1. BASIC PROJECT INFORMATION

1.1	Name of the Project				
		MELTING PLANT AND STEEL MILL BAR PROJECT (EXPANSION OR PRODUCTION CAPACITY)			
	Location	Sitio Kirahon, Barangay San Martin, Municipality of Villanueva, Province of Misamis Oriental			
	Total Lot Area	Expansion of Land Area from 60,100 square meters to 100,000 square meters			
	Project Type	Heavy and Other Processing/Manufacturing Industries 1.4 Smelting Plants <u>></u> 15,000 MT annual rate production			
Pollution Control Device, Tower, Substation or Materials and Finished Pr		Pollution Control Device, Rolling Tower, Substation or Power St	sed of Four (4) Induction Furnace with Air ice, Rolling Mill, Casting Machine, Cooling r Power Station, Warehouse for Scrap l Products, Admin Office, Guardhouse, and ies.		
		From Capacity 2,000 MT/month Land Area 60,000 sqms	To 7,500 MT/month 100,000 sqms		
	Project Cost	Php 100,000,000.00			
1.2	Proponent Name	KEIM HING STEEL CORPORATION			
	Proponent Address	Lot 2758-B, Barangay Tatlong Bating, Naic Cavite City			
	Ownership	The area is owned by the Proponent			
	Proponent Means of Contact	Name: EDWIN FABRO VINCENT TAN ENGR. VENICE V. MONTEMAYOR	Designation: President Manager EIS-Team Leader		
		Landline No.	Fax No.		
		(632)871-5747	(632)455-2022		
		Mobile No.	Email:		
		0915-7080777	273992796@qq.com		

2. PROJECT DESCRIPTION

2.1 Goals and Objectives

The project is located in Sitio Kirahon, Barangay San Martin, Municipality of Villanueva, Province of Misamis Oriental. The project has granted already an Environmental Compliance Certificate (ECC) with Reference No. ECC-R10-1802-003 on February 14, 2018 issued by EMB Region 10 for the 2,000 MT per month production capacity. The said expansion to 7,500 MT per month is due to the expected increase in the demand of steel products in Mindanao area within the same location.

The project conducted public scoping last December 5, 2017 at the Audio Visual Room (AVR) Gymnasium in Villanueva, Misamis Oriental with various stakeholders including the barangay.

The rationale behind this project is the effective utilization of the earth's limited resources. Waste is produced from industrial sites, houses and others, which includes fragments of materials which can be retrieved and re-vitalized to be a usable product again. However, such re-cycling activity can only be harnessed through an effective collection and transport of these materials, specifically iron scraps. Hence, the necessity of the proposed project

The objective of the company is to be able to provide construction steel materials within the Mindanao Region bringing the easy access to the development. With the demands due to the projects in the area made the proponent decided to increase the volume capacity from 2,000 MT per month to 7,500 MT per month.

This project aims to achieve the following objectives:

- 1. Become and active partner in the waste minimization and utilization project of the government;
- 2. Introduce advance and state of the art technology in recycling of iron ore materials that will not contribute to the existing environmental settings and surrounding;
- 3. Bringing job opportunities by providing employment to the local community.

The rationale choosing the location is that the area is located in an Industrial Zone.

2.2 Alternative of the project being considered by the proponent on the following:

• **Project Type, components and size** – The project is an expansion of the production capacity and land area which is currently under construction phase in terms of building enclosed structures, there is no other project type to be considered.

The project if granted to pursue its expansion of output capacity will be able to reduce the volume of delivery truck and container coming from one site to the other, thus, access to easy delivery towards the different areas in Mindanao Region would be easier and will reduce the travel time.

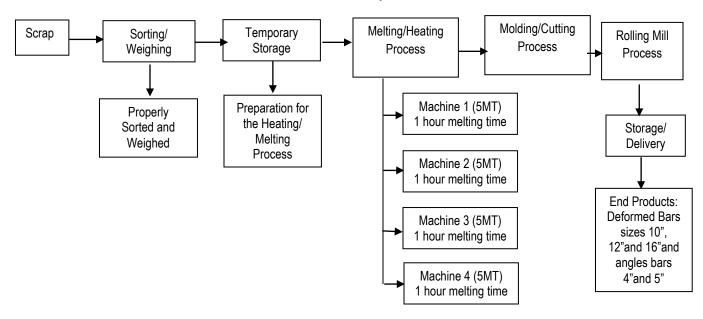
• **Process Technology** - the project shall be using four (4) units of electric induction furnace with capacity of 5.0 MT. Basically buying scrap materials, melting, moulding, cooling and rolling to produce deformed bars with sizes 10mm, 12mm, and 16mm and angle bars size 4"and 5".

The process and technology includes properly:

- Buying/Collection of scrap local or out-source
- o Sorting and weighing
- Melting the scrap to produce liquid metal
- o Molding process to produce ingot
- o Rolling Process

The operation is 16 hours per day

Process Flow of the Operation Phase



Resource Utilization

Water – the project shall consider the use of underground water system if the local water utility cannot provide the needs during its operation phase. In addition, a water storage reservoir is provided to serve as rainwater collection.

Power – the project shall consider the use of electric machines and shall tap directly to CEPALCO.

2.3 Project Location and Area

The project is located in Sitio Kirahon, Barangay San Martin, Municipality of Villanueva, Province of Misamis Oriental. The project has granted already an Environmental Compliance Certificate (ECC) with Reference No. ECC-R10-1802-003 on February 14, 2018 issued by EMB Region 10 for the 2,000 MT per month production capacity. The said expansion to 7,500 MT per month is due to the expected increase in the demand of steel products in Mindanao area within the same location.

