC), for its **PATRICK-VIGA RIVER DREDGING PROJECT** to be located at **Patrick-Viga River, Barangays Claudio Salgado, San Agustin, Pag-asa, Lagnas, Victoria, Paetan, San Francisco and Tagumpay, Municipality of Sablayan, Occidental Mindoro**, by the Department of Environment and Natural Resources (DENR), through the Environmental Management Bureau (EMB).

SUBJECT to the conditions and restrictions set out herein labeled as Annexes A and B.

This Certificate is issued with the following details:

PROJECT DESCRIPTION

This ECC covers the **PATRICK-VIGA RIVER DREDGING PROJECT** that is confined within the dredging area located in **Patrick-Viga River, Barangays Claudio Salgado, San Agustin, Pag-asa, Lagnas, Victoria, Paetan, San Francisco and Tagumpay, Municipality of Sablayan, Occidental Mindoro:**

A. 18.65- LINE KILOMETER- RIVER DREDGING ZONE (RDZ) of **Patrick-Viga River,** having a dredging area of ***1,629,100 m^2 or 162.91 hectares***, an Extraction Resource Volume of ***3,941,773.50 m^3***, and Annual Extraction Rate (with replenishment rate) of ***7,200,000.00 m^3***, specifically described in **Annex C** herein:

B. NAVIGATION AREA of **36.71 hectares** and a **Total Volume of Sand to be Extracted of** ***2,821,818.00 m^3***, specifically in **Annex C** herein:

C. Project components/ facilities enumerated to wit:

PROJECT COMPONENTS		QUANTITY/APPROXIMATE SIZE/CAPACITY
Dredging Vessels and Equipment	Cutter Suction Dredger (CSD)	2 units/ 12,000 m^3 per day
	Hydraulic Excavator	4 units / 1.0 m^3
	Dump trucks	15 units/ 20 Tonner
	Payloader	3.0 m^3
	Service Vehicle	Pick-Up Truck
	Wheel loader	4 units/ 5 m^3
	Hauling Barge (Small)	3,000 m^3
Support Facilities and Common Auxiliaries	Yard landfill/ Stockpile	3 Areas *(3,600 m^2 per pile)*: 10,800 m^2
	Field Office	1 unit
	Bunk house	1 unit
	Warehouse	1 unit
	Motorpool with oil and lubricants storage room	1 unit
	Equipment staging area	1 unit
	Canteen and Restroom	1 unit
Pollution Control Devices	Wastewater Treatment System (Vessel Built-in and land-based Facilities), Materials Recovery Facility (MRF), Silt Curtains, and	

ncd

	Geotextile Sediment Filters.

The project shall operate and maintain its components and support facilities as contained in the submitted **Environmental Impact Statement (EIS)** and **Environmental Management Plan (EMP).**

This Certificate is issued in compliance with the requirements of Presidential Decree No. 1586, and its Implementing Rules and Regulations. Non-compliance with any of the provisions of this Certificate including the mitigating measures cited herein shall be a sufficient cause for its cancellation and/or imposition of a fine in an amount not to exceed Fifty Thousand Pesos (**₱50,000.00**) for every violation thereof without prejudice to the imposition of fines and penalties under other environmental laws. The EMB, however, is not precluded from reevaluating and correcting any deficiencies or errors that may be found after issuance hereof.

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**. It is expected that the proponent will diligently secure pertinent **PERMITS/CLEARANCES** from all concerned government agencies prior to the start/implementation of the project. Furthermore, the DENR/EMB will be monitoring the project periodically to ensure compliance with the stipulations cited in the attached conditions and restrictions which are made an integral part thereof.

Issued at EMB-R4B, 6th Floor DENR by the Bay Bldg., 1515 Roxas Blvd., Ermita, Manila this 30th day of November 2023.

Recommending Approval:

ENGR. BUENA FE A. RIOFLORIDO
Chief, Clearance and Permitting Division

Approved:

JOE AMIL M. SALINO
Regional Director

Digitally signed by Environmental Management Bureau-MIMAROPA Region
Date: 2023.11.30 21:03:40 +08'00'

rec'd:

SWORN ACCOUNTABILITY STATEMENT

I, **WALFRIDO FRANCISCO R. SUN,** Managing Officer of **PERRC CONSTRUCTION AND DEVELOPMENT CORPORATION,** with office address at **Unit 302 and 703 OMM Citra Building, San Miguel Avenue, Ortigas Center, Barangay San Antonio, Pasig City,** takes full responsibility for complying with all conditions in this Environmental Compliance Certificate (ECC).

WALFRIDO FRANCISCO R. SUN
Signature

TIN No. 150-974-725-000

Subscribed and sworn before me this DEC 04 2023, the above-named affiant taking oath presenting _____, issued on _____ at _____.

Notary Public

Doc. No. 118
Page No. 25
Book No. 44
Series of 2023

ATTY. CONCEPCION P. VILLAREÑA
Notary Public for Quezon City
Until December 31, 2023
PTR No. 3716371 / January 3, 2023 Q.C
IBP No. 167803 / November 25, 2021 Q.C,
Roll No. 30457 / 05-09-1980
MCLE VII-0006594 / 09-21-2021
ADM. MATTER No. NP-005 (2022-2023)
TIN NO. 131-942-754

ANNEX A

I. CONDITIONS

ENVIRONMENTAL MANAGEMENT

All commitments, mitigating measures, and monitoring requirements, contained in the Environmental Impact Statement (EIS) for the proposed **PATRICK-VIGA RIVER DREDGING PROJECT**, particularly in the Environmental Management Plan/ Environmental Monitoring Plan, including any modifications and/or additional information as approved by the EMB, shall be instituted to minimize any adverse impact of the project to the environment throughout its implementation, which shall include among others to wit:

1. That the proponent shall ensure that the project implementation shall **NOT COMMENCE** unless all required/clearances from the concerned government agencies are secured. EMB shall be advised when all the permits/clearances are secured and when will be the actual date of project implementation;

    1.1 The dredging implementation and operation shall be strictly in accordance with the approved Dredging Master Plan (DMP) and issued Dredging Clearance of the Department of Public Works and Highways (DPWH);

2. That the proponent shall conduct an effective Information, Education and Communication (IEC) Program to inform and educate all stakeholders, especially its contractors, workers, and local residents about the mitigating measures embodied in its EIS, the conditions stipulated in this Certificate and the environmental and human safety features of the project for greater awareness, understanding and sustained acceptance of the project. The program shall be submitted to EMB – MIMAROPA and other concerned agencies on an annual basis;

3. That the proponent shall implement a comprehensive Social Development Program (SDP) and submit a separate report together with the Compliance Monitoring Report (CMR) to the EMB-4B (MIMAROPA Region) on a semi-annual basis;

4. That the proponent shall establish a reforestation and carbon sink program using endemic/indigenous species to mitigate greenhouse gas (GHG) emissions of the project in line with the DENR's thrust for GHG emissions reduction programs and National GreeningProgram. The program shall be submitted to EMB-4B (MIMAROPA Region) six (6) months prior to the project implementation;

5. That the proponent shall strictly manage excessive surface runoff, dust, oil spillage, or accidental spillage, and health hazards identified in the Environmental Impact Statement (EIS). In case of emergency, appropriate response activities shall be immediately undertaken for the protection of the workers/ personnel, host and nearby communities, and the receiving environment;

6. That the preservation and easement retention of natural drainage/waterways shall be undertaken and should conform with the provisions of the DENR Administrative Order No. 97-05 (Procedures in the Retention of Areas within certain distances along the Banks of Rivers, Streams, and Shores of Seas, Lakes and Oceans for Environmental Protection). If disturbed, a replacement drainage system shall be constructed within two (2) months from the disturbance;

7. The proponent shall comply with all the provisions of RA 9275, the Philippine Clean Water Act of 2004 and its Implementing Rules and Regulations;

8. The proponent shall install and maintain air pollution control devices to minimize dust and gas emissions from different sources. Likewise the proponent shall ensure that emissions at all times comply with the DENR standards and with all the provisions of RA 8749, the Philippine Clean Air Act of 1999 and its Implementing Rules and Regulations;

9. The proponent shall install, operate, and maintain collection, handling, treatment, storage and disposal facilities or any system serving different sources of hazardous waste. The system shall be properly operated to ensure compliance with all the provisions of RA 6969, the Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 and its Implementing Rules and Regulations;

10. The proponent install, operate and maintain collection, handling, treatment, storage and disposal facilities or any system serving different sources of solid waste. The system shall be properly operated to ensure compliance with all the provisions of RA 9003, the Ecological Solid Waste Management Act of 2000 and its Implementing Rules and Regulations;

11. The proponent shall spearhead the establishment of station markers and proper delineation of exact boundaries of the navigational zone;

II. GENERAL CONDITIONS

12. The proponent shall conform with the provision of **DPWH-DENR-DILG-DOTr Joint Memorandum Circular No. 01, Series of 2019** and **DENR Administrative Order No. 12, Series of 2020**;

13. That the dredging activities shall be initially conducted at the delta of a heavily – silted riverchannel for a period of **SIX (6) MONTHS** in accordance with Chapter 3 Section 4 of DAO 2020 – 12;

