SEDC SOLID EARTH
DEVELOPMENT CORPORATION

04 March 2019

ENGR. METODIO U. TURBELLA
Director
ENVIRONMENTAL MANAGEMENT BUREAU (EMB)
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (DENR)
DENR Compound, Visayas Avenue,
Diliman, Quezon City

Attention : **Engr. Esperanza A. Sajul**
Chief, EIAM Division

Subject : **Request for Public Scoping of the proposed Siliceous Clay Quarry Expansion Project**

Dear Director Turbella:

We respectfully submit the following documents in support of our Request for conduct of Public Scoping in relation to the ECC amendment application of the proposed Siliceous Clay Quarry Expansion Project:

1. Project Description for Scoping (PDS);
2. Proof of Conduct of IEC;
3. Pre-Public Scoping Participatory Data Gathering (KII, FGD, and Initial Perception Survey);
4. Proposed list of invitees for the public scoping;
5. Draft invitation letter (to be signed by EMB) and IEC materials in preparation for the public scoping; and
6. Draft presentation of the project during public scoping.

We hope you find everything in order.

Thank you.

Sincerely yours,

Atty. Dennis B. Tenefrancia
President

National Highway, South Poblacion, San Fernando, Cebu
Tel No (032) 234 1543, Telefax No (032) 234 1539

SILICEOUS CLAY QUARRY EXPANSION PROJECT

REQUEST FOR PUBLIC SCOPING REQUIREMENTS

SEDC SOLID EARTH DEVELOPMENT CORPORATION

RHR Consult Services, Inc.

MARCH 2019

ATTACHMENT 1

PROJECT DESCRIPTION FOR SCOPING

SILICEOUS CLAY QUARRY EXPANSION PROJECT

PROJECT DESCRIPTION FOR SCOPING

SEDC SOLID EARTH DEVELOPMENT CORPORATION

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MARCH 2019

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PROJECT FACT SHEET

PROPOSED PROJECT COVERAGE

Project Name	:	Siliceous Clay Quarry Expansion Project
Project Type	:	Quarrying – Extraction of Non-metallic minerals
Project Location	:	Barangays Magsico, Cabatbatan, and Bugho in the Municipality of San Fernando, and Barangays Sibago and Guimbawi-an in the Municipality of Pinamungajan, Province of Cebu within Mineral Production Sharing Agreement (MPSA) Nos. 131-99-VII, 330-2010-VII, and 348-2010-VII
Project Scale/Limit	:	Total annual extraction rate: Increase from 350,000 MT to 1,080,000.00 MT Total Production Areas: 315.57 hectares o Magsico (MPSA 131-99-VII): 42.02 hectares o Sibago/Guimbawi-an, North Bugho & South Bugho (MPSA 330-2010-VII): 254.63 hectares o South Bugho (MPSA 348-2010-VII): 18.92 hectares
Major Project Components	:	Quarry i. Production Areas ii. Overburden/topsoil stockyard iii. Access and Haul Roads iv. Siltation Control Facilities v. Quarry Administration Building vi. Nursery

PROFILE OF THE PROPONENT

Name of the Company	:	**Solid Earth Development Corporation (SEDC)**
Contact Person	:	Atty. Dennis B. Tenefrancia President
Office Address	:	9th Floor Insular Life Business Center, Cebu Business Park, Cebu City
Contact Details	:	Tel. No.: (032) 350 2908 Fax. No. (032) 234 2795

PROFILE OF THE EIA PREPARER

Name of the Company	:	**RHR Consult Services, Inc.**
Contact Person	:	Jess M. Addawe Project Director
Office Address	:	Unit 606, FSS Building II, 18 Scout Castor cor. Scout Tuazon, Barangay Laging Handa, Quezon City
Contact Details	:	Tel. No.: (02) 798 0020

1 PROJECT DESCRIPTION

SEDC is a proponent of Siliceous Clay Quarrying Operations and Permit Holder of Mineral Production Sharing Agreement (MPSA) with the Republic of the Philippines denominated as MPSA 131-1999-VII which covers a contract area of approximately 505.0365 hectares; MPSA 330-2010-VII with area of approximately 1,683.0581 hectares; and MPSA 348-2010-VII with an area of 496.5760 hectares, all situated in the Municipality of San Fernando, Province of Cebu.

MPSA 131-1999-VII was first granted to Grand Cement Manufacturing Corporation (GCMC) on May 12, 1999 and an Environmental Compliance Certificate (ECC) (Ref. No. 0403-011-302) was issued on April 12, 2005 with an approved annual capacity of 200,000 MT. This MPSA was later transferred to Solid Earth Development Corporation (SEDC) through a Deed of Assignment of the MPSA on June 29, 2000. Likewise, MPSA 330-2010-VII and MPSA 348-2010-VII was granted on April 30, 2010 and June 25, 2010 respectively and on 07 June 2016, the ECC (Ref. No. ECC-CO-1512-0028) for the Siliceous Clay Quarry Project within these MPSAs was approved with a total annual capacity of 150,000 DMT.

1.1 PROJECT LOCATION AND AREA

The quarry operations will be located within the Barangays of Magsico, Cabatbatan, and Bugho in the Municipality of San Fernando, and Barangays Sibago and Guimbawi-an in the Municipality of Pinamungajan, all within the Province of Cebu. These areas are covered by the following: MPSA 131-1999-VII which covers a contract area of approximately 505.0365 hectares; MPSA 330-2010-VII with area of approximately 1,683.0581 hectares; and MPSA 348-2010-VII with an area of 496.5760 hectares. The technical descriptions of these MPSAs are shown in Table 1 to Table 4 while the location map is presented in Figure 1.

Table 1. Geographical Coordinates of MPSA 131-99-VII

Point	Latitude	Longitude
1	10° 12' 59.877"	123° 40' 57.52"
2	10° 12' 40.834"	123° 40' 57.479"
3	10° 12' 40.891"	123° 40' 30.162"
4	10° 12' 42.44"	123°40' 30.165"
5	10° 12' 46.659"	123° 40' 30.174"
6	10° 12' 59.934"	123° 40' 30.202"

Table 2. Geographical Coordinates of MPSA 348-2010-VII

Point	Latitude	Longitude
1	10° 12' 59.934"	123° 39' 30.264"
2	10° 12' 41.013"	123° 39' 30.225"
3	10° 12' 40.891"	123° 40' 30.162"
4	10° 12' 42.44"	123° 40' 30.165"
5	10° 12' 46.659"	123° 40' 30.174"
6	10° 12' 59.934"	123° 40' 30.202"
7	10° 12' 59.935"	123° 40' 11.855"

Table 3. Geographical Coordinates of Bugho MPSA 330-2010-VII

Point	Latitude	Longitude
1	10° 12' 59.934"	123° 39' 30.264"
2	10° 14' 6.843"	123° 39' 30.402"

Point	Latitude	Longitude
3	10° 14' 6.815"	123° 39' 44.639"
4	10° 14' 2.139"	123° 39' 47.967"
5	10°13' 59.563"	123° 39' 51.749"
6	10° 13' 57.873"	123° 39' 55.153"
7	10° 13' 53.53"	123° 39' 57.242"
8	10°13' 46.428"	123° 39' 59.462"
9	10° 13' 27.146"	123° 40' 5.489"
10	10° 13' 27.038"	123° 40' 57.578"
11	10° 12' 59.877"	123° 40' 57.52"
12	10° 12' 59.934"	123° 40' 30.202"
13	10°12' 59.935"	123° 40' 11.855"

Table 4. Geographical Coordinates of Sibago MPSA 330-2010-VII

Point	Latitude	Longitude
1	10° 14' 39.483"	123° 39' 0.202"
2	10° 14' 59.934"	123° 39' 0.202"
3	10° 14' 59.93"	123° 39' 55.527"
4	10° 14' 39.372"	123°39' 55.484"

The land area encompassed by MPSA 330-2010-VII and MPSA 348-2010-VII are contiguous with the land area covered by MPSA 131-99-VII (Figure 1). Table 5 to Table 9 depict the production areas identified by SEDC with a total area of three hundred fifteen and 57/100 (315.57) hectares. A total of 88.86 hectares of the identified production areas are within Brgys. Sibago and Guimbawi-an of Pinamungajan, Cebu while the remaining are within the jurisdiction of San Fernando, Cebu. There are areas within the MPSAs adjacent to the proposed production site which will be treated as buffer-zones where no exploitation activities will be pursued and are proposed locations for compensation tree planting and depository areas for waste materials.

Table 5. Production Area Coordinates of MPSA 131-99-VII

Point	Latitude	Longitude
1	10°12'59.934"	123° 40' 30.202"
2	10° 12' 59.881"	123-40-55.877
3	10° 12' 42.387"	123-40-55.84
4	10° 12' 42.44"	123-40-30.165
5	10° 12' 46.659"	123-40-30.174

Table 6. Production Area Coordinates of MPSA 348

Point	Latitude	Longitude
1	10°12' 59.934"	123°40' 30.202"
2	10°12' 46.659"	123°40' 30.174"
3	10°12' 46.684"	123° 40' 18.037"
4	10° 12' 59.935"	123° 40' 11.855"

Table 7. Production Area Coordinates of South Bugho MPSA 330

Point	Latitude	Longitude
1	10° 12' 59.934"	123° 40' 30.202"
2	10°12' 59.935"	123° 40' 11.855"
3	10° 13' 13.114"	123° 40' 5.706"
4	10° 13'25.463"	123° 40' 32.677"
5	10° 13'25.415"	123° 40' 55.932"
6	10° 12' 59.881"	123° 40' 55.877"

Table 8. Production Area Coordinates of Sibago MPSA 330

Point	Latitude	Longitude
1	10°14' 41.005"	123° 39' 1.845"
2	10° 14' 59.283"	123° 39' 1.845"
3	10° 14'59.279"	123° 39' 53.845"
4	10° 14'41.002"	123° 39' 53.844"

Table 9. Production Area Coordinates of North Bugho MPSA 330

Point	Latitude	Longitude
1	10°13'30.223"	123° 39' 31.969"
2	10° 14' 5.213"	123° 39' 32.041"
3	10° 14' 5.186"	123° 39' 45.039"
4	10° 14' 1.728"	123° 39' 47.625"
5	10° 13' 59.122"	123° 39' 51.537"
6	10° 13' 57.304"	123° 39' 54.834"
7	10° 13' 53.315"	123° 39' 56.74"
8	10° 13' 47.698"	123° 39' 58.402"
9	10° 13' 30.201"	123° 39' 42.882"

Direct impact area of the project is comprised of the 42.02-hectare Quarry Area in Magsico (MPSA 131), 254.63-hectare Sibago/Guimbawi-an, North Bugho & South Bugho (MPSA 330) Quarry, and 18.92-hectare South Bugho Quarry Area (MPSA 348).