Table 1 shows the estimated location for the four (4) corners of the area is presented below as follows;

Table 1-1 shows the estimated location for the corners of the property

Perimeter/Boundary points (based on OCT/TCT/etc)	Latitude	Longitude
Point 1	8º33'38.00"	124 ⁰ 47'20.00"
Point 2	8º33'49.84"	124 ⁰ 47'19.75"
Point 3	8º33'43.72"	124 ⁰ 47'39.95"
Point 4	8º33'30.94"	124 ⁰ 47'41.15"
Point 5	8º33'27.32"	124 ⁰ 47'17.46"

2.4 Project Components

The project is composed of Four (4) Induction Furnace with Air Pollution Control Device, Rolling Mill, Casting Machine, Cooling Tower, Substation or Power Station, Warehouse for Scrap Materials and Finished Products, Admin Office, Guardhouse, Substation and other supporting facilities.

	From	То
Capacity	2,000 MT/month	7,500 MT/month
Land Area	60,000 sqms	100,000 sqms

2.5 Google Map showing the project site and the proposed EIS Study Area.

The project site showing 1-km radius impact area identified as the host barangay of Barangay San Martin, Barangay Balacanas, Barangay Tambobong and Industrial Plant such as Jacobi Carbons Philippines, Inc., CEPALCO, Kirahon Solar Plant and National Grid Power Corporation (NGCP).

2.6 Project Proponents

KEIM HING STEEL CORPORATION

Edwin Fabro	- Filipino
Leila C. Chen	- Filipino
Karen C. Chen	- Filipino
Krisandra C. Chen	- Filipino
Katelyn C Chen	- Filipino

2.7 Project Timeframe of the Project Phases

Pre-Construction Phase – Acquisition of necessary permits – 6 months to 1 year-

Construction Phase – Two (2) years- On-going Construction – 40% completed structures

Pre-Operation Phase – After two (2) months of completion and installation of machines

Operation Phase – After six (6) month of pre-operation

2.8 Preliminary Identified Environmental Aspect to each alternative

Components	Description	Wastes	Built-In Measures
Pre- Construction Phase	Planning Stage, preparation of conceptual plans and final plan and secure ECC	Permits secured such as ECC, and LGU Permits	Comply with the process as mandated by the National and Local Office
Construction Phase	Land Water	Construction materials and debris, solid wastes Domestic wastewater generated by the workers	 Segregation of solid wastes recyclables, food waste and construction debris; Proper coordination with the local government units for collection and disposal of residual waste. Hazardous wastes such as paints shall be properly stored separately for proper hauling of accredited haulers. Provide for a Portable Toilets or Septic Tank with preliminary treatment facility for construction workers. Regular monitoring of sludge for proper hauling.
Operation Phase	Land	Solid wastes	 Implement RA 9003, solid waste management system Segregation of solid waste recyclables, and food wastes and designation of temporary storage area; Provision for Material Recovery Facility (MRF) Proper coordination with the local government units for collection and disposal of residual waste. Hazardous wastes such as used oil, busted fluorescent lamps, empty cans of paints for maintenance, oil and grease generated from the residential and retail space shall be properly stored separately, properly labeled for proper hauling of accredited haulers.
	Water	Competition of Water source	 Provision for underground water source if the local water district cannot provide Implement rainwater collection harvesting thru construction of reservoir to collect downspout water and surface water thus implementing a zero discharge
		Domestic wastewater	• The plant is provided with three chamber septic tank for primary treatment of domestic waste water generated by the workers
	Air	Air Pollution thru generation of Fumes and Increase in Particulate Matter (PM)	 Proper installation of Air Pollution Control Device such as Bag house with filter to capture the possible fumes and particulate matter in the area
	Noise	Noise coming from the loading and unloading of scrap materials and finished products	 The plant is properly enclosed, high ceiling type of structures, all activities and process are controlled inside the plant
	People	Health and Safety	 Implement Standard Operating Procedures (SOP). Wearing of Personal Protective Equipment (PPE) Proper orientation to all personnel in the implementation of environmental measures
Abandonment Phase	Proper demolition of dismantling of equipment and machines in the area. Clean-up	Proper tum-over of the towers the owner	Properly turned over as built utility plans and secure transfer of all permits and licenses

Table 1-2 Project Process

The project site is about 1.5 km southwest from the populated community area (Phividec Relocation Site) of Barangay Balacanas and Tambobong including schools and church.



2.9 Photos of the project Site.



The Project Site and its On-going Construction of Warehouses as of September 7, 2018



The proposed location of the Expansion of the Land Area







The Barangay Hall of San Martin about 1.8 km aerial distance and 3.5 km actual distance from site



Barangay San Martin MRF Area in Support to RA 9003 - 3.5 km from the site



Covered Court in Barangay San Martin – 3.5 km from the site



Barangay San Martin Health Center - 3.5 km from the site





Barangay Balacanas (Relocation Site) about 1.3 km from the site



Nearest Chapel – San Roque about 1.3 km from the site



Balacanas School about 1.3 km from the site



Covered Court of Barangay Balacas about 1.3 km from the site



Community in Barangay Balacanas













Jacobi Carbons Philippines, Inc. about 100 meters north from the Site



12 MW Kirahon Solar Plant Project



National Grid Corporation (NGCP) about 200 meters Southeast of the project



Villanueva Municipal Hall about 3.5 km from the Site