14. That the proponent **shall set-up a competent Environmental Unit (EU)** with a Pollution Control Officer, within sixty (60) days from the issuance of this Certificate and shall be duly accredited by this Office in accordance with DAO No. 02, series of 2014 (Revised Guidelines for Pollution Officer Accreditation). The Environmental Unit (EU) shall competently handle the environment-related aspects of the project. In addition to the monitoring requirements, as specified in the Environmental Management Plan/ Environmental Monitoring Plan, the EU shall have the following responsibilities:

    14.1. Monitor actual project impacts vis-à-vis the predicted impacts and management measures in the Generic IEE Checklist Report;
    14.2. Recommend revisions to the EMP/EMoP, whenever necessary subject to the approval of EMB-4B (MIMAROPA Region);
    14.3. Ensure that data gathered during monitoring activities are properly documented, assessed, evaluated, and reported to EMB-4B (MIMAROPA Region) in accordance with the standard formats;
    14.4. Ensure that monitoring and submissions of reports to EMB-4B (MIMAROPA Region) are carried out as required;

    14.5. Regular submission of the following reports:

        14.5.1. A semi-annual ***ECC Compliance Monitoring Report*** within Thirty (30) days at the end of each semi-annual reporting period. The CMR must be provided with supporting documents and in accordance with the prescribed format stipulated in the Implementing Rules and Regulations

of P.D. 1586;

14.5.2. Submit a ***Quarterly Self-Monitoring Report*** within fifteen (15) days at the end of each quarter. The SMR must be in accordance with the prescribed format of the ***Self-Monitoring Report (SMR)*** pursuant to DAO 2003-27;

15. The proponent shall submit an **Abandonment Plan** to the EMB Regional Office at least six (6) months prior to project abandonment. The plan shall include rehabilitation measures/clean-up, remediation of areas affected by the project and proposed alternative projects in the area;

16. The proponent shall set up the following:

    16.2 A readily available and replenishable Environmental Guarantee Fund (EGF) to cover the following expenses:

        16.2.1 Further environmental assessment, compensation/indemnification forwhatever damages to life and property that may cause by the project;

        16.2.2 Rehabilitation and/or restoration of areas affected by the project implementation;

        16.2.3 Abandonment/decommission of the project facilities related to the prevention of possible negative impact and as a source of funds for contingency and clean-up activity;

    16.3 A Multi-Partite Monitoring Team (MMT) composed of the representative /(s) prescribed in the DENR Administrative Order 2017-15 shall be organized; it shall primarily oversee the compliance of the proponent with the Environmental Management and Monitoring Plan (EMMoP), as well as with the conditions of this ECC;

17. That the proponent shall allocate a sufficient budget for the implementation of the proposed mitigating/enhancement measures during the operation, maintenance, and abandonment phases of the project;

18. That Health and Sanitation practices shall be observed in all phases of the project and safety & personal protection equipment/devices shall always be provided to all employees/workers within the premises of the project site to prevent health and occupational hazards;

19. That there shall be no screening and/or washing of quarry materials within the streambed to avoid siltation and turbidity of water. Likewise, no stockpile shall be left at the streambed during extraction to avoid obstruction of water flow;

20. That a billboard containing this message: **"Notice to the Public, the PATRICK-VIGA RIVER DREDGING PROJECT of PERRC CONSTRUCTION AND DEVELOPMENT CORPORATION, has been issued an Environmental Compliance Certificate (ECC-R4B-2310-0008) by the Department of Environment and Natural Resources – Environmental Management Bureau MIMAROPA Region on November 30, 2023."** shall be installed at all entry andexit points and in the perimeter of the project site facing the road to inform the general public within thirty (30) days from receipt of the ECC;

21. That a copy of the ECC shall be posted in a conspicuous location at the field office of the project site clearly visible to the public and shall be adequately framed or otherwise protected against damage and at the barangay bulletin board of the host barangay(s) within thirty (30) days from receipt of the ECC;

22. The proponent shall provide "one entry" and "one exit" for its operation and shall install a Closed-Circuit Television (CCTV) connected to the server of the EMB Regional Office concerned;

23. That the proponent shall submit monthly drone shots of the activity area (Operation Phase);

24. That any **authorized DENR and/or EMB personnel**, with proper identification card and travel/mission order, shall be allowed unconditional access to conduct an on-the-spot inspection and monitoring to the project without the need for prior notice to the proponent to oversee compliance to the ECC;

III. RESTRICTIONS

25. That no other activities should be undertaken other than what was stipulated in the Environmental Impact Statement (EIS) Should there be an expansion of the project beyond the project description, construction of other structures beyond those stated in the Environmental Impact Statement (EIS); or any change in the activity or location, shall be made subject to a new Environmental Impact Assessment (EIA) requirements;

    25.1 The following components and activity as determined in the EIS report and enumerated in **items A and C of the project description herein**, shall ***NOT be commenced or implemented*** unless otherwise all the corresponding clearances from the concerned agencies are secured or equal documents for such have been secured.

- Extraction of ***7,200,000.00 m³*** as an annual extraction rate (Combined initial volume with the replenishment rate.
- Stockpile area of 10,800 square meters.
- Extraction activity within the eastern part of the project area from Sta 12+050 of centerline going upstream to (19+150) the eastern boundary of the project.

26. That a limit of extraction shall NOT exceed the slope/gradient identified in the DPWH-accepted/approved Dredging Master Plan (DMP) and EIS; and strictly within the approved Dredging Area / **18.65-line kilometer River Dredging Zone (162.91 Hectares)**. A monthly report of extraction shall be incorporated in the quarterly and semi-annual monitoring reports (SMRand CMR);

27. That all recommendations cited in the submitted **DPWH-accepted/approved Dredging Master Plan (DMP), Bathymetric Survey,** and **Geotechnical Report** shall be undertaken for the project implementation;

28. That the proponent shall maintain a uniform depth of extraction at any given time on the approved area based on the **DPWH-accepted/approved Dredging Master Plan (DMP), Bathymetric Survey** and **Geotechnical Report**;

29. That there shall be no extraction within one (1) kilometer radius from any **government infrastructures** such as bridges, irrigation canals, etc.;

30. That a **Sediment Transport Modelling** shall be conducted, and the report shall be submittedto this Office and copy furnished to the Mines and Geosciences Bureau (MGB) – MIMAROPA within ninety (90) days upon receipt hereof;

31. That hauling trucks, and other similar heavy equipment, should be covered with canvass, and removal of soil/mud from trucks' tires and equipment before leaving the project area shall be done regularly;

32. Station markers (i.e., buoys, floaters, anchorages, etc.) of the delineated extraction boundaries of both identified river and offshore dredging areas shall be established;

33. Silt curtains and/or similar control measures shall be appropriately and strictly established/installed to enclose the siltation within the dredging vicinity and ensure the minimization of the foreseen negative effects of the project operation;

34. A natural contour depth of extraction shall be maintained at any given time on the navigational shoreline area as determined in the **Bathymetric Survey,** and **Geotechnical Report;**

35. That the extraction limit intended for the Navigational Shoreline Area shall **NOT** exceed ***2,821,818.00 m^3*** as determined in the EIA study;

36. That the proponent shall ensure the repair or restoration of all existing Riverbank Stabilization infrastructures in case of damage due to the project implementation/operation.

37. That in case of transfer of ownership/management of this project, these same conditions and restrictions shall apply, and the transferee shall be required to notify this Office concerned within fifteen (15) days as regards the transfer of ownership/management; and

38. That the proponent **(PERRC CONSTRUCTION AND DEVELOPMENT CORPORATION)** shall be accountable for any misrepresentation and failure to state material information in the submitted documents.

The conditions stipulated in this Certificate shall be deemed final within fifteen (15) days from receipt hereof and all conditions and restrictions set forth above shall be complied with by the herein grantee. Moreover, this ECC will automatically *EXPIRE IF NOT IMPLEMENTED WITHIN FIVE (5) YEARS* from the date of issuance and the proponent must apply for a new ECC if it intends to proceed with the project.

ANNEX B

PROJECT ASSESSMENT PLANNING TOOL

For the assistance of the Proponent, LGUs and other concerned government agencies (GAs) in the management of the project and for better coordination in mitigation on the impacts of the project on its surrounding areas and to the environment.

By way of recommendation, the following have been taken notice of by this Office and are providing these recommendations to the parties and authorities concerned for proper action and integration into their decision making-process.