1.1.1 PROJECT ACCESSIBILITY

The Municipality of San Fernando is located 29.3 kilometers Southwest of Cebu City, accessible by all types of land transport mode. The proposed production area is about eight (8) kilometers from the town center of San Fernando and about five (5) kilometers from the Taiheyo Cement Philippines Inc. plant site which is along the Natalio B. Bacalso South National Highway as it passes the Barangay South Poblacion.

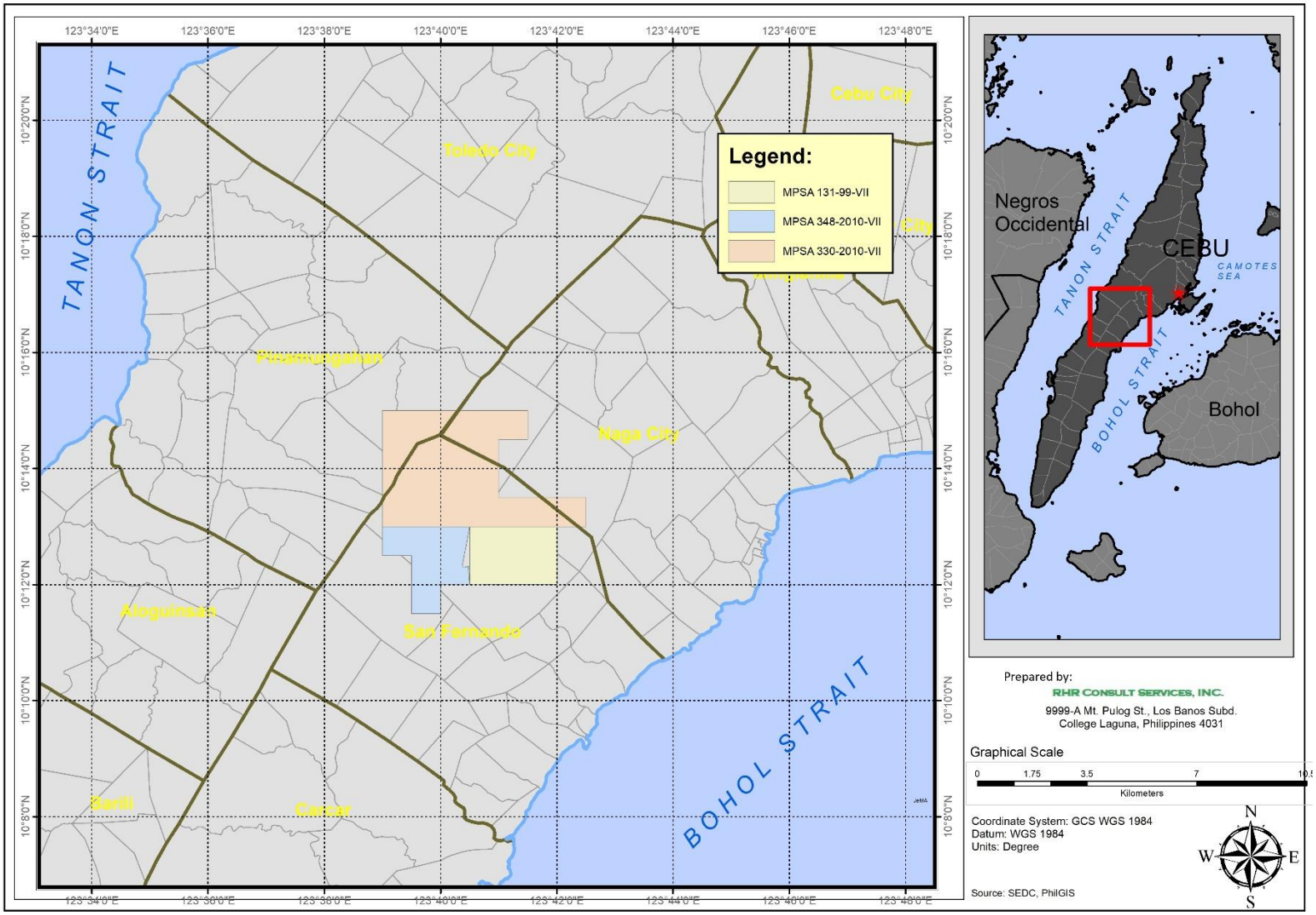


Figure 1. Project Location Map

1.2 PROJECT RATIONALE

The demand for cement in the Philippines continued to inch upward since 2010 and the annual volume of local sales and imports consistently remained higher than the total volume of sales and exports from 2010 to present. In 2013, the domestic sales and export of the commodity was reported at 19,445MT, while local sales and import was at 19,604 MT. Average annual growth rate in local sales and exports from 2010 to 2013 was 7%, while the annual growth rate in local sales and imports was 8% for the same period. This condition is brought about by the increase in construction works of the Private sector and Philippine Government infrastructure works. CeMAP reported that the growth in the construction industry is at 14.4% during the same period. By default, any demand that cannot be supplied by domestic production is filled by importation, and in terms of economic development, increase in domestic cement production is expected to benefit the country through job creation, import substitution, increase in internal revenues and increase in sources of support for local social development and development of carbon sink.

1.3 PROJECT ALTERNATIVES

SEDC conducted geological exploration in the project MPSAs, among others, to identify the specific sources of raw materials suitable for the cement manufacture of TCPI. From the initial exploration results, the resources within the quarry locations proposed in this application meet the material quality criteria and were found economically feasible for quarry operations to supply TCPI requirements.

The exploration activities were undertaken covering various promising locations within the project MPSAs, and only the areas proposed herein are deemed feasible for the quarry operations due to the material quality, quarryable volume and contiguity of the proposed extraction area which contribute to operational efficiency and a better profitability profile.

1.4 PROJECT COMPONENTS

1.4.1 QUARRY

The quarrying operations will produce siliceous clay raw materials suitable for cement manufacture, with Silica (SiO2) cut-off grade of 39%. The proponent will exploit the quarry resources using surface mining or open cut method. The quarry operations will be limited to the 124.5 hectares designated production area as qualified quarries are confirmed thus far only in these areas.

The current quarry production area is at 168.85 hectares with a lump sum of 26,400,000 as the annual mineral reserves per year on the 6mx5m bench dimension, a working batter slope of 70° and final maximum base to apex slope is 45°, 10cm top soil overburden, 8% waste rock and 3,241 kg siliceous clay material per cubic meter. Final pit bottom will not be lower than existing national road elevation. Cut-off drainage channels with baffles or rock pile velocity decelerators / sediment settling sumps will be created to separate background surface run-off from project quarry areas, channel these to natural surface drainage systems to reduce the load and silt spill over from project settling ponds. A canal or depression will be provided within the quarry zone adjacent to and parallel to the public roadway to prevent project sediment overtopping on public road.

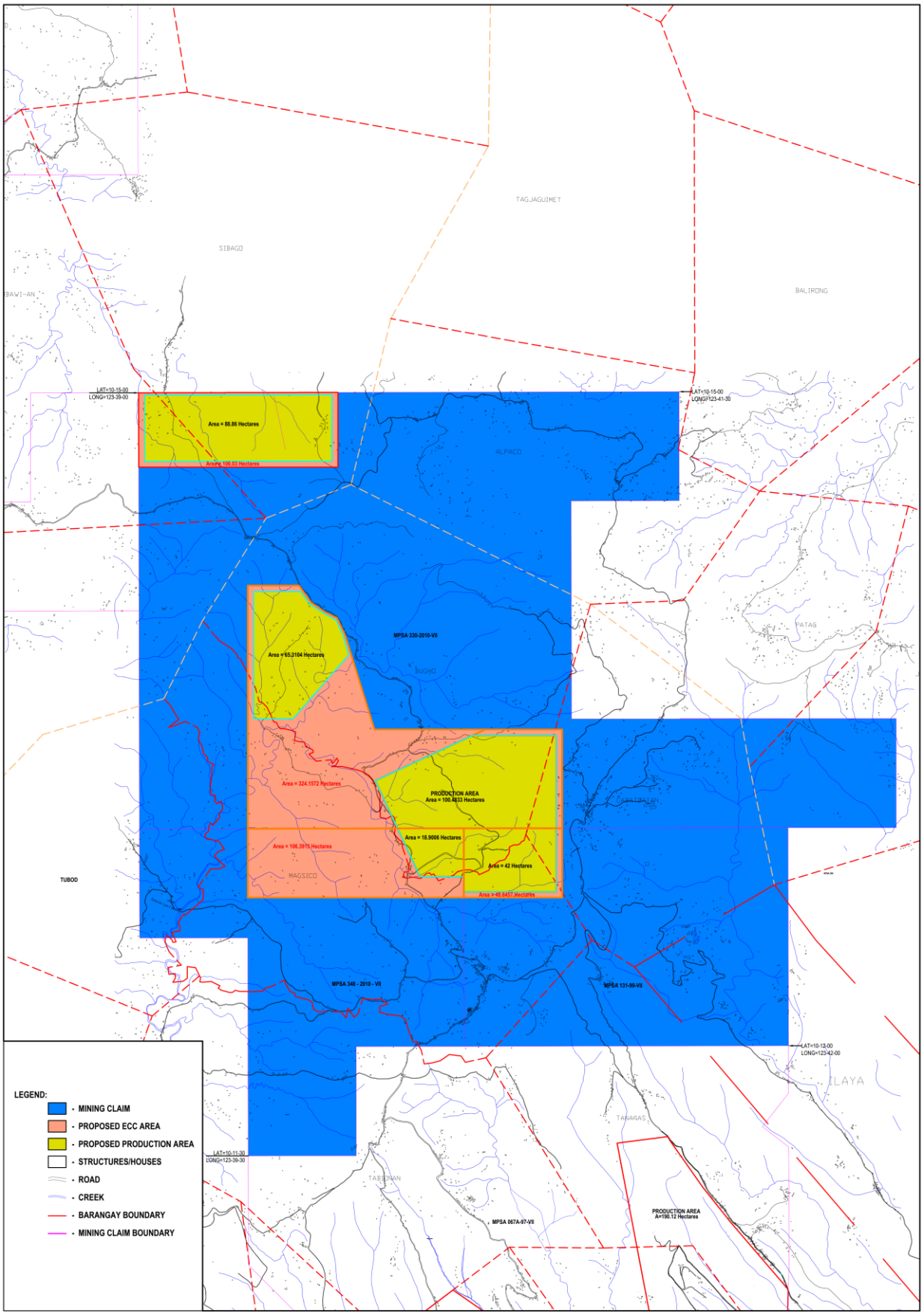


Figure 2. General Site Development Map of Quarry Area

1.4.2 ROADS

1.4.2.1 HAUL ROADS

The quarry area has existing access roads that connect to barangay and provincial roads that directly connect to the Natalio B. Bacalso South National Highway along which the TCPI processing plant is located, with total length of about five and a half kilometers. The Provincial Road traversing the quarry site has average width of approximately eight (8) meters and is presently paved. An additional access road was constructed to accommodate the additional production from the Sibago quarry area which is 6km from the provincial road.

1.4.2.2 ACCESS ROADS

Minimal new access roads opening are required to bring production to the main road, as the quarry is close to the main road (Figure 3). A total of less than 1 kilometer of quarry access road will be developed during the life of the project as the quarry area is directly beside the provincial road.

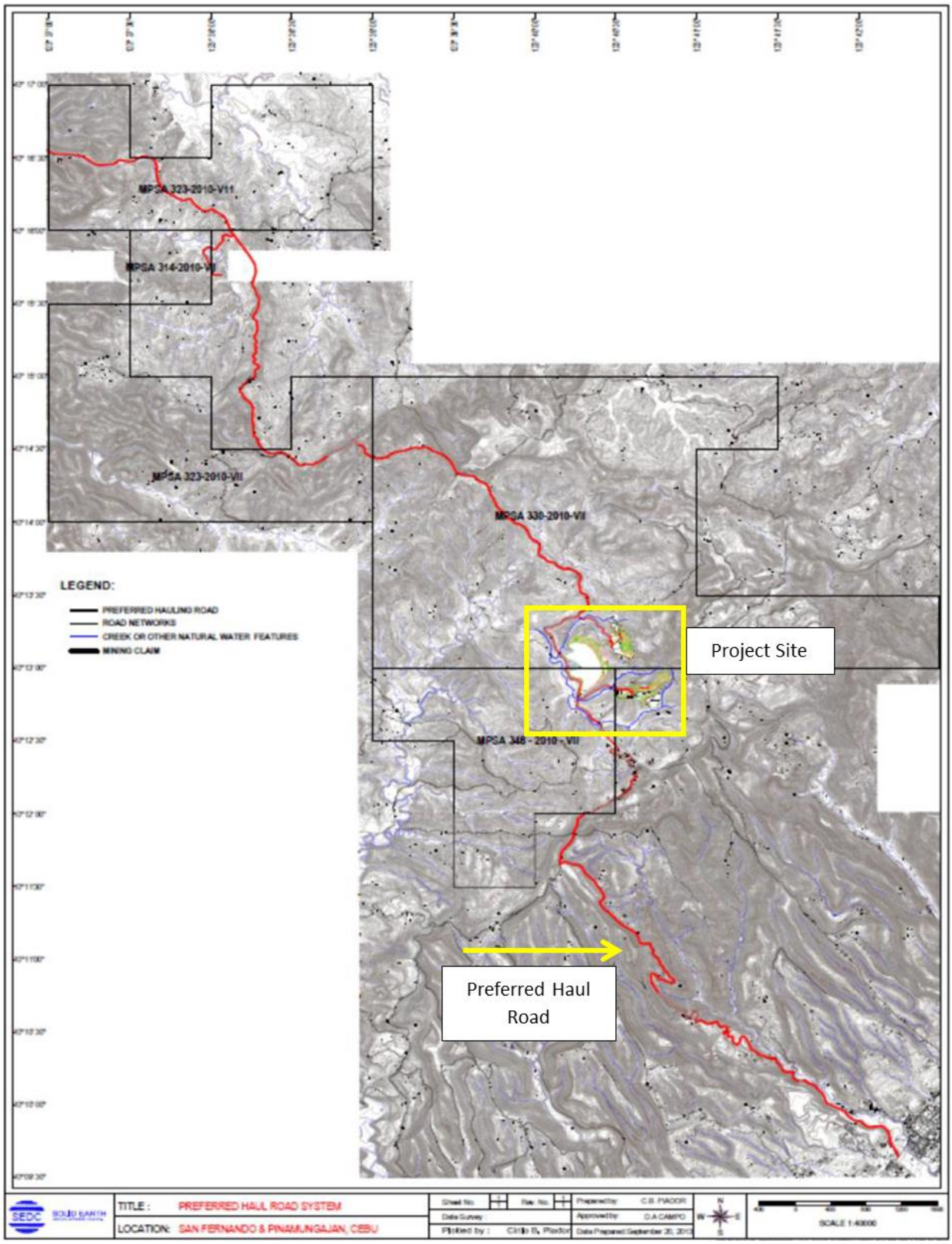


Figure 3. Haul Road/Access Road of Clay-Silica Project

1.4.3 STOCKPILES OVERBURDEN/TOPSOIL STOCKYARD

The company will not maintain a cement raw material stockpile in the quarry site. The operation will be direct cut and haul out through waiting haul trucks.

1.4.3.1 TOP SOIL AND WASTE MATERIAL STOCKPILE

The stockpiles will be of organically-rich topsoil for compensation planting and nursery operations, and for the waste materials which are set aside of road maintenance and for use by the public needing backfill materials for land development, with estimated volume of 34,000 cubic meters.

Topsoil stockpiles and waste materials stockpiles are properly situated in locations with minimal additional disturbed area, areas with minimal tree and vegetation cover, require no tree cutting and in relatively higher elevation that is easy to provide earth bounds or surrounding compacted embankment soil barriers. Three stockpile sites are located within the quarry area for efficient operations for sectional rehabilitation, and within the buffer zone. While each stockpile area may hold both the top soil overburden and the waste materials, these two items will not be allowed to mix. The stockpile slope will be kept at low angle and safe height to minimize slumping. The proposed height of the stockpile will be finally determined by the angle-of-repose of the materials, observed to average approximately three meters. Angle of repose is the maximum angle of descent or dip of the stockpile slope relative to the horizontal plane. This is to insure that the maximum volume materials will be stockpiled without sacrificing safety.

1.4.3.2 STOCKPILE DRAINAGE

Stockpile drainage will be constructed to serve as a water catchment basin to address the possible problems related to damage to nearby farms and exceedance of the water quality standard, and stockpile areas will be carefully selected as to have proper natural drainage features.

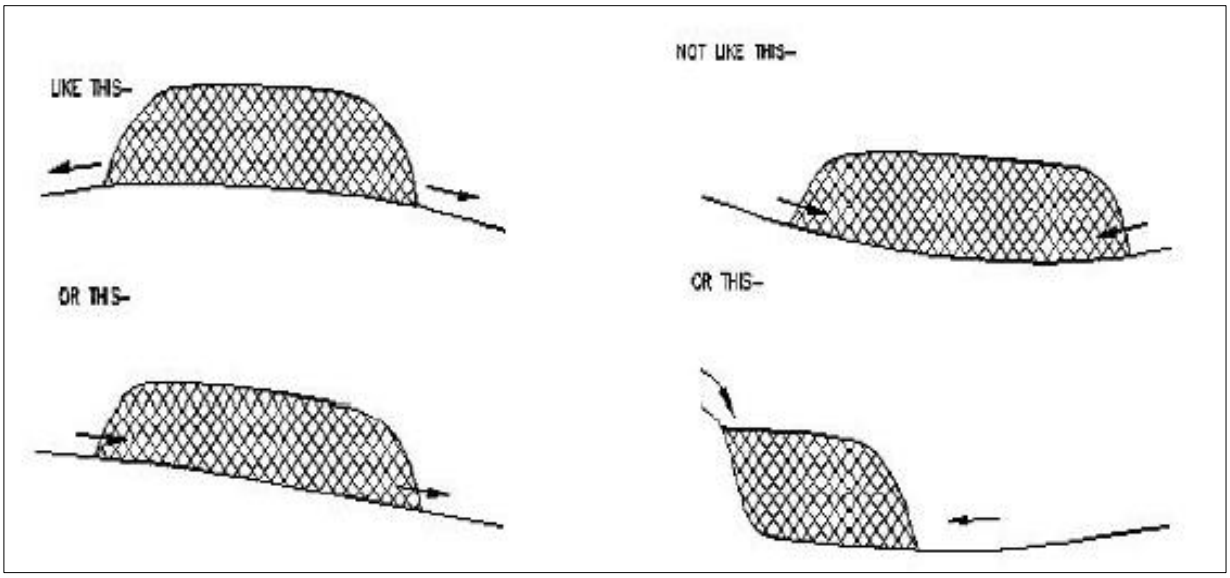


Figure 4. Ideal Natural Drainage Features of Stockpile Area

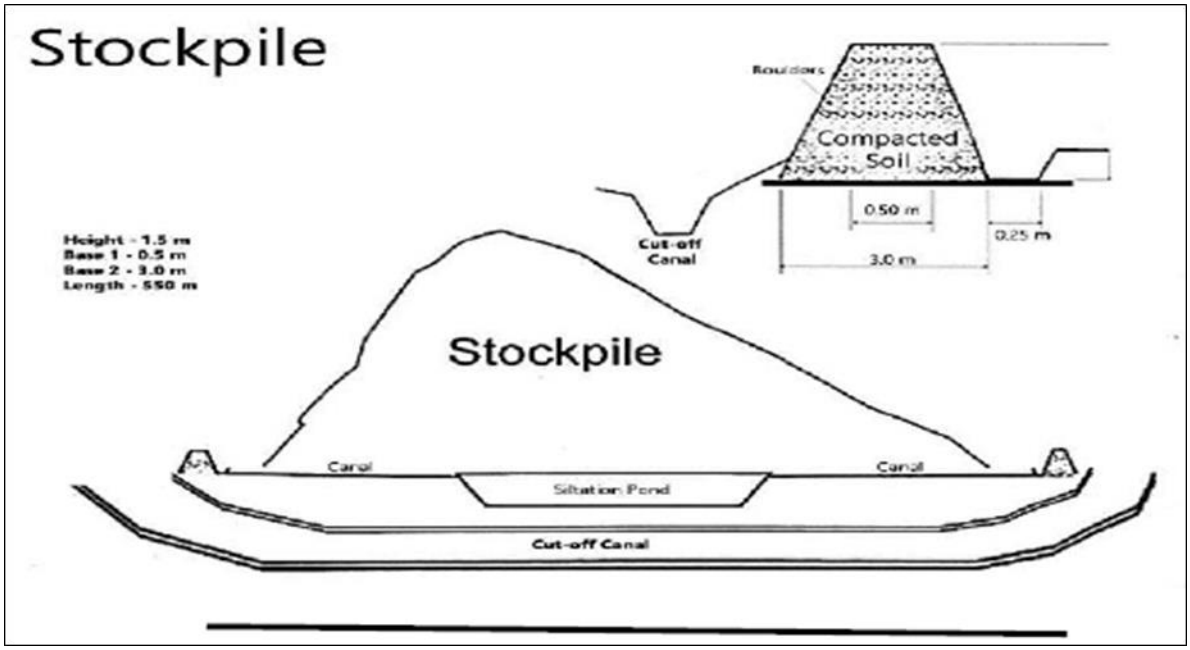


Figure 5. Drainage Provision Plan for Stockpile

1.4.3.3 DRAINAGE

Drainage canals will be installed for every bench that is connected to a graded canal at the end of each bench. These canals are directed to a silt detention pond where sediments carried by run-off are to be collected. The overflows from the ponds are again collected by another canal that is connected to the existing streams that drain the quarry area.