Regulatory Conditions	
1. The proponent shall comply with, but not limited to the following: 1.1 P.D. 856 or the Sanitation Code of the Philippines; 1.2 P.D. 442 or the Labor Code of the Philippines including occupational health and safety; 1.3 R.A. 6541 or the National Building Code of the Philippines including adequate storm drainage system and other flood control measures and compliance to the Fire Safety and Emergency Preparedness; 1.4 P.D. 705 & DAO 97-05;	DOH DOLE-Bureau of Working Conditions Municipal Planning & Dev't. Office/Building Official/BFP/LGU Concerned DENR Sector concerned
2. That all appropriate construction, operational and resource-use permits/clearances from other national and local government agencies concerned shall be secured pertaining to the implementation of the project. Likewise, the proponent shall notify this Office of the reckoning date of project operation.	(i.e. NTC, PMRB, PNP, LGUs, DPWH, DOH, NWRB, HLURB, MGB, DA, DAR, DOLE, DTI, etc.)
3. Preference of employment shall be given to qualified residents. Adequate public information for jobs available to residents in the area shall be provided;	LGU
Environmental Planning Recommendations for the Proponent	
1. Close monitoring of the project should be undertaken by the proponent to maintain a high level of safety and efficiency at all phases of the project and to immediately address any environmental hazard that may take place.	Proponent

ANNEX C

PROJECT AREA BOUNDARIES AS DEFINED IN ACCORDANCE WITH THE DREDGING MASTER PLAN AND THE DETAILED ENGINEERING STUDY

CORNER	North Latitude	East Longitude
RIVER		
1	12°53'54.837"	120°46'53.019"
2	12°53'56.036"	120°46'54.188"
3	12°53'57.000"	120°46'55.082"
4	12°53'58.492"	120°46'55.741"
5	12°54'00.099"	120°46'55.999"
6	12°54'01.680"	120°46'56.422"
7	12°54'03.287"	120°46'56.680"
8	12°54'05.008"	120°46'56.976"
9	12°54'06.725"	120°46'57.377"
10	12°54'07.958"	120°46'58.509"
11	12°54'09.273"	120°46'59.497"
12	12°54'10.672"	120°47'00.344"
13	12°54'12.071"	120°47'01.190"
14	12°54'13.802"	120°47'01.466"
15	12°54'15.532"	120°47'01.742"
16	12°54'17.014"	120°47'02.445"
17	12°54'18.311"	120°47'03.231"
18	12°54'18.854"	120°47'03.751"
19	12°54'20.478"	120°47'03.654"
20	12°54'22.101"	120°47'03.557"
21	12°54'23.725"	120°47'03.460"
22	12°54'25.583"	120°47'03.374"
23	12°54'27.258"	120°47'03.501"
24	12°54'28.876"	120°47'03.670"
25	12°54'30.494"	120°47'03.839"
26	12°54'32.112"	120°47'04.007"
27	12°54'33.720"	120°47'04.275"
28	12°54'36.292"	120°47'04.932"
29	12°54'37.501"	120°47'06.066"
30	12°54'38.666"	120°47'07.223"
31	12°54'39.853"	120°47'08.356"
32	12°54'41.041"	120°47'09.489"
33	12°54'42.251"	120°47'10.598"
34	12°54'43.665"	120°47'12.093"
35	12°54'44.600"	120°47'13.609"
36	12°54'45.365"	120°47'15.073"
37	12°54'46.273"	120°47'16.458"
38	12°54'46.147"	120°47'18.405"
39	12°54'46.338"	120°47'20.180"
40	12°54'46.976"	120°47'21.717"
41	12°54'48.376"	120°47'22.538"
42	12°54'50.031"	120°47'22.463"
43	12°54'51.677"	120°47'22.527"
44	12°54'53.304"	120°47'22.688"
45	12°54'55.027"	120°47'22.971"
46	12°54'56.724"	120°47'23.559"
47	12°54'58.266"	120°47'24.731"

CORNER	North Latitude	East Longitude
48	12°54'59.206"	120°47'26.120"
49	12°55'00.086"	120°47'27.515"
50	12°55'00.966"	120°47'28.909"
51	12°55'01.691"	120°47'30.341"
52	12°55'02.224"	120°47'31.359"
53	12°55'03.857"	120°47'31.423"
54	12°55'05.491"	120°47'31.487"
55	12°55'07.134"	120°47'31.717"
56	12°55'08.685"	120°47'31.679"
57	12°55'10.189"	120°47'32.312"
58	12°55'11.692"	120°47'32.945"
59	12°55'13.231"	120°47'33.486"
60	12°55'14.723"	120°47'34.106"
61	12°55'16.105"	120°47'34.921"
62	12°55'17.398"	120°47'35.928"
63	12°55'18.71"	120°47'36.908"
64	12°55'20.141"	120°47'37.730"
65	12°55'21.437"	120°47'38.768"
66	12°55'23.124"	120°47'39.722"
67	12°55'24.295"	120°47'40.963"
68	12°55'24.692"	120°47'42.627"
69	12°55'25.806"	120°47'43.900"
70	12°55'26.604"	120°47'45.345"
71	12°55'27.403"	120°47'46.79"
72	12°55'28.202"	120°47'48.235"
73	12°55'28.943"	120°47'49.711"
74	12°55'29.658"	120°47'51.016"
75	12°55'30.334"	120°47'52.004"
76	12°55'31.644"	120°47'52.988"
77	12°55'32.953"	120°47'53.971"
78	12°55'34.263"	120°47'54.955"
79	12°55'35.572"	120°47'55.938"
80	12°55'36.882"	120°47'56.922"
81	12°55'38.191"	120°47'57.905"
82	12°55'39.733"	120°47'59.288"
83	12°55'40.698"	120°48'00.800"
84	12°55'41.469"	120°48'02.260"
85	12°55'42.241"	120°48'03.720"
86	12°55'43.012"	120°48'05.180"
87	12°55'43.784"	120°48'06.639"
88	12°55'44.555"	120°48'08.099"
89	12°55'45.327"	120°48'09.559"
90	12°55'46.131"	120°48'11.019"
91	12°55'46.505"	120°48'13.832"
92	12°55'45.680"	120°48'15.261"
93	12°55'44.855"	120°48'16.691"
94	12°55'43.843"	120°48'18.279"
95	12°55'42.091"	120°48'19.765"

nicd :

CORNER	North Latitude	East Longitude
96	12°55'40.563"	120°48'20.332"
97	12°55'39.035"	120°48'20.900"
98	12°55'37.518"	120°48'21.499"
99	12°55'36.012"	120°48'22.130"
100	12°55'34.472"	120°48'22.666"
101	12°55'33.176"	120°48'23.137"
102	12°55'32.766"	120°48'23.349"
103	12°55'32.368"	120°48'24.957"
104	12°55'31.971"	120°48'26.565"
105	12°55'31.636"	120°48'28.188"
106	12°55'31.239"	120°48'29.797"
107	12°55'31.142"	120°48'30.519"
108	12°55'31.814"	120°48'31.556"
109	12°55'32.899"	120°48'32.792"
110	12°55'33.959"	120°48'34.049"
111	12°55'34.754"	120°48'35.550"
112	12°55'35.645"	120°48'36.963"
113	12°55'36.608"	120°48'38.309"
114	12°55'37.127"	120°48'40.006"
115	12°55'37.677"	120°48'41.582"
116	12°55'39.118"	120°48'43.115"
117	12°55'39.264"	120°48'44.767"
118	12°55'39.409"	120°48'46.418"
119	12°55'39.554"	120°48'48.070"
120	12°55'39.57"	120°48'49.734"
121	12°55'38.711"	120°48'51.477"
122	12°55'39.200"	120°48'53.264"
123	12°55'39.262"	120°48'55.158"
124	12°55'38.785"	120°48'56.744"
125	12°55'38.309"	120°48'58.329"
126	12°55'37.894"	120°48'59.934"
127	12°55'37.480"	120°49'01.539"
128	12°55'37.128"	120°49'03.164"
129	12°55'36.682"	120°49'04.759"
130	12°55'36.238"	120°49'06.352"
131	12°55'36.082"	120°49'07.477"
132	12°55'35.933"	120°49'09.136"
133	12°55'35.947"	120°49'10.795"
134	12°55'35.961"	120°49'12.453"
135	12°55'35.975"	120°49'14.111"
136	12°55'35.989"	120°49'15.769"
137	12°55'36.002"	120°49'17.427"
138	12°55'36.016"	120°49'19.086"
139	12°55'36.030"	120°49'20.744"
140	12°55'36.044"	120°49'22.402"
141	12°55'35.913"	120°49'24.236"
142	12°55'35.671"	120°49'25.954"
143	12°55'35.397"	120°49'27.588"
144	12°55'35.123"	120°49'29.223"
145	12°55'34.882"	120°49'30.863"
146	12°55'34.608"	120°49'32.498"
147	12°55'34.334"	120°49'34.132"
148	12°55'34.028"	120°49'35.761"