1.4.4 SILTATION CONTROL FACILITIES

For reasons of practicality, the Project will utilize a combination of contour canals and a series of settling ponds to meet Class C TSS value (DAO 35). The contour canal dimension shall be 0.5 m wide and 0.5m deep, with settling sumps 1.0 meter deep with stone pile "baffles" or water velocity decelerators every 700m interval. The contour canals will hug the land side of the slope being quarried and will have horizontal slope alignment between 2% - 3% gradient only. The contour canals will be interconnected such that excess surface is directed toward the settling pond before the water exits the quarry zone.

1.4.5 QUARRY ADMINISTRATION BUILDING

The SEDC will construct one small site management office with footprint area of approximately one hundred square meters, and a small maintenance shed made for emergency on-site materials requirement. The site office will be equipped with sanitary facilities for use of the project staff and occasional visitors. Construction of these structures will be in accordance with the National Building Code.

Domestic water requirement purposes will be sourced from a water impounding area at a creek that cuts through the project site. Recycling of inorganic wastes will be encouraged in the area, not only to reduce the amount of waste generated but also as additional earning of the concerned employees.

1.4.6 NURSERY

The nursery area will be located in the buffer zone close to the areas to the forest development areas. The Project nursery commitment is intended to supply the reforestation requirement under E.O. 26 of equivalent to twice the hectare of the opened area, and to redeem the Green House Gas emissions from heavy equipment operation.

1.5 Water and Requirement Supply

Water requirement for the quarry activities is about 60 m^3 per dry day if the project operates before the haul roads are paved. The Project personnel will also be utilizing water for day stay at the office (i.e., washing, domestic use), with estimated volume of about 36 gallons/day. Drinking water will be brought-in from a local purified water supplier.

1.6 Power Supply/Requirement

The Company's main power supply comes from the direct connection with NPC Power Plant in nearby Naga town. Power requirement is only office lightings, computers, printers, fax machine, photocopier, refrigerator and air conditioners. No power requirements in the quarry since operation is daytime only and all equipment are diesel-powered. Alternative power supply, in case of power failure, is company-owned generator-set.

1.7 Process / Technology

The project will exploit the cement raw materials from the reserve using conventional open cut mining method with progressive rehabilitation. Its mining operation includes stripping, extraction, hauling and progressive rehabilitation. The general quarry process is shown in the following figure:

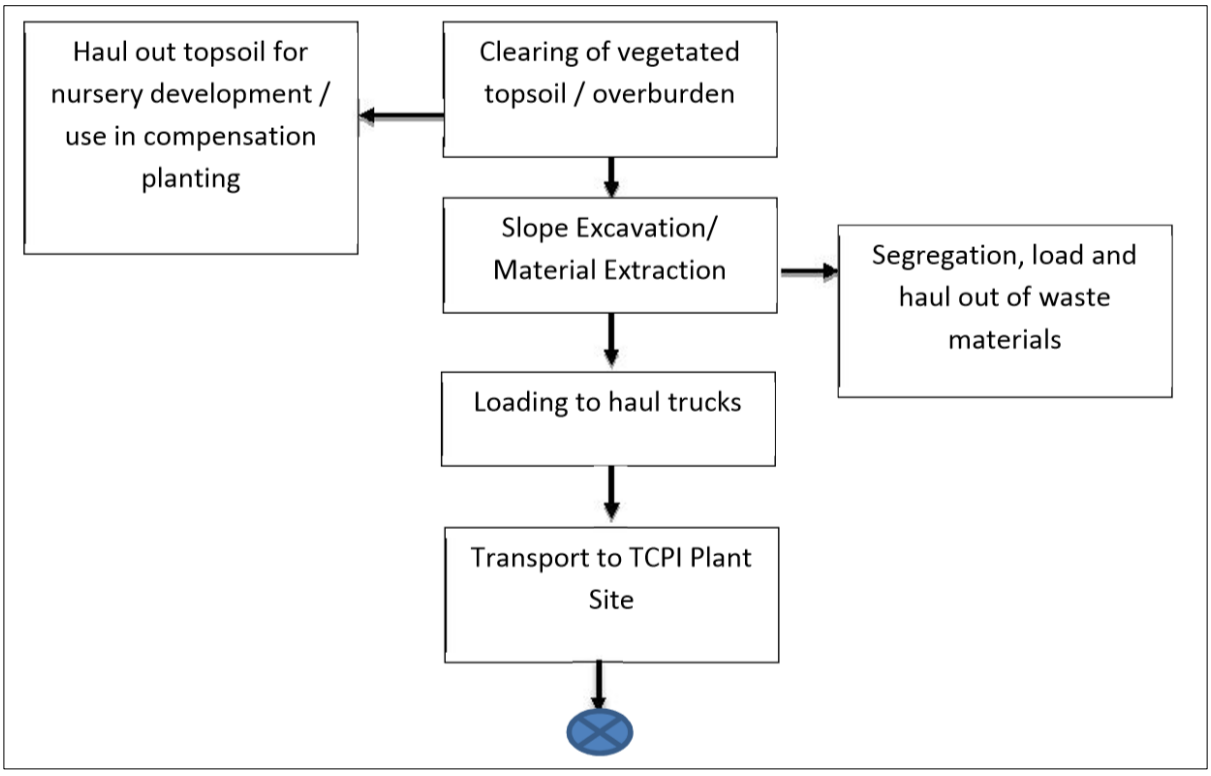


Figure 6. Quarry Operations/Activity Flowchart

1.8 Project Size

1.8.1 Annual Production, Resource and Reserves

Based on the result of the exploration conducted by SEDC, the three (3) MPSAs have total combined mineable reserve of 26,400,000 Metric Tons of clay and silica (Clay: 21,400,000 MT + Silica: 5,000,000MT). The proposed increase in total annual production from 350,000 MT to 1,080,000 MT shall be sourced from the additional production areas identified within the 3 MPSAs. A summary is presented in Table 10 .

Table 10. Existing and Amended Annual Production and Mineral Reserves

ECC No.	0403-011-302	1512-0028	
Tenement No.	MPSA 131	MPSA 330	MPSA 348
Commodity	Clay	Clay and Silica	Clay
Location	Magsico, Cabatbatan, San Fernando, Cebu	Bugho, Magsico, Cabatbatan, San Fernando, Sibago, Pinamungajan, Cebu	Bugho, Magsico, San Fernando, Sibago, Cebu
Annual Production	Existing: 200,000MT	Existing: 150,000 MT	
	For Amendment ECC Production = 1,080,000MT		
Mineral Reserves	Active = 1,000	Clay Active = 400,000 Clay: North Bugho = 17,300,000 TOTAL CLAY = 17,700,000 SILICA SIBAGO = 5,000,000	South Bugho = 2,700,000
	TOTAL = 26,400,000 MT (Clay: 21,400,000 MT + Silica: 5,000,000MT)		

1.8.2 PROJECT AREA

SEDC is planning to increase the total production area of the project to a total area of three hundred fifteen and 57/100 (315.57) hectares. A total of 88.86 hectares of the identified production areas are within Brgys. Sibago and Guimbawi-an of Pinamungajan, Cebu while the remaining are within the jurisdiction of San Fernando, Cebu. The summary of the ECC and production areas are presented in Table 11.

Table 11. Existing Annual and Amended Production

	MPSA 131	MPSA 330	MPSA 348
ECC Area (has.)	Existing: 42.02	Existing: 558.49	
	For amendment: 48.68	For amendment: 321.15 Sibago/Guimbawi-an area: 106.03 TOTAL = 427.18	For amendment: 106.39
	For amendment total ECC Area: 582. 25 has		
Existing Production Area (has)	Existing: 42.02	Existing: 126.83	
For Amendment Production Area (has.)	Magsico: 42.02	Sibago/Guimbawi-an(silica): 88.86 North Bugho: 65.31 South Bugho: 100.46	South Bugho: 18.92 has
	Total Prod. = 42.02	Total Production = 254.63	Total Prod. = 18.92 has
	For Amendment: Total Production Area = 315.57 has		

1.9 DEVELOPMENT PLAN, DESCRIPTION OF PROJECT PHASES AND CORRESPONDING TIMEFRAMES

The Project will be implemented in several phases which includes: a) project preparation phase; b) project development phase; c) quarry operations phase; and d) abandonment phase. The schedule of the different project phases is summarized in the sections below.

1.9.1 Project Development Phase

The project development phase will include the following:

- Construction of access roads
- Construction of quarry administration facilities
- Construction of pollution control devices

1.9.1.1 Access road construction and haul roads improvement

Access roads are transport facilities intended to facilitate the movement of quarry materials from its source to the provincial road. These structures (access roads) will be constructed connecting the quarry site/s to the provincial road. There are existing access roads to the initial quarry sections, and these will be improved by widening. As the quarry operations progress inward into the quarry site, short access road sections will be opened. The access roads development will be simple direct cut, matting, leveling and compaction. Contour canals will be part of the access road design to keep run-off on road sides and reduce damage of the roadway center. Waste materials will be hauled to the waste pile.

1.9.1.2 Construction of quarry administration facilities

The construction of quarry administration facilities will be simple and straightforward similar to common construction procedure for a simple single story dwelling structure with concrete flooring and walls and galvanized iron sheet roofing.

1.9.1.3 Settling Ponds

Settling ponds are one of the silt control measures to be installed in the Project. This facility will be constructed at the base of quarry benches where it can collect run-off water coming from the contour canals from the quarry blocks. Each settling pond location shall have a series of two or three cascading basins to adequately detain sediments before releasing the quarry drainage water meeting the requirement of Class C water quality guidelines.

1.9.2 Quarry Operations Phase

1.9.2.1 Clearing of Vegetated Topsoil or Overburden

Land clearing would entail clearing, balling and transfer of trees less than 15cm diameter at breast height (DBH), timber recovery of trees above 15cm DBH, chipping/mulching of removed vegetation to be added to top soil heap , separation and haul out of humus (top soil). Bulldozers, front-end loaders, and trucks would be deployed to undertake this work. Stockpiling of the removed materials at designated areas for future re-use would preserve the mulched vegetation and the topsoil.

1.9.2.2 Overburden Removal

With the use of appropriate heavy equipment (i.e. bulldozers, backhoe, etc.) the overburden layer would be removed from the ground, loaded on 10-ton haul trucks, and piled at waste stockpile areas or for benching and contouring of quarried out areas.

1.9.2.3 Quarry /Material Extraction

Once exposed, the target siliceous clay materials will be excavated using an excavator in a backhoe mode. In view of the characteristic of the earth hosting the target materials, quarrying or material extraction will start from the lowest bench starting from bench at level ±230 (masl) until bench +320 (masl) is reached. Extraction shall progress upwards whenever justified by grade requirements and economics.

At the initial benching operation, two benches are prepared, a lower bench and an upper bench. The lower bench would serve as the location of the hauling trucks to be loaded with minerals and waste extracted from

the upper active bench where an excavator is located. Once quarried, the upper bench becomes the lower bench of a new upper bench, and so on. If too high for safe digging, slopes will be dozed down in horizontal layers until an acceptable height for loading is achieved. Temporary slopes in the advancing the working face along the contour would have an overall slope of about 80% due to the stiff material and the cut slope will comprise a batter slope angle between 60% to 75%. Bench width will be about 6meters. The haul roads will be 20meters.

The final slope of the residual land form will have a grade of 0-3% for 23.5hectares (72.1%) and 30-50% grade for 9.12 hectares (27.9%) after all target minerals and waste are removed.

1.9.2.4 DRAINAGE

Drainage from the quarry sections will be through the contour canals along the base of the slope face. Benches would be cut to allow the bench floor for positive drainage (5-degree fall away from the cut surface), approximately 0.5m x 0.5m (contour canal cross-section), to reduce surface water flow over the cut face and bench, and limit soil erosion potential. Surface run-off from benches would be directed to rock-lined water channels forming a drainage system on quarry floor as necessary and directed toward the settling ponds designed sufficiently contain expected surface run-off from the opened quarry area. Background area surface run-off will be directed toward the natural waterways.

Due to the nature of the deposits which occur consistently from elevation ±230 masl to +320masl, the quarry activities will be a continuous extraction process until a pre-deter quarry elevation and quarry boundary limit is attained, after which quarry rehabilitation activities commence at each elevation level.

1.9.3 DECOMMISSIONING / ABANDONMENT / REHABILITATION

A final mine rehabilitation and decommissioning plan will be prepared for the project that will address concerns on planned closure, unplanned closure, and care and maintenance scenarios. The plan will be consistent with the provisions and relevant rules and regulations of the Philippine Mining Act of 1995.

Decommissioning activity will commence after the operating life of the project. Decommissioning activity will involve dismantling of company infrastructures and machineries. Simultaneously, rehabilitation activity will be carried out. In addition to rehabilitation activity that are conducted progressively with the operation, final mine rehabilitation activity will be carried out after the operating period of the project. Rehabilitation will include stabilization of steep slopes, backfilling, grading and reforestation of mined-out areas, among others.

To ensure that the program will be implemented as planned, the corresponding financial budget will be deposited, progressively, in a government depository bank. The fund will be established in line with the provisions of the Mining Act.

1.10 MANPOWER

The manpower for the project is presented in the following table:

Table 12. Existing workforce of the Project

Description	Quarry/Production			Security			Total Gender		
	No.	M	F	No.	M	F	No.	M	F
Manager	1	1		0			1	1	0
Safety Officer	1	1		0			1	1	0
Supervisor	1	1		1	1		2	2	0
Foreman	0	0		0			0	0	0
Mechanic	4	4		0			4	4	0
Equipment Operators	3	3		0			3	3	0

Description	Quarry/Production			Security			Total Gender		
	No.	M	F	No.	M	F	No.	M	F
Drivers	10	10		0			10	10	0
Welder	2	2		0			2	2	0
Electrician	2	2		0			2	2	0
Equipment Spotters	2	2		0			2	2	0
Utility Aide	2	1	1	0			2	1	1
Survey Aide	0	0		0			0	0	0
Accounting Staff	2	1	1	0			2	1	1
Administrative Staff	2	1	1	0			2	1	1
Plant Nursery Staff	0			0			0	0	0
Security Guards	0			6	3	3	6	3	3
TOTAL	**32**	**29**	**3**	**7**	**4**	**3**	**39**	**33**	**6**

M: Male; F: Female

ATTACHMENT 2

PROOF OF CONDUCT OF IEC

PRE-EIS Information and Education and Communications (IEC) Campaign Documentation Report for the SEDC Clay and Silica Quarry Expansion Project (MPSA 131, MPSA 330, MPSA 348)

I. Objective

In compliance with DAO 2017-15 or the Guidelines on Public Participation under the Philippine Environmental Impact Statement System, Information and Education and Communications (IEC) Campaign Activities on the Clay and Silica Quarry Expansion Project (MPSA 131, MPSA 330, and MPSA 348) of Solid Earth Development Corporation was conducted from November 14 – December 3, 2018 in various locations in San Fernando, particularly in the Impact Barangays and with Key Stakeholders.

II. Activities

The IEC Activities conducted were the following:

1. Courtesy Calls and Consultations with :
   a. Municipal LGU Official and Personnel
   b. Barangay Officials and Personnel
   c. School Officials and Personnel
2. Project Description Presentation and Discussions with Key Stakeholders and Stakeholder Representatives;
3. Distribution of Brochures
4. Placement of Posters

III. Time Frame and Duration

The time frame and duration of the IEC activities was from November 12 – December 3, 2018.

- The Courtesy Calls and Consultations with Municipal LGU Official and Personnel, as well as Barangay Officials and Personnel were conducted within November 14 – December 3, 2018.
- The Project Description Presentation and Discussion with the San Fernando Stakeholders was on November 14, 2018 Wednesday in the morning.
- The Project Description Presentation and Discussion with the Pinamungajan Brgy. LGUS was on November 15, 2018 Thursday at 10 in the morning.
- The Project Description Presentation and Discussion with the Pinamungajan Municipal. LGU was on November 29, 2018 Thursday at 10 in the morning
- The distribution of brochures was conducted from November 26 – December 3, 2018.
- The placement of posters was conducted from November 26 – December 3, 2018.

IV. Locations and Venues

The locations and venues of the IEC Activities were in the Impact Barangays as well as the SEDC Conference Room.

V. Contents

The content of the IEC Discussions and material were the following:

1. Philippine Environmental Impact Statement System (PEISS)
2. Project Description
3. Proponent Details
4. Other General Project Related Information

As these were just the initial IEC Activities held, more in-depth and broad activities are lined up in the following days and months up to until, during, and even following the completion of the project.

Summary Matrix for the Pre-Public Scoping IEC

Project	Clay and Silica Quarry Expansion Project Pre-Public Scoping IEC
Subject	Clay and Silica Quarry Expansion Project
Objective	Clay and Silica Quarry Expansion Project Pre-Public Scoping Public Participation Compliance as per DAO 2017-15 or the Guidelines on Public Participation under the Philippine Environmental Impact Statement System
Activities	1. Courtesy Calls and Consultations with: a. Municipal LGU Official and Personnel b. Barangay Officials and Personnel c. School Officials and Personnel 2. PEISS and Project Description Presentation with Key Stakeholders and Stakeholder Representatives, 3. Distribution of Brochures 4. Placement of Posters
Time frame/Duration	• November 14 – December 3, 2018 • 3 weeks
Location	Municipality of San Fernando 1. SEDC Conference Room, South Poblacion, San Fernando 2. Brgy. Tabionan 3. Brgy. Magsico 4. Brgy. Bugho Municipality of Pinamungajan 1. Brgy. Sibago 2. Brgy .Duangan 3. Pinamungajan Municipal Hall
Contents	1. Philippine Environmental Impact Statement System (PEISS) 2. Project Description 3. Proponent Details 4. Other General Project Related Information

Summary Matrix for the Pre-Public Scoping IEC Activities

#	IEC Activities Conducted	Time Frame/ Duration	Location/ Venue	Remarks
1	Courtesy Calls and Consultations with Barangay Officials	November 14 – December 3, 2018	Brgy. Halls	
2	PEISS and Project Description Presentation with Key Stakeholders and Stakeholder Representatives - San Fernando Stakeholders	November 14, 2018 10am-12noon	SEDC Conference Room, South Poblacion	Attendance: 66 Pax Total Audience
3	PEISS and Project Description Presentation with Key Stakeholders and Stakeholder Representatives - Barangay LGUs	November 15, 2018 10am	Duangan Brgy, Hall	Attendance: 8 Pax 5 Brgys.
4	PEISS and Project Description Presentation with Key Stakeholders and Stakeholder Representatives - Municipal LGUs	November 29, 2018	Pinamungajan Mun. Hall Conf. Rm.	Attendance: 11 Pax Total Audience 20 Pax Total Participants

#	IEC Activities Conducted	Time Frame/ Duration	Location/ Venue	Remarks
5	Brochure Distribution	November 26 – December 3	• SEDC Conference Room • Impact Brgys (4)	
6	Placement of Posters	November 26-December 3	Brgy. Halls	