CORNER	North Latitude	East Longitude
149	12°55'33.711"	120°49'37.447"
150	12°55'33.288"	120°49'39.313"
151	12°55'32.746"	120°49'40.878"
152	12°55'32.084"	120°49'42.394"
153	12°55'31.422"	120°49'43.910"
154	12°55'30.790"	120°49'45.438"
155	12°55'30.188"	120°49'46.979"
156	12°55'29.556"	120°49'48.507"
157	12°55'28.954"	120°49'50.048"
158	12°55'28.352"	120°49'51.588"
159	12°55'27.75"	120°49'53.129"
160	12°55'27.148"	120°49'54.669"
161	12°55'26.668"	120°49'56.103"
162	12°55'26.238"	120°49'57.673"
163	12°55'25.816"	120°49'59.274"
164	12°55'25.394"	120°50'00.875"
165	12°55'24.972"	120°50'02.477"
166	12°55'24.110"	120°50'03.958"
167	12°55'23.248"	120°50'05.439"
168	12°55'22.481"	120°50'06.946"
169	12°55'22.058"	120°50'08.547"
170	12°55'21.793"	120°50'10.191"
171	12°55'21.466"	120°50'11.819"
172	12°55'21.106"	120°50'13.437"
173	12°55'21.010"	120°50'14.967"
174	12°55'21.112"	120°50'16.589"
175	12°55'21.223"	120°50'18.246"
176	12°55'21.335"	120°50'19.904"
177	12°55'21.381"	120°50'21.562"
178	12°55'21.395"	120°50'23.220"
179	12°55'21.408"	120°50'24.878"
180	12°55'21.422"	120°50'26.536"
181	12°55'21.436"	120°50'28.194"
182	12°55'21.450"	120°50'29.853"
183	12°55'21.398"	120°50'31.511"
184	12°55'21.445"	120°50'33.169"
185	12°55'21.426"	120°50'34.828"
186	12°55'21.439"	120°50'36.486"
187	12°55'21.453"	120°50'38.144"
188	12°55'21.467"	120°50'39.802"
189	12°55'21.572"	120°50'41.345"
190	12°55'21.962"	120°50'42.625"
191	12°55'22.665"	120°50'44.121"
192	12°55'23.367"	120°50'45.616"
193	12°55'24.099"	120°50'47.098"
194	12°55'25.036"	120°50'48.479"
195	12°55'25.944"	120°50'49.874"
196	12°55'26.676"	120°50'51.356"
197	12°55'27.378"	120°50'52.851"
198	12°55'28.110"	120°50'54.333"
199	12°55'28.871"	120°50'55.800"
200	12°55'29.573"	120°50'57.295"
201	12°55'30.276"	120°50'58.791"

CORNER	North Latitude	East Longitude
202	12°55'30.978"	120°51'00.287"
203	12°55'31.681"	120°51'01.783"
204	12°55'32.324"	120°51'03.307"
205	12°55'33.027"	120°51'04.803"
206	12°55'33.729"	120°51'06.298"
207	12°55'34.402"	120°51'07.808"
208	12°55'35.104"	120°51'09.304"
209	12°55'35.807"	120°51'10.800"
210	12°55'36.509"	120°51'12.295"
211	12°55'37.211"	120°51'13.791"
212	12°55'37.914"	120°51'15.287"
213	12°55'38.616"	120°51'16.783"
214	12°55'39.319"	120°51'18.278"
215	12°55'40.021"	120°51'19.774"
216	12°55'40.686"	120°51'21.504"
217	12°55'41.180"	120°51'23.094"
218	12°55'41.666"	120°51'24.676"
219	12°55'42.153"	120°51'26.258"
220	12°55'42.702"	120°51'27.821"
221	12°55'43.188"	120°51'29.403"
222	12°55'43.613"	120°51'31.005"
223	12°55'44.100"	120°51'32.588"
224	12°55'44.555"	120°51'34.180"
225	12°55'45.042"	120°51'35.762"
226	12°55'45.528"	120°51'37.345"
227	12°55'46.046"	120°51'38.917"
228	12°55'46.525"	120°51'40.530"
229	12°55'46.754"	120°51'42.643"
230	12°55'46.682"	120°51'44.300"
231	12°55'46.610"	120°51'45.957"
232	12°55'46.505"	120°51'47.612"
233	12°55'46.433"	120°51'49.269"
234	12°55'46.394"	120°51'50.927"
235	12°55'46.290"	120°51'52.582"
236	12°55'46.218"	120°51'54.239"
237	12°55'46.146"	120°51'55.896"
238	12°55'46.041"	120°51'57.551"
239	12°55'45.969"	120°51'59.207"
240	12°55'45.865"	120°52'00.863"
241	12°55'45.760"	120°52'02.518"
242	12°55'45.688"	120°52'04.175"
243	12°55'45.844"	120°52'05.842"
244	12°55'45.545"	120°52'07.488"
245	12°55'45.473"	120°52'09.145"
246	12°55'45.401"	120°52'10.801"
247	12°55'45.329"	120°52'12.458"
248	12°55'45.257"	120°52'14.115"
249	12°55'45.217"	120°52'15.773"
250	12°55'45.113"	120°52'17.428"
251	12°55'45.041"	120°52'19.085"
252	12°55'44.969"	120°52'20.742"
253	12°55'44.694"	120°52'22.670"
254	12°55'44.031"	120°52'24.449"

CORNER	North Latitude	East Longitude
255	12°55'43.273"	120°52'25.918"
256	12°55'42.281"	120°52'27.274"
257	12°55'41.230"	120°52'28.600"
258	12°55'40.473"	120°52'30.070"
259	12°55'39.862"	120°52'31.610"
260	12°55'39.810"	120°52'33.421"
261	12°55'39.112"	120°52'34.919"
262	12°55'38.413"	120°52'36.416"
263	12°55'37.715"	120°52'37.914"
264	12°55'37.016"	120°52'39.411"
265	12°55'36.318"	120°52'40.909"
266	12°55'35.619"	120°52'42.407"
267	12°55'34.920"	120°52'43.904"
268	12°55'34.222"	120°52'45.402"
269	12°55'33.523"	120°52'46.900"
270	12°55'33.001"	120°52'48.276"
271	12°55'32.534"	120°52'49.829"
272	12°55'32.073"	120°52'51.419"
273	12°55'31.612"	120°52'53.009"
274	12°55'31.151"	120°52'54.600"
275	12°55'30.691"	120°52'56.190"
276	12°55'30.230"	120°52'57.781"
277	12°55'29.769"	120°52'59.371"
278	12°55'29.340"	120°53'00.971"
279	12°55'28.879"	120°53'02.561"
280	12°55'28.313"	120°53'04.200"
281	12°55'27.721"	120°53'05.823"
282	12°55'27.089"	120°53'07.352"
283	12°55'26.458"	120°53'08.880"
284	12°55'25.826"	120°53'10.408"
285	12°55'25.195"	120°53'11.936"
286	12°55'24.563"	120°53'13.464"
287	12°55'23.932"	120°53'14.993"
288	12°55'23.30"	120°53'16.521"
289	12°55'22.638"	120°53'18.036"
290	12°55'22.007"	120°53'19.564"
291	12°55'21.196"	120°53'21.015"
292	12°55'19.994"	120°53'22.299"
293	12°55'19.513"	120°53'23.892"
294	12°55'18.731"	120°53'25.553"
295	12°55'17.869"	120°53'26.980"
296	12°55'17.006"	120°53'28.396"
297	12°55'16.143"	120°53'29.811"
298	12°55'15.177"	120°53'31.145"
299	12°55'14.236"	120°53'32.500"
300	12°55'13.193"	120°53'33.774"
301	12°55'12.252"	120°53'35.129"
302	12°55'11.260"	120°53'36.443"
303	12°55'10.294"	120°53'37.777"
304	12°55'9.302"	120°53'39.092"
305	12°55'8.310"	120°53'40.406"
306	12°55'06.768"	120°53'41.828"
307	12°55'04.624"	120°53'42.536"

CORNER	North Latitude	East Longitude
308	12°55'03.011"	120°53'42.750"
309	12°55'01.398"	120°53'42.965"
310	12°54'59.785"	120°53'43.179"
311	12°54'58.172"	120°53'43.393"
312	12°54'56.559"	120°53'43.607"
313	12°54'54.946"	120°53'43.822"
314	12°54'53.341"	120°53'44.102"
315	12°54'51.893"	120°53'44.420"
316	12°54'50.432"	120°53'44.802"
317	12°54'48.867"	120°53'45.259"
318	12°54'47.303"	120°53'45.715"
319	12°54'45.749"	120°53'46.203"
320	12°54'44.184"	120°53'46.659"
321	12°54'42.620"	120°53'47.116"
322	12°54'41.085"	120°53'47.667"
323	12°54'39.530"	120°53'48.155"
324	12°54'37.976"	120°53'48.643"
325	12°54'36.421"	120°53'49.131"
326	12°54'35.400"	120°53'49.520"
327	12°54'34.113"	120°53'50.535"
328	12°54'32.787"	120°53'51.497"
329	12°54'31.063"	120°53'51.935"
330	12°54'29.498"	120°53'52.583"
331	12°54'28.370"	120°53'53.808"
332	12°54'26.984"	120°53'54.691"
333	12°54'26.156"	120°53'56.310"
334	12°54'24.750"	120°53'57.167"
335	12°54'23.782"	120°53'58.602"
336	12°54'22.496"	120°53'59.616"
337	12°54'21.767"	120°54'01.366"
338	12°54'19.722"	120°54'01.715"
339	12°54'17.620"	120°54'02.171"
340	12°54'16.100"	120°54'03.135"
341	12°54'14.307"	120°54'01.894"
342	12°54'12.673"	120°54'01.937"
343	12°54'11.201"	120°54'03.296"
344	12°54'09.668"	120°54'04.161"
345	12°54'07.985"	120°54'03.809"
346	12°54'06.408"	120°54'04.312"
347	12°54'04.697"	120°54'03.730"
348	12°54'03.087"	120°54'03.907"
349	12°54'01.745"	120°54'04.354"
350	12°54'01.162"	120°54'05.021"
351	12°54'00.391"	120°54'06.534"
352	12°53'59.521"	120°54'07.960"
353	12°53'58.308"	120°54'09.082"
354	12°53'56.996"	120°54'10.117"
355	12°53'55.832"	120°54'11.283"
356	12°53'54.864"	120°54'12.622"
357	12°53'53.724"	120°54'13.810"
358	12°53'52.725"	120°54'14.902"
359	12°53'52.112"	120°54'16.153"
360	12°53'51.254"	120°54'17.593"