VI. Comments, Issues and Concerns, and Suggestions Raised

A. Issues and Concerns Raised During the Nov 14, 2018 SEDC Conference Room PD Presentation and Discussion

#	Issues and Concerns	Participant	Response	Respondent
1	Continuous request to DENR and MGB on Survey, Inspection, Assessment of Mined Out Areas in our Barangay for Safety Concerns have yet to be addressed.	Brgy. Capt. Arriesgado – Brgy. Magsico	Even though we are not the regulatory agencies, we still took initiative to address the concerns and request, and we are actually having a site visit with the PG-ENRO in the area scheduled within the day.	Mr. Samuel Tagsip – Operations Div Mngr - SEDC
2	We also have a pending request for backfill	Brgy. Capt. Arriesgado – Brgy. Magsico	We shall see how we may address it	Mr. Samuel Tagsip – Operations Div Mngr - SEDC
3	Research on co-relation of present prevalent upper respiratory tract infection with the presence of the quarrying and cement processing and plant activities in the area. Coordinate and joint research with the LGU and Health Office	Mayor Reluya – Mun. of San Fernando	We coordinate with the health office re health, medical missions and research. We do not have the skillsets and technical know-how and manpower, nor know who to engage to undertake such research, but we are willing to support such undertaking.	Ms. Mitzie Carin – HRA Manager - SEDC
4	Coordinate and joint research with the LGU and Health Office	Mayor Reluya – Mun. of San Fernando		
5	Any MPSA Application is plotted in our GIS Map. So far we have plotted 7 applications already, albeit this is not yet updated. Based on our plotting, the larger part of our town is already under MPSA applications, there	Mayor Reluya – Mun. of San Fernando	Clarified re MPSA and EIA	Engr. Aramando L. Malicse – MSESDD Chief - MGB VII
			Clarified the difference between mining rights and surface rights	Ms. Mitzie Carin – HRA Manager - SEDC

#	Issues and Concerns	Participant	Response	Respondent
	seems to be very little to almost none remaining for the Town itself.		Exploration Permit, EIA Process Show actual Quarry Area +expansion	Engr. Aramando L. Malicse – MSESDD Chief - MGB VII
6	Clarification re MPSA MPSA for minable areas vs MPSA for approved Final Area	Brgy. Capt. Arriesgado – Brgy. Magsico	Clarification on the difference of the MPSA, ECC, Buffer Areas and Production Areas	Mr. Samuel Tagsip – Operations Div Mngr – SEDC

SEDC – Pinamungajan LGU Project Presentation and Consultation
on Pinamungajan Quarry Expansion Projects
Documentation Report

I. Activity Summary

Project/s	SEDC Clay and Silica Quarry Expansion Project
Activity	Information Education Communication (IEC) Campaign Activity - Project Presentation and Consultation
Date	November 29, 2018 Thursday 10am – 12 noon
Venue	Pinamungajan Municipal Hall Conference Room
Participants	Pinamungajan LGU Representatives
Proponent	Solid Earth Development Corporation (SEDC)
Rationale	DENR DAO 2017-15
Attendance	Total: 20 Pax
Languages Used	Primary Language Used : Cebuano/Visaya Secondary Language/s Used: English; Filipino

II. Attendance Summary

	Office / Designation	Representative
	Pinamungajan LGU (11)	
1	Office of the Municipal Mayor	Mayor Glenn Baricuatro
2	MPDO/MPDC	Mr. Oscar M. Canino
3	MAO/MENRO Designate	Mr. Marlon B. Aninon
4	MHO	Ms. Maria Eleanor P. Gigante
5	MEO – Staff	Mr. Rodolfo P. Patong
6	Provincial Capitol	Mr. Alexander Ygay
7	Sanggunian Bayan Secretary	Ms .Melucina Erames
8	ABC President	Mr. Jesus Manaygaytay
9	Brgy. Sibago Brgy. Treasurer	Ms. Mamete R. Gellegan
10	Brgy. Sibago Brgy. Captain	M. Paulino Canoy
11	RSI/MHU	Ms. Bernadette B. Atil
	SEDC (8)	
1	Senior Technical Adviser	Mr. Hiroyuki Sakakibara
2	HRA Division Manager	Ms. Mitzi Carin
3	VP - Operations	Mr. Delfin Campo
4	Administration Manager/ Community Relations Officer	Mr. Gines Boltron
5	Mining Department Manager	Mr. Joel Sombelon
6	Environmental Officer	Mr. Angelo Teopiz
7	Consultant	Mr. Nilo Yap
8	Survey, Engineering – Section Head	Mr. Cerilo Piador
	RHR Consult Services (1)	
1	IEC Specialist	IEC Facilitator
	Total	**20 Pax**

III. Program Summary

Agenda	Facilitation
I. Brief Discussion on PEISS A. PD 1586 – Philippine Environmental Impact Statement (EIS) System B. DENR DAO 2017-15 – Public Participation Requirements	RHR Consult Services
II. Project Description 1. SEDC Pinamungajan 389.44 Ha Silica Quarry Expansion Project (MPSA 314, PSA 323)	Solid Earth Development Corporation (SEDC)

Agenda	Facilitation
A. Project Information/Details B. MPSA Map C. Location Map D. ECC Amendment Details Matrix 2. SEDC San Fernando – Pinamungajan 626.83 Ha Clay and Silica Quarry Expansion Project (MPSA 131, MPSA 330) A. Project Information/Details B. MPSA Map C. Location Map D. ECC Amendment Details Matrix	Mr. Joel Sombelon Mining Department Manager
III. Open Forum (Issues and Concerns)	RHR Consult Services SEDC

IV. Comments, Issues and Concerns, and Suggestions Raised

	Issues and Concerns	Participant	Response	Respondent
1	Distribution and flow of Tax Proceeds and Payment is directly to National (Offices)	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Yes	Mr. Campo – VP Operations – SEDC
2	How many blocks?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	15 blocks;1,500 Ha	Mr. Campo – VP Operations – SEDC
3	How many/How big is the mined out area? What is being done to the mined out area? Is there a mined out area already?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Yes, there is a mined out area already. We are undertaking tree planting in Duangan	Mr. Campo – VP Operations – SEDC
4	Provide photos of mined Out Areas, especially of programs and rehabilitation	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Yes, OK.	Mr. Sombelon – Mining Dept. Mgr. - SEDC
5	How's the start and process of the rehabilitation?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	No rehabilitation yet. Not yet time. Technical Studies are ongoing.	Mr. Sombelon – Mining Dept. Mgr. - SEDC
6	The project is considered environmentally critical?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Yes, based on the location and activity	Mr. Campo – VP Operations – SEDC
7	Is there an MMT?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Yes	Mr. Sombelon – Mining Dept. Mgr. - SEDC
			The mayor will be part of the MMT. Or the mayors office will assign within the LGU to represent the LGU. Plus NGOs	Mr. Campo – VP Operations – SEDC
8	How are the soil studies? Especially with regards to plants and vegetation	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	The soil studies are ongoing. It is part of the operations. More will be conducted, such as	Mr. Sombelon – Mining Dept. Mgr. - SEDC

	Issues and Concerns	Participant	Response	Respondent
			soil classification, acidity, etc, to know which plans are compatible.	
9	Are there any successful soil studies implemented?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	In Magsico	Mr. Sombelon – Mining Dept. Mgr. - SEDC
			Prior and during operations, soil studies are being conducted. Especially with regards to the top-soil, like with acidity etc, and also what will ultimately be the top soil used once treeplanting/for treeplanting	Mr. Campo – VP Operations – SEDC
10	Tree Growing (It's supposed to be)	Mayor Balicuatro – Office of the Municipal Mayor – Pinamungajan	Yes, it is not just for planting trees and then leaving them, but to ensure their growth	Mr. Campo – VP Operations – SEDC
			We've tested different species for growth, and so far those with success are acacia, lomboy, some narra and about 4 others. Other species do not survive and die.	Mr. Sombelon – Mining Dept. Mgr. - SEDC
11	What about the farmlands in the MPSA Areas? What about the farmers there?	Mr. Canino - MPDC – Pinamungajan	That will be regarding the surface rights	Ms. Carin – HRA Div. Mngr. – SEDC
			There will be compensation and relocation	Mr. Campo – VP Operations – SEDC
12	A common/perennial problem is the issue of siltation	Mr. Canino - MPDC – Pinamungajan	This is addressed thru the use of sedimentation ponds. All the water released from it will be passing regulations. The silt will then be used for other purposes.	Mr. Campo – VP Operations – SEDC
			Monitoring will be done by the MMT	Ms. Carin – HRA Div. Mngr. – SEDC
13	What about the destruction, repair and rehabilitation of the interior barangay roads?	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	As of now, the operation is still small scale, and thereby no large	Mr. Campo – VP Operations – SEDC

	Issues and Concerns	Participant	Response	Respondent
			scale destruction/disrepair of roads due to use. But still the small scale operators will share responsibility but are able to address it slowly and not in a large scale at once. But once we get into commercial operations, then it will be a large scale – in accordance with our MPSA, and we shall then be the one responsible. As of now, even if not yet in large scale operations, we are providing assistance and materials	
			Once we start our commercial operations, we are obligated by law to implement a Social Development and Management Program (SDMP). It shall be included in the operational budget. The bigger the operational budget, the bigger the budget for the SDMP. The SDMP can help thru (projects for): - Infra(structure) - Livelihood - Education - Health Although as mandated, it (SDMP) will be bigger in the host communities. But it will not be limited to them. The Municipality and other brgys. will benefit as well.	Ms. Carin – HRA Div. Mngr. – SEDC

	Issues and Concerns	Participant	Response	Respondent
14	Assistance is not recorded as Income of the LGU. The point is for the LGU to have income that can be implemented for other projects.	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	There shall be excise tax, as well business tax, that will go to the LGU	Ms. Carin – HRA Div. Mngr. – SEDC
15	We are encouraging SEDC to be part of the lobbying group seeking that taqx payments be made directly to or thru the LGU	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	Noted	Ms. Carin – HRA Div. Mngr. – SEDC
16	May we have the Lot numbers for/included in the Permits?	Mr. Patong - Mun Eng'g - Pinamungajan	Yes, you will be provided those information. You will also be a resource person for the EIS Study	Ms. Carin – HRA Div. Mngr. – SEDC
17	To be noted for permitting and zoning (-do-)	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan		
18	We also need the locations and areas, so we can integrate it in the CLUP	Mr. Canino - MPDC – Pinamungajan		
19	On the DR (Delivery Receipt), there should be transparency. To whom is it submitted to? So as to know the correct income we should be receiving.	Ms. Erames - SB Sec – Pinamungajan	To the Brgy. Treasurer	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan Mr. Campo – VP Operations – SEDC
20	Require the supplier to attach DR Documents	MPDC	We submit quarterly to the Province, with the rate being P20/cubic meter	Mr. Campo – VP Operations – SEDC
21	Including the Volume	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan		
22	Address the DR Documents to the Treasurer	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan		
23	Ensure that what happened to Naga doesn't happen (again/here)	Ms. Erames - SB Sec – Pinamungajan	Measures will be undertaken	Mr. Campo – VP Operations – SEDC
24	Avoid hazardous practices such as what may have happened in Apo Cement	Mayor Balicuatro – Office of the Municipal Mayor - Pinamungajan	We shall be careful and study soils and slopes before and as we proceed, and adjust accordingly. Over-stockpiling while continuing to aggressively expand even around the Stockpile Area is Dangerous.	Mr. Campo – VP Operations – SEDC

V. Photo Documentation during the IEC Activity

Figure 1. Consultation/Courtesy Calls, PEISS and Project Description Presentation

Figure 2. Placement of Posters

Figure 3. Distribution of Brochures

ATTACHMENT 3

PRE-PUBLIC SCOPING PARTICIPATORY GATHERING

PRE-PUBLIC SCOPING PARTICIPATORY DATA GATHERING

Documentation Report for the

SEDC Clay and Silica Quarry Expansion Project

(MPSA 131, MPSA 330, MPSA 348)

I. Objective

In compliance with DAO 2017-15 or the Guidelines on Public Participation under the Philippine Environmental Impact Statement System, Participatory Data Gathering Activities on the Clay-Silica Quarry Expansion Project (MPSA 131, MPSA 330 & MPSA 348) of Solid Earth Development Corp. was conducted from November 14 – December 3, 2018 in various locations in San Fernando and Pinamungajan, particularly in the Impact Barangays and with Key Stakeholders.

II. Activities

The, Participatory Data Gathering Activities conducted were the following:

1. Consultation with PG-ENRO
2. Key Informant Interviews (KIIs)
3. Focus Group Discussions (FGDs)
4. Perception Survey

III. Time Frame and Duration

The time frame and duration of the Participatory Data Gathering Activities was from November 12 – December 3, 2018.

- The Consultation with the PG-ENRO was held in the SEDC Conference Room on November 14, 2018 at 1pm.
- The Key Informant Interviews were held on November 14, 2018 Wednesday at 2pm.
- The Focus Group Discussion was held on November 20, 2018 Tuesday
- The Perception Survey

IV. Locations and Venues

The locations and venues of the Participatory Data Gathering Activities were in the Impact Barangays.

Summary Matrix for the Pre-Public Scoping the Participatory Data Gathering

Project	Clay and Silica Quarry Expansion Project of SEDC Pre-Public Scoping the Participatory Data Gathering
Subject	SEDC San Fernando-Pinamungajan 626.83 Ha. Clay-Silica Quarry Expansion Project (MPSA 131, MPSA 330)
Objective	SEDC San Fernando-Pinamungajan 626.83 Ha. Clay-Silica Quarry Expansion Project (MPSA 131, MPSA 330) Pre-Public Scoping Public Participation Compliance as per DAO 2017-15 or the Guidelines on Public Participation under the Philippine Environmental Impact Statement System
Activities	1. Consultation with PG-ENRO 2. Key Informant Interviews (KIIs) 3. Focus Group Discussions (FGDs) 4. Perception Survey
Time frame/Duration	• November 14 – December 3, 2018 • 3 weeks
Location	Municipality of San Fernando 1. SEDC Conference Room, SEDC Compound Brgy. South Poblacion 2. Brgy. Tabionan 3. Brgy. Magsico 4. Brgy. Bugho Municipality of Pinamungajan 1. Brgy. Sibago

Summary Matrix for the Pre-Public Scoping Participatory Data Gathering Activities

#	Participatory Data Gathering Activities Conducted	Time Frame/ Duration	Location/ Venue	Remarks
1	Consultation with PG-ENRO	November 14, 2018	SEDC Conference Room	
2	Key Informant Interviews (KIIs)	November 15, 2018	Duangan Brgy. Hall	Respondents: Brgy. Captain
3	Focus Group Discussions (FGDs)	November 20, 2018 10am-12noon	Tabionan Brgy Hall	Participants: BHWs
4	Perception Survey	November 21 – November 30, 2018	Barangays: 1. South Poblacion 2. Tonggo 3. Tinubdan 4. Tananas	Purposive Sampling 100 respondents