CORNER	North Latitude	East Longitude
361	12°53'50.546"	120°54'19.092"
362	12°53'49.627"	120°54'20.508"
363	12°53'49.709"	120°54'22.317"
364	12°53'48.304"	120°54'23.542"
365	12°53'48.659"	120°54'25.459"
366	12°53'48.134"	120°54'27.030"
367	12°53'47.488"	120°54'28.553"
368	12°53'45.904"	120°54'29.986"
369	12°53'43.910"	120°54'30.656"
370	12°53'42.254"	120°54'30.546"
371	12°53'40.621"	120°54'30.601"
372	12°53'39.030"	120°54'30.984"
373	12°53'37.490"	120°54'31.762"
374	12°53'35.891"	120°54'32.080"
375	12°53'52.919"	120°46'56.098"
376	12°53'54.205"	120°46'57.127"
377	12°53'56.264"	120°46'58.652"
378	12°53'57.935"	120°46'59.344"
379	12°53'59.541"	120°46'59.603"
380	12°54'01.148"	120°46'59.861"
381	12°54'02.755"	120°47'00.119"
382	12°54'03.666"	120°47'00.178"
383	12°54'04.816"	120°47'00.656"
384	12°54'06.131"	120°47'01.645"
385	12°54'07.447"	120°47'02.634"
386	12°54'08.846"	120°47'03.48"
387	12°54'10.244"	120°47'04.327"
388	12°54'11.975"	120°47'04.603"
389	12°54'13.789"	120°47'04.736"
390	12°54'15.188"	120°47'05.582"
391	12°54'16.617"	120°47'06.632"
392	12°54'19.064"	120°47'07.393"
393	12°54'20.687"	120°47'07.296"
394	12°54'22.311"	120°47'07.198"
395	12°54'23.935"	120°47'07.101"
396	12°54'25.324"	120°47'07.012"
397	12°54'26.893"	120°47'07.130"
398	12°54'28.512"	120°47'07.299"
399	12°54'30.130"	120°47'07.467"
400	12°54'31.748"	120°47'07.636"
401	12°54'33.372"	120°47'07.739"
402	12°54'33.981"	120°47'07.497"
403	12°54'35.211"	120°47'08.559"
404	12°54'36.398"	120°47'09.692"
405	12°54'37.586"	120°47'10.826"
406	12°54'38.796"	120°47'11.934"
407	12°54'39.961"	120°47'13.092"
408	12°54'40.841"	120°47'13.931"
409	12°54'41.585"	120°47'15.246"
410	12°54'42.379"	120°47'16.694"
411	12°54'43.028"	120°47'18.220"
412	12°54'43.190"	120°47'20.011"
413	12°54'43.409"	120°47'21.770"

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CORNER	North Latitude	East Longitude
414	12°54'45.233"	120°47'24.478"
415	12°54'48.244"	120°47'25.852"
416	12°54'49.395"	120°47'25.715"
417	12°54'51.035"	120°47'25.812"
418	12°54'52.655"	120°47'26.006"
419	12°54'53.890"	120°47'25.936"
420	12°54'54.996"	120°47'26.251"
421	12°54'55.862"	120°47'26.435"
422	12°54'56.744"	120°47'27.736"
423	12°54'57.624"	120°47'29.130"
424	12°54'58.505"	120°47'30.524"
425	12°54'59.442"	120°47'32.093"
426	12°55'02.397"	120°47'34.239"
427	12°55'04.033"	120°47'34.336"
428	12°55'05.670"	120°47'34.466"
429	12°55'07.301"	120°47'34.564"
430	12°55'07.657"	120°47'34.367"
431	12°55'09.172"	120°47'34.969"
432	12°55'10.687"	120°47'35.572"
433	12°55'12.238"	120°47'36.082"
434	12°55'13.466"	120°47'36.580"
435	12°55'14.426"	120°47'37.161"
436	12°55'15.699"	120°47'38.194"
437	12°55'17.051"	120°47'39.122"
438	12°55'18.501"	120°47'39.918"
439	12°55'19.615"	120°47'40.372"
440	12°55'20.774"	120°47'41.009"
441	12°55'21.888"	120°47'42.281"
442	12°55'22.658"	120°47'43.742"
443	12°55'23.456"	120°47'45.187"
444	12°55'24.255"	120°47'46.632"
445	12°55'25.025"	120°47'48.093"
446	12°55'25.795"	120°47'49.553"
447	12°55'26.564"	120°47'51.014"
448	12°55'27.444"	120°47'52.591"
449	12°55'28.752"	120°47'54.194"
450	12°55'30.061"	120°47'55.177"
451	12°55'31.352"	120°47'56.188"
452	12°55'32.661"	120°47'57.171"
453	12°55'33.971"	120°47'58.155"
454	12°55'35.280"	120°47'59.138"
455	12°55'36.590"	120°48'00.122"
456	12°55'37.508"	120°48'00.848"
457	12°55'38.321"	120°48'02.106"
458	12°55'39.092"	120°48'03.566"
459	12°55'39.864"	120°48'05.025"
460	12°55'40.635"	120°48'06.485"
461	12°55'41.407"	120°48'07.945"
462	12°55'42.178"	120°48'09.405"
463	12°55'42.950"	120°48'10.865"
464	12°55'43.710"	120°48'12.312"
465	12°55'44.150"	120°48'12.419"
466	12°55'43.325"	120°48'13.849"

CORNER	North Latitude	East Longitude
467	12°55'42.500"	120°48'15.278"
468	12°55'41.761"	120°48'16.475"
469	12°55'41.155"	120°48'17.147"
470	12°55'39.627"	120°48'17.715"
471	12°55'38.099"	120°48'18.283"
472	12°55'36.571"	120°48'18.851"
473	12°55'35.232"	120°48'19.948"
474	12°55'33.514"	120°48'19.987"
475	12°55'31.814"	120°48'20.760"
476	12°55'30.104"	120°48'22.722"
477	12°55'29.738"	120°48'24.338"
478	12°55'29.372"	120°48'25.953"
479	12°55'29.006"	120°48'27.569"
480	12°55'28.608"	120°48'29.177"
481	12°55'28.692"	120°48'31.675"
482	12°55'29.778"	120°48'33.415"
483	12°55'30.887"	120°48'34.628"
484	12°55'31.948"	120°48'35.885"
485	12°55'33.057"	120°48'37.099"
486	12°55'34.190"	120°48'38.290"
487	12°55'35.275"	120°48'39.525"
488	12°55'35.894"	120°48'40.525"
489	12°55'36.154"	120°48'41.721"
490	12°55'36.300"	120°48'43.373"
491	12°55'36.445"	120°48'45.025"
492	12°55'36.590"	120°48'46.676"
493	12°55'36.735"	120°48'48.328"
494	12°55'36.913"	120°48'49.976"
495	12°55'37.091"	120°48'51.625"
496	12°55'37.070"	120°48'52.987"
497	12°55'36.773"	120°48'54.381"
498	12°55'36.266"	120°48'55.957"
499	12°55'35.758"	120°48'57.533"
500	12°55'35.188"	120°48'59.089"
501	12°55'34.712"	120°490'0.674"
502	12°55'34.235"	120°49'02.260"
503	12°55'33.759"	120°49'03.845"
504	12°55'33.282"	120°49'05.433"
505	12°55'32.992"	120°49'07.504"
506	12°55'33.005"	120°49'09.162"
507	12°55'33.019"	120°49'10.82"
508	12°55'33.033"	120°49'12.478"
509	12°55'33.047"	120°49'14.136"
510	12°55'33.061"	120°49'15.795"
511	12°55'33.075"	120°49'17.453"
512	12°55'33.089"	120°49'19.111"
513	12°55'33.102"	120°49'20.769"
514	12°55'33.116"	120°49'22.427"
515	12°55'33.070"	120°49'23.899"
516	12°55'32.849"	120°49'25.462"
517	12°55'32.575"	120°49'27.097"
518	12°55'32.302"	120°49'28.732"
519	12°55'31.996"	120°49'30.361"

ncd:

CORNER	North Latitude	East Longitude
520	12°55'31.722"	120°49'31.995"
521	12°55'31.448"	120°49'33.63"
522	12°55'31.206"	120°49'35.27"
523	12°55'30.911"	120°49'36.84"
524	12°55'30.477"	120°49'38.172"
525	12°55'29.875"	120°49'39.712"
526	12°55'29.273"	120°49'41.253"
527	12°55'28.671"	120°49'42.793"
528	12°55'28.070"	120°49'44.334"
529	12°55'27.468"	120°49'45.874"
530	12°55'26.896"	120°49'47.427"
531	12°55'26.294"	120°49'48.968"
532	12°55'25.692"	120°49'50.508"
533	12°55'25.090"	120°49'52.049"
534	12°55'24.488"	120°49'53.589"
535	12°55'23.918"	120°49'55.291"
536	12°55'23.473"	120°49'56.915"
537	12°55'23.051"	120°49'58.517"
538	12°55'22.629"	120°50'00.118"
539	12°55'22.207"	120°50'01.720"
540	12°55'21.314"	120°50'03.192"
541	12°55'20.483"	120°50'04.681"
542	12°55'19.653"	120°50'06.171"
543	12°55'19.262"	120°50'07.781"
544	12°55'18.966"	120°50'09.417"
545	12°55'18.607"	120°50'11.036"
546	12°55'18.247"	120°50'12.654"
547	12°55'18.085"	120°50'14.831"
548	12°55'18.152"	120°50'16.614"
549	12°55'18.231"	120°50'18.272"
550	12°55'18.374"	120°50'19.929"
551	12°55'18.421"	120°50'21.587"
552	12°55'18.434"	120°50'23.245"
553	12°55'18.448"	120°50'24.903"
554	12°55'18.429"	120°50'26.562"
555	12°55'18.476"	120°50'28.220"
556	12°55'18.457"	120°50'29.878"
557	12°55'18.503"	120°50'31.536"
558	12°55'18.484"	120°50'33.195"
559	12°55'18.498"	120°50'34.853"
560	12°55'18.479"	120°50'36.511"
561	12°55'18.493"	120°50'38.169"
562	12°55'18.506"	120°50'39.828"
563	12°55'18.667"	120°50'41.719"
564	12°55'19.322"	120°50'43.914"
565	12°55'20.053"	120°50'45.395"
566	12°55'20.785"	120°50'46.877"
567	12°55'21.517"	120°50'48.358"
568	12°55'22.571"	120°50'49.682"
569	12°55'23.479"	120°50'51.077"
570	12°55'24.152"	120°50'52.587"
571	12°55'24.825"	120°50'54.097"
572	12°55'25.469"	120°50'55.622"

CORNER	North Latitude	East Longitude
573	12°55'26.142"	120°50'57.132"
574	12°55'26.844"	120°50'58.627"
575	12°55'27.547"	120°51'00.123"
576	12°55'28.249"	120°51'01.619"
577	12°55'28.981"	120°51'03.100"
578	12°55'29.742"	120°51'04.567"
579	12°55'30.444"	120°51'06.063"
580	12°55'31.147"	120°51'07.559"
581	12°55'31.849"	120°51'09.054"
582	12°55'32.522"	120°51'10.564"
583	12°55'33.166"	120°51'12.089"
584	12°55'33.868"	120°51'13.584"
585	12°55'34.571"	120°51'15.08"
586	12°55'35.273"	120°51'16.576"
587	12°55'35.975"	120°51'18.071"
588	12°55'36.678"	120°51'19.567"
589	12°55'37.380"	120°51'21.063"
590	12°55'37.898"	120°51'22.415"
591	12°55'38.293"	120°51'24.016"
592	12°55'38.780"	120°51'25.599"
593	12°55'39.235"	120°51'27.191"
594	12°55'39.753"	120°51'28.763"
595	12°55'40.239"	120°51'30.346"
596	12°55'40.943"	120°51'31.859"
597	12°55'41.306"	120°51'33.481"
598	12°55'41.823"	120°51'35.053"
599	12°55'42.310"	120°51'36.636"
600	12°55'42.766"	120°51'38.228"
601	12°55'43.252"	120°51'39.810"
602	12°55'43.716"	120°51'41.371"
603	12°55'43.829"	120°51'42.511"
604	12°55'43.757"	120°51'44.168"
605	12°55'43.685"	120°51'45.825"
606	12°55'43.613"	120°51'47.482"
607	12°55'43.541"	120°51'49.138"
608	12°55'43.469"	120°51'50.795"
609	12°55'43.430"	120°51'52.453"
610	12°55'43.358"	120°51'54.11"
611	12°55'43.286"	120°51'55.766"
612	12°55'43.214"	120°51'57.423"
613	12°55'43.174"	120°51'59.081"
614	12°55'43.135"	120°52'00.739"
615	12°55'43.063"	120°52'02.396"
616	12°55'42.991"	120°52'04.053"
617	12°55'42.951"	120°52'05.711"
618	12°55'42.847"	120°52'07.366"
619	12°55'42.743"	120°52'09.021"
620	12°55'42.606"	120°52'10.675"
621	12°55'42.534"	120°52'12.332"
622	12°55'42.559"	120°52'13.993"
623	12°55'42.487"	120°52'15.650"
624	12°55'42.415"	120°52'17.306"
625	12°55'42.343"	120°52'18.963"

CORNER	North Latitude	East Longitude
626	12°55'42.304"	120°52'20.621"
627	12°55'42.055"	120°52'21.946"
628	12°55'41.563"	120°52'23.253"
629	12°55'40.776"	120°52'24.708"
630	12°55'40.077"	120°52'26.206"
631	12°55'38.791"	120°52'27.418"
632	12°55'37.975"	120°52'28.859"
633	12°55'37.688"	120°52'30.556"
634	12°55'37.401"	120°52'32.253"
635	12°55'36.732"	120°52'33.765"
636	12°55'36.033"	120°52'35.263"
637	12°55'35.335"	120°52'36.760"
638	12°55'34.636"	120°52'38.258"
639	12°55'33.908"	120°52'39.741"
640	12°55'33.210"	120°52'41.239"
641	12°55'32.511"	120°52'42.736"
642	12°55'31.813"	120°52'44.234"
643	12°55'31.114"	120°52'45.732"
644	12°55'30.463"	120°52'47.441"
645	12°55'29.975"	120°52'49.058"
646	12°55'29.514"	120°52'50.649"
647	12°55'29.054"	120°52'52.239"
648	12°55'28.593"	120°52'53.830"
649	12°55'28.132"	120°52'55.420"
650	12°55'27.672"	120°52'57.01"
651	12°55'27.211"	120°52'58.601"
652	12°55'26.750"	120°53'00.191"
653	12°55'26.289"	120°53'01.781"
654	12°55'25.802"	120°53'03.280"
655	12°55'25.202"	120°53'04.742"
656	12°55'24.571"	120°53'06.270"
657	12°55'23.939"	120°53'07.798"
658	12°55'23.308"	120°53'09.326"
659	12°55'22.676"	120°53'10.855"
660	12°55'22.045"	120°53'12.383"
661	12°55'21.413"	120°53'13.911"
662	12°55'20.782"	120°53'15.439"
663	12°55'20.060"	120°53'16.929"
664	12°55'19.459"	120°53'18.470"
665	12°55'18.647"	120°53'19.921"
666	12°55'17.476"	120°53'21.217"
667	12°55'16.994"	120°53'22.810"
668	12°55'16.548"	120°53'23.877"
669	12°55'15.729"	120°53'25.302"
670	12°55'14.814"	120°53'26.676"
671	12°55'13.951"	120°53'28.092"
672	12°55'13.011"	120°53'29.447"
673	12°55'12.019"	120°53'30.761"
674	12°55'11.027"	120°53'32.075"
675	12°55'10.061"	120°53'33.410"
676	12°55'08.991"	120°53'34.663"
677	12°55'7.0974"	120°53'35.957"
678	12°55'06.982"	120°53'37.272"

CORNER	North Latitude	East Longitude
679	12°55'05.990"	120°53'38.586"
680	12°55'05.140"	120°53'39.347"
681	12°55'04.245"	120°53'39.576"
682	12°55'02.632"	120°53'39.790"
683	12°55'01.019"	120°53'40.005"
684	12°54'59.406"	120°53'40.219"
685	12°54'57.793"	120°53'40.433"
686	12°54'56.180"	120°53'40.648"
687	12°54'54.567"	120°53'40.862"
688	12°54'52.946"	120°53'41.010"
689	12°54'51.202"	120°53'41.315"
690	12°54'49.532"	120°53'41.823"
691	12°54'47.987"	120°53'42.343"
692	12°54'46.442"	120°53'42.862"
693	12°54'44.887"	120°53'43.350"
694	12°54'43.332"	120°53'43.838"
695	12°54'41.778"	120°53'44.326"
696	12°54'40.214"	120°53'44.783"
697	12°54'38.659"	120°53'45.271"
698	12°54'37.085"	120°53'45.695"
699	12°54'35.531"	120°53'46.183"
700	12°54'33.608"	120°53'47.160"
701	12°54'32.361"	120°53'48.227"
702	12°54'31.035"	120°53'49.189"
703	12°54'29.271"	120°53'49.575"
704	12°54'27.745"	120°53'50.275"
705	12°54'26.598"	120°53'51.473"
706	12°54'25.212"	120°53'52.357"
707	12°54'23.966"	120°53'53.424"
708	12°54'23.038"	120°53'54.911"
709	12°54'22.050"	120°53'56.320"
710	12°54'20.764"	120°53'57.335"
711	12°54'20.075"	120°53'59.136"
712	12°54'18.443"	120°53'59.405"
713	12°54'17.279"	120°53'59.407"
714	12°54'15.770"	120°54'00.470"
715	12°54'13.994"	120°53'59.361"
716	12°54'12.360"	120°53'59.403"
717	12°54'10.896"	120°54'00.828"
718	12°54'09.343"	120°54'01.529"
719	12°54'07.664"	120°54'01.210"
720	12°54'06.095"	120°54'01.779"
721	12°54'04.380"	120°54'01.163"
722	12°54'02.774"	120°54'01.436"
723	12°54'00.996"	120°54'01.917"
724	12°53'59.294"	120°54'03.369"
725	12°53'58.597"	120°54'04.947"
726	12°53'57.728"	120°54'06.374"
727	12°53'56.514"	120°54'07.496"
728	12°53'55.202"	120°54'08.531"
729	12°53'54.087"	120°54'09.740"
730	12°53'53.807"	120°54'11.688"
731	12°53'52.692"	120°54'12.897"

mid:

CORNER	North Latitude	East Longitude
732	12°53'51.206"	120°54'13.878"
733	12°53'49.927"	120°54'15.294"
734	12°53'48.977"	120°54'16.697"
735	12°53'48.270"	120°54'18.196"
736	12°53'47.806"	120°54'19.791"
737	12°53'47.584"	120°54'21.481"
738	12°53'47.059"	120°54'23.052"
739	12°53'46.504"	120°54'24.611"
740	12°53'45.888"	120°54'26.146"
741	12°53'45.181"	120°54'27.645"
742	12°53'44.266"	120°54'28.098"
743	12°53'43.588"	120°54'28.190"
744	12°53'41.928"	120°54'28.048"
745	12°53'40.281"	120°54'28.004"
746	12°53'38.686"	120°54'28.355"
747	12°53'37.159"	120°54'29.231"
748	12°53'35.547"	120°54'29.450"
DELTA *(Navigation Zone)*		
N1	12°53'54.64"	120°46'52.96"
N2	12°53'53.01"	120°46'55.56"
N3	12°53'20.79"	120°46'40.03"
N4	12°53'20.72"	120°46'39.42"
N5	12°53'20.59"	120°46'39.24"
N6	12°53'20.87"	120°46'39.06"
N7	12°53'20.93"	120°46'38.76"
N8	12°53'21.28"	120°46'38.67"
N9	12°53'21.71"	120°46'38.71"
N10	12°53'21.86"	120°46'38.92"
N11	12°53'22.06"	120°46'39.16"
N12	12°53'22.42"	120°46'39.4"
N13	12°53'22.92"	120°46'39.48"
N14	12°53'23.35"	120°46'39.39"

CORNER	North Latitude	East Longitude
N15	12°53'23.99"	120°46'39.12"
N16	12°53'24.44"	120°46'38.84"
N17	12°53'25.19"	120°46'38.54"
N18	12°53'26.25"	120°46'38.45"
N19	12°53'26.82"	120°46'38.27"
N20	12°53'27.68"	120°46'38.06"
N21	12°53'28.26"	120°46'37.84"
N22	12°53'28.8"	120°46'37.96"
N23	12°53'29.11"	120°46'38.22"
N24	12°53'29.66"	120°46'38.11"
N25	12°53'30.05"	120°46'37.62"
N26	12°53'30.28"	120°46'37.14"
N27	12°53'30.21"	120°46'36.59"
N28	12°53'30.4"	120°46'36.08"
N29	12°53'30.81"	120°46'36.02"
N30	12°53'31.2"	120°46'36.23"
N31	12°53'31.29"	120°46'36.6"
N32	12°53'31.44"	120°46'36.93"
N33	12°53'33.14"	120°46'36.78"
N34	12°53'34.21"	120°46'36.31"
N35	12°53'38.75"	120°46'36.14"
N36	12°53'39.52"	120°46'36.03"
N37	12°53'39.95"	120°46'35.8"
N38	12°53'41.76"	120°46'35.68"
N39	12°53'42.25"	120°46'35.87"
N40	12°53'42.58"	120°46'36.11"
N41	12°53'43.1"	120°46'36.02"
N42	12°53'43.97"	120°46'35.46"
N43	12°53'45.18"	120°46'35.38"
N44	12°53'45.66"	120°46'36.24"
N45	12°53'46.2"	120°46'36.32"

ANNEX D

ENVIRONMENTAL IMPACT AND MANAGEMENT PLAN (EIMP)

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
I. CONSTRUCTION / DEVELOPMENT PHASE		
Construction of office, staff house, and other support facilities		
LAND		
Possible conflict with existing land use; encroachment in ECAs; & impact in existing land tenure issue/s	Consultation with land tenants that will be affected by the development. Justly compensate them in terms of crop damages or for the temporary use of the land, whichever is appropriate.	Complaints avoided or properly and promptly settled.
WATER QUALITY		
Water pollution from solid wastes.	• On-site solid waste management (segregation and proper temporary	100% compliant with RA 9003; and DAO 1992-29 and DAO 201322 including its Revised Procedural Manual

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	storage) including hazardous wastes; • 3rd party disposal on shore.	
Water pollution from hazardous solid wastes	• On-site solid waste management (segregation and proper temporary storage) of hazardous wastes; • Treatment/disposal by a DENR-accredited 3rd party contractor on shore.	
AIR		
Slight increase in noise level.	• Provide silencers and mufflers to minimize noise; • Construction activities should be done only during daytime; • Proper maintenance of the equipment and vehicles.	100% Compliant with Noise Standards
PEOPLE: Occupational Health and Safety		
Physical injuries arising from accidents	• Daily toolbox meeting; • Strict wearing of PPEs at the workplace; • Safety Engineer to oversee health hazards over the personnel all throughout the construction; • Sufficient first aid kits shall be made available at all times at the project site; • Observance of safety practices and training of construction workers; • Establish Emergency Preparedness and Response Program.	100% Compliant to DOLE OSH Standards
II. OPERATIONS PHASE		
Opening of river mouth through near-shore dredging; River dredging; Stockpiling or Hauling; Ship Loading; Vessel/s Operation; Refueling; Operation of other facilities		
LAND		
Possible conflict with existing land use; encroachment in environmentally critical areas; and impact in existing land tenure issue/s	• Consultation with land tenants that will be affected by dredging activities. Give just compensation; • Good housekeeping.	Complaints avoided or properly and promptly settled.
Generation of domestic solid wastes	• Respective waste management facilities for all operating units; • Improvement of segregation methods and recycling facility; • River clean-up drives; and • IEC on ecological solid waste management	Zero Dumping; 100% compliant with RA 9003; and DAO 1992-29 and DAO 201322 including its Revised Procedural Manual

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
Generation of toxic and hazardous waste wastes	• Sorting, labeling and monitoring of hazardous wastes with bund wall and oil-water separator at the storage facility; • Provision of oil spill kit and fire extinguisher; • Collection, transportation and treatment of generated hazardous waste materials by a DENR accredited transporter and TSD facility	Zero Dumping; 100% compliant with RA 9003; and DAO 1992-29 and DAO 201322 including its Revised Procedural Manual
WATER & LAND: Geohazards		
Potential inducement of riverbank erosion	• Maintaining slope stability of riverbanks by proper engineering measures; • Adequate drainage control; • Easement of at least 10 meters between bank and dredging operations; • Maintain 1:4 height to base ratio for bank slope.	Zero riverbank erosion due to dredging
Improvement in flood drainage containment capacity of lower Patrick-Viga River leading to improvement in farm yield	• IEC to inform locals about the perceived & planned enhancement of the river • Installation and proper maintenance of drainage system.	Enhancement
WATER		
Change in drainage morphology	• Maintain a central pilot channel to guide stream flow; • Silt curtains or other measures to be installed will be strategically constructed to lessen the transport of silt-laden water.	Enhancement of heavily choked Patrick-Viga River
Riverbed deepened and water surface lowered - lessens flooding susceptibility	• Maintain a central pilot channel; • Strictly follow/stick to the approved Dredging Plan.	Enhancement
Disruption in water circulation pattern, littoral current, and coastal erosion/deposition	• Stick to DPWH-approved Dredging Master Plan; • Employ geo-engineering technologies.	Enhancement of heavily choked Patrick-Viga River
Increase in background water quality levels due to resuspension of sediments.	• Installation of silt curtains or other possible measures; • If silt curtains and other containment enclosures are not possible, limit the dredging during periods of calm winds or low tides; • Follow engineering and environmental plans stringently;	100 % compliant to RA 9275 and DAO 2016-08 standards

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	• Maintain a central pilot channel; • Stick to approved Dredging Plan; • Periodic water quality monitoring; • Cover stockpiles of dredged materials if hauling is not yet available.	
Inadvertent spill of ship bilge, ballast water, fuel, oily residues, domestic wastewaters from vessel operations	• Onboard bilge management; • Ballast water management; • Proper maintenance and regular inspection of vehicles and construction equipment; • Provision of facilities for recovery of leaks and storage in drums; • Proper training of vehicle operators especially on spill prevention and containment; • Designation of a motor pool for refueling and maintenance works; • Refueling by latch-lock between dispenser & receiving fuel tank; • Prepare belt oil skimmer for oil spill emergency; • and Implement Oil (& grease) Spill Contingency Plan; • No bilge and ballast water disposal at sea; • Use of portable septic tanks in all facilities; • Waste minimization, recycling and re-use including motor pool spoils.	100% compliant to RA 9275 and DAO 2016-08 standards
Potential increase in BOD & coliform level of water bodies from domestic wastewater and equipment.	• Temporary facilities ("portalets") for workers onboard the vessels; • Strictly impose proper waste disposal and sanitation/good housekeeping practices; • Prevention of disposal of untreated wastewater to river/sea; • Regular Water Quality Monitoring	Zero discharge of untreated domestic wastewater to the river/bay.
Siltation loading in coastal waters – leading to potential disturbance and alteration of the seabed and benthic substrate hosting fish, macro-invertebrates and crustaceans	• Contain erosion at source and entrap fugitive sediments thru provision of silt curtains and/or sediment filters around estuary and around coral reef; • Mangrove planting in foreshore areas; • Compensate any substantiated loss of income from fishing due to project;	100% compliant to Approved Dredging Plan

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Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	• Loss of gear efficiency of stationary gears due to sediment streams will be replaced.	
Potential loss of sandy demersal fish habitat; Migration of fish; Physical damage to macro-invertebrate habitats	• Translocate/ re-stock suitable bivalve populations in the inter-tidal area; • Formulation of a Fisheries Improvement Plan.	100% compliant to Approved Dredging Plan
AIR		
Air pollution due to emission of CO, SO_x and No_x	• Regular Preventive Maintenance System (PMS) for all vessels; • Vessels fully compliant with international standards.	100% Compliant to RA 8749
Increase in ambient noise level	• Regular preventive maintenance of vessels/vehicles/equipment; • Choose less noisy equipment or cover noisy equipment with noise reducing sheets; • Enclosure of equipment emitting high level noise; • Use alternative power source for cooling system such as solar power; • If possible, plant trees at the banks to act as buffer; • Proper scheduling of dredging and hauling; • Imposition of speed limits for land vehicles along access roads (30 kph maximum); • Periodic monitoring of noise level during operating hours; • No dredging operations at night as much as possible. In case exigency of operation at night, full coordination with barangay will be conducted beforehand.	100% Compliant with Noise Standards
PEOPLE		
Improved safety due to lesser flooding problems as a result of dredging	• IEC to inform locals about the perceived & planned enhancement of the river	An enhancement feature
Public health and safety issues related to project implementation	• Provide health clinic manned by a doctor, nurse, or health workers; • Provision and maintenance of signages demarcating buffer zone; • Facilitate trainings for Project-related Disaster Risk	100% Compliant to DOLE OSH Standards;

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	Reduction Management in the Barangays.	
Physical injuries arising from accidents	• Wearing of PPEs for all workers while at the project premises; • Conduct regular safety trainings and drills; • Conduct basic medical check-up for newly-hired workers; • Provide warning and safety signs where needed; • Daily toolbox meeting; and • Implement Emergency Response Plan and Health and Safety Management Plan.	100% Compliant to DOLE OSH Standards; 100% Compliant to Phil. Coast Guard & MARINA Standards
Equipment and personnel safety during rainy season	• Use amphibious dredger; • Define quick shelter route in the event of strong rain; • Conduct emergency drills; • Set up barometer and anemometer at site; • Assign somebody to monitor the weather and provide all-weather communication equipment with all operators; and • Provide training for adaptation of working procedures and protocol under all weather conditions.	100% Compliant to DOLE OSH Standards; 100% Compliant to Phil. Coast Guard & MARINA Standards
Uncontrolled developments around the project site	• Coordinate with Barangay LGU regarding developments to discourage building of permanent structures due to flood hazard.	100% compliance to Local Government Code
Spread of COVID-19	• Rigidly implement all protocols implemented by the government at all times; • Provide COVID-19 insurance/compensation benefits to workers.	100% Compliant to COVID guidelines
LIVELIHOOD: Displacement of sustenance fishers in the river and estuary.	• Translocate/ re-stock suitable bivalve populations in the inter-tidal area; • Formulation of a Fisheries Improvement Plan; • Provide the affected local people with supplemental livelihood training; • Replace dislocated fishing gears; and • Pursue crab and fish replenishment in nearshore sandy shoals through collaboration with the Southeast Asian Fisheries Development Center	100% Compliant to livelihood and Fish Aggregating Device (FAD);

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	(SEAFDEC) and private fish hatcheries.	
Threat to stability of foundation of Patrick Bridge & the gabions (FCs) of DPWH.	• Provide scour protection for bridge columns if necessary. • Project area ends more than 2 km river distance from bridge, hence, no scour protection measures required.	100% compliance to DPWH standards and the approved Dredging Plan
Employment and livelihood opportunities for local people and entrepreneurs	• Prioritize locals in hiring of workers if skills are available locally; • Partner with the LGU for the implementation of the Social Development Program; • Provide employees' wages and benefits as prescribed by law; • Generation of livelihood opportunities by allowing local entrepreneurs to provide support services to the project and its workers.	100% Compliant to SDP and the Local Government Code in terms of local employment
In-migration might cause health and safety issues, social conflicts, peace and order, and introduction of other social evils.	• Prioritize locals in hiring; • Establish and maintain strict hiring policy for migrant workers and orient them properly upon or before arrival; • Coordination with the Barangay LGU to ensure only authorized establishments are able to operate in the area.	100% Compliant to SDP and the Local Government Code in terms of local employment
Discrimination of women in the workplace and security issues to women and children	• Promote equal protection or treatment to women and children as part of the gender and development initiatives; • Implement flexible and gender-sensitive employment and equal opportunities for the elderly, men, women, and youth that are not employed; • Assist the women in capability-building and/or skills training; • Uphold fundamental human rights by never discriminating against others based on their legally-protected traits.	100% Compliant to SDP and the Local Government Code in terms of local employment
Delivery of supplemental basic social services to local people	• Partner with the LGU for the implementation of the SDP; pay all taxes and fees diligently.	100% Compliant to SDP
III. DECOMMISIONING AND ABANDONMENT PHASE		
Dismantling and removal of equipment and structures		
Generation of solid waste from the dismantling of structures.	• Implement ecological solid waste management system;	100% compliant with RA 9003

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
Potential stockpiling of wastes at riverbanks	• Ensure proper disposal of all solid wastes before leaving the site.	
Generation of hazardous waste from the dismantling of structures.	• Implement hazardous waste management system to acceptable standards; • Commission a DENR-accredited 3rd Party Contractor to haul out all waste materials and dispose only to approved Treatment, Storage and Disposal (TSD) facility.	100% compliant with DAO 1992-29 and DAO 201322
Collapse of riverbanks or damage to bridge &/or gabions	• Provision of engineering mitigation measures to portions of riverbanks when absolutely necessary (in coordination with DPWH); • Project site to be inspected by concerned government agencies & LGUs before Proponent turns over the site to the LGU.	100% compliant with DPWH guidelines
Increase in turbidity due to sediment resuspension	• Maintain sediment barrier until TSS values are below the limit for Class C/ Class SC	100 % compliant to RA 9275 and DAO 2016-08 standards
Potential spill of oil, lubricants or wastewater	• Commission an accredited 3rd Party Contractor to haul out and/or treat all liquid wastes (especially used oils/lubricants and its containers).	100% compliant to RA 9275 and DAO 2016-08 standards
Re-establishing riparian vegetative cover in the project area	• The planting of trees/vegetative cover at riverbanks for the duration of the project shall have grown and improved the area by the time of decommissioning.	An enhancement
Return and/or increase in population of fish and other water species due to restoration of habitat	• An enhancement	An enhancement
GHG and particulate emissions from equipment	• Provide catalytic converters and particulate filters for petroleum-fueled equipment; • Construct at site a concrete platform with lip, surfaces lightly dipping to an oil collection sump with oil and grease separator unit. • Collected used oil and fuel storage should be on concrete flooring with containment lip in case of spillage; and	100% Compliant to RA 8749

Potential Impact Per Project Activity Per Phase	Mitigating Measures	Rating/ Performance of Mitigating Measures
	• Used oil should be hauled out only by DENR-accredited waste handler and treater.	
Cessation of employment and loss of business opportunities for locals.	• Ensure capability training as part of employment benefits to help them become employable after life of project; Provide assistance in job seeking; • Prepare the communities through capability building and assistance in the development of alternative sustainable livelihood; and • Implement satisfactory retrenchment package.	100% compliant to DOLE Labor Code
Accidents due to collapse of riverbanks or damage to bridge &/or gabions	• Provision of engineering mitigation measures to portions of riverbanks when absolutely necessary (in coordination with DPWH); • Project site will be inspected by concerned government agencies & LGUs before Proponent turns over the site to the LGU.	100% compliance to DPWH guidelines and to Approved Dredging Plan

For dissemination and proper action of the parties concerned.

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EIA Review Committee Chairperson

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