V. Demographic Data of respondents in the impact barangays

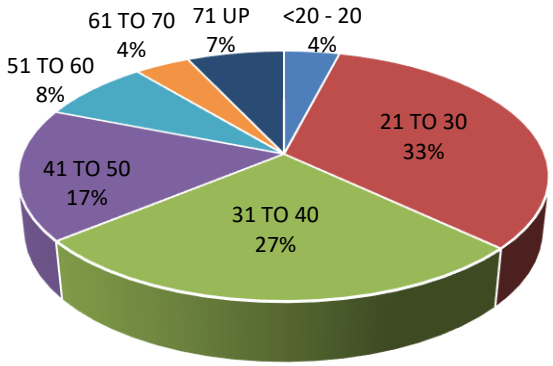


Figure 1. Age of the respondents

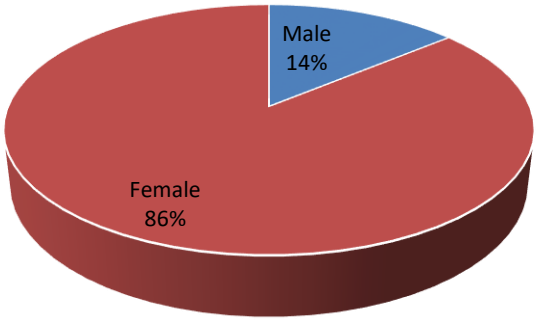


Figure 2. Gender of the respondents

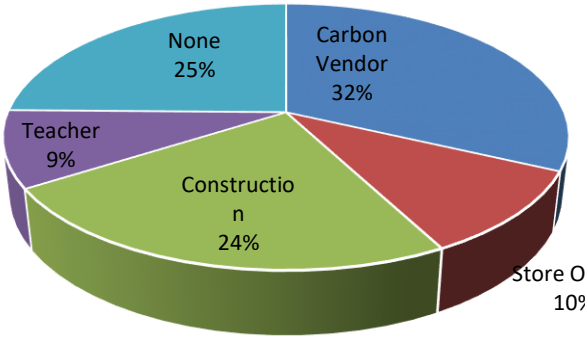


Figure 3. Source of Income

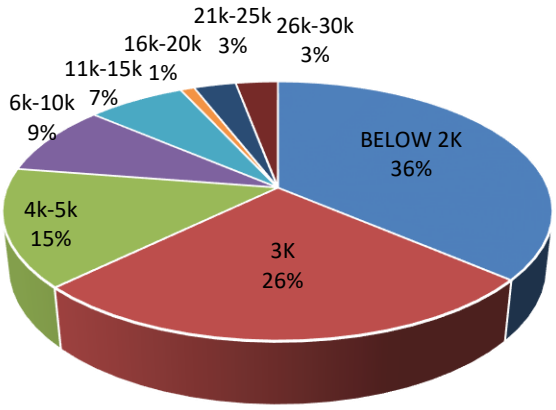


Figure 4. Monthly Income of the respondents

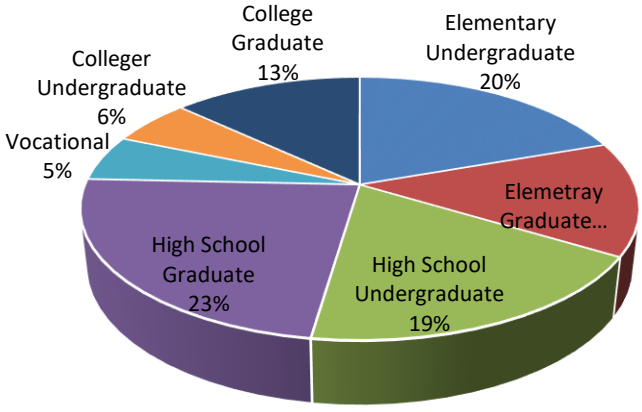


Figure 5. Educational Attainment

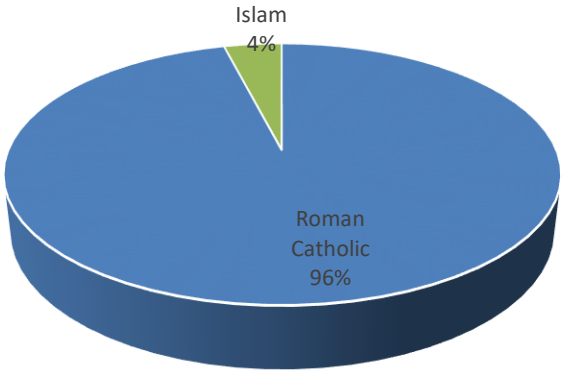


Figure 6. Religion of respondents

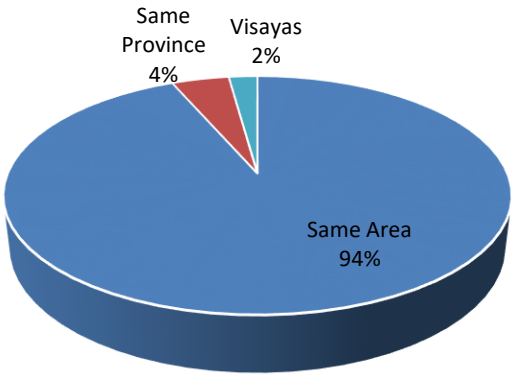


Figure 7. Place of Birth of the respondents

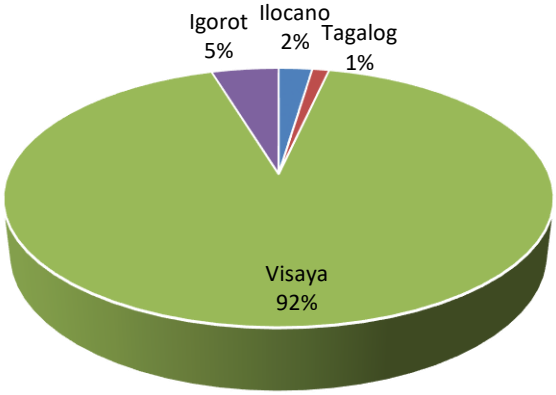


Figure 8. Ethnic Origin of the respondents

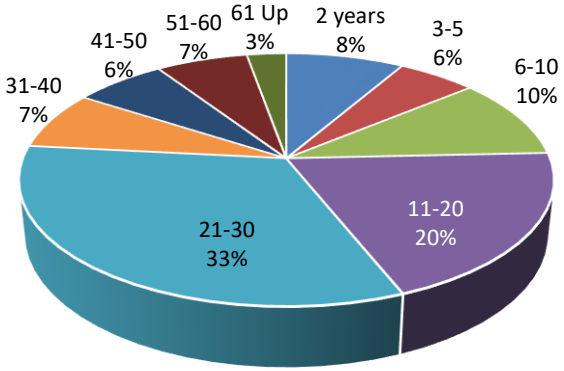


Figure 9. Length of Stay

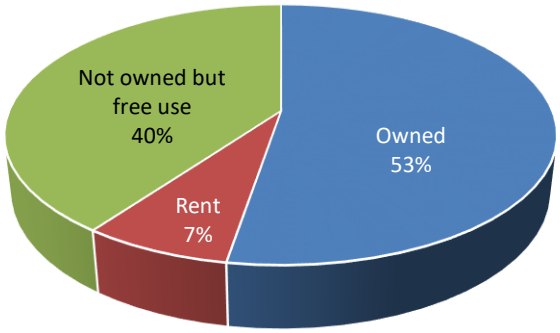


Figure 10. Tenurial Status of Residence

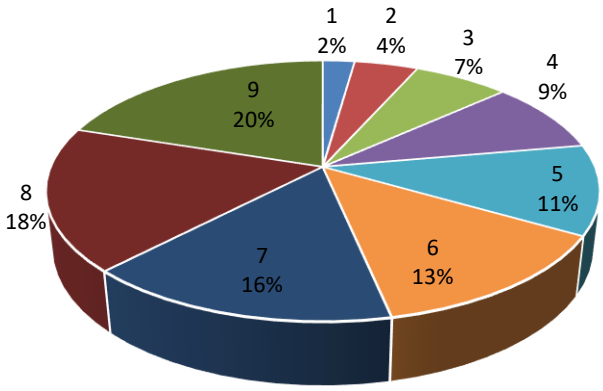


Figure 11. Number of Household

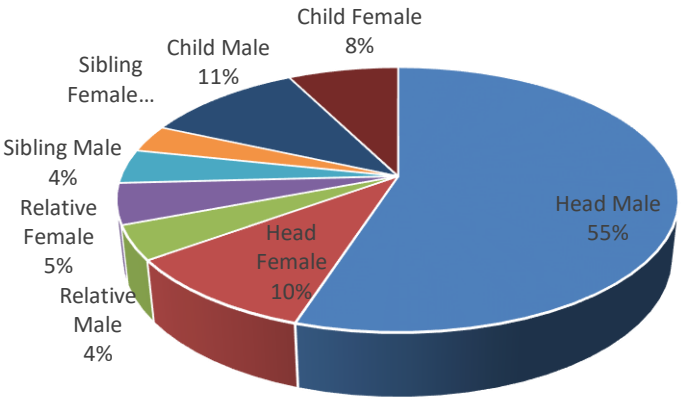


Figure 12. Breadwinner

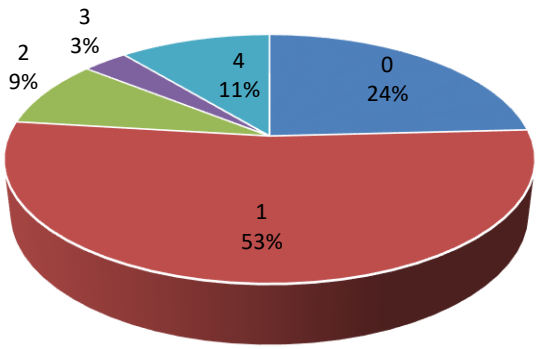


Figure 13. Number of Illness

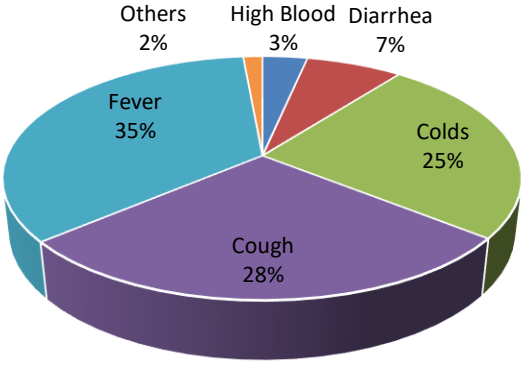


Figure 14. Type of Illness

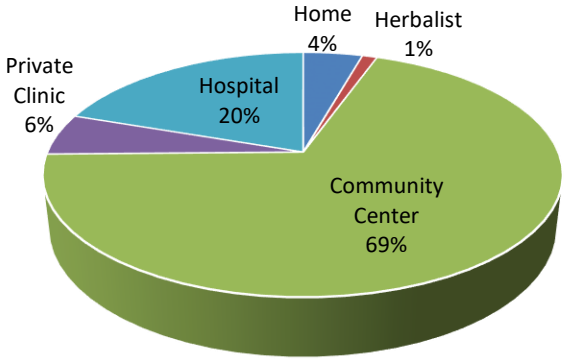


Figure 15. Venue of Treatment

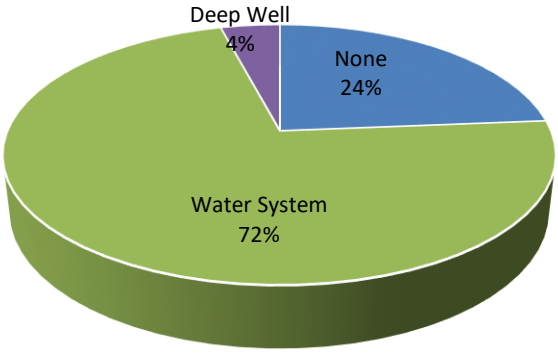


Figure 16. Water Source

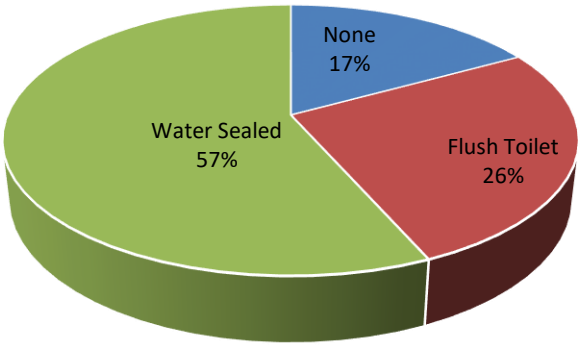


Figure 17. Toilet Facility

VI. Issues and Concerns

A. Issues and Concerns Raised During the Nov 14, 2018 Consultation with the PG-ENRO

#	Issues and Concerns	Participant	Response	Respondent
1	Fault Line traverses MPSA – Bugho Magsico, based on MGB Data Raw File	PG ENRO	We will check and confirm. Should be verified with PHilvocs	Mr. Samuel Tagsip – Operations Div Mngr - SEDC

A. Issues and Concerns raised during the KIIs

1. Perceived Negative Impacts/Concerns of the Project

b. Erosion and Landslide/Safety Concern
c. Dust

2. Perceived Positive Impacts/Concerns of the Project

a. Additional Livelihood
b. Support in Brgy. Programs
c. Increased IRA
d. Employment

B. Issues and Concerns raised during the FGDs

1. Perceived Negative Impacts/Concerns of the Project

a. Erosion and Landslide/Safety Concern
b. Dust
c. No available employment for women
d. Loss of water source
e. Loss of Vegetation

2. Perceived Positive Impacts/Concerns of the Project

a. Assistance to the Brgy.
b. Employment
c. Additional Livelihood
d. Support of Health Programs
e. Support in Brgy. Programs

VII. Photo Documentation


Figure 18. Focus Group Discussion and Key Informant Interview


Figure 19. Perception Survey

ATTACHMENT 4

PROPOSED LIST OF INVITEES

LIST OF INVITEES FOR THE PUBLIC SCOPING

Agency/Institution	Name of Representative	Designation	Address
National Agencies			
DENR EMB Central	Engr. Metodio U. Turbella	EMB Director	DENR Compound, Visayas Avenue, Diliman, Quezon City
EMB EIAMD	Engr. Esperanza A. Sajul	Chief	DENR Compound, Visayas Avenue, Diliman, Quezon City
Mines and Geosciences Bureau	Atty. Wilfredo G. Moncano	Acting Director	MGB Compound, North Avenue, Diliman, Quezon City
Regional Agencies			
DENR R7	Gilbert C. Gonzales	Regional Director	National Government Center, Sudlon, Lahug, Cebu City, Cebu
EMB R7	Engr. William P. Cuñado	EMB Regional Director	Greenplains Subdivision, Banilad Mandaue City, Cebu
MGB R7	Engr. Efren B. Carido	OIC - Regional Director	Greenplains Subdivision, Banilad Mandaue City, Cebu
Provincial Agencies			
Cebu Provincial LGU	Hon. Hilario Davide III	Governor	N. Escario St., Cebu Capitol, Cebu City
	Hon. Agnes Almendras Magpale	Vice governor	N. Escario St., Cebu Capitol, Cebu City
	Mr. Rodel C. Bontuyan	Provincial Planning and Development Officer	3rd Floor East Wing, Executive Bldg., Cebu Capitol
	Mr. Jayson P. Lozano	Provincial Environment and Natural Resources Office	Ground Floor West Wing, Executive Bldg., Cebu Capitol
PENRO-Cebu	For. Jose Cleo Cary Colis	OIC, PENR Officer	Green Plains Subdivision, Banilad, Mandaue City
Municipal Agencies			
San Fernando Municipal Government	Lakambini G. Reluya	Mayor	Municipality of San Fernando San Fernando, Cebu
	BB Sabalones	Vice Mayor	Municipality of San Fernando

Agency/Institution	Name of Representative	Designation	Address
			San Fernando, Cebu
	-	Municipal Council Members	Municipality of San Fernando San Fernando, Cebu
	To All Department Heads	Department Heads	Municipality of San Fernando San Fernando, Cebu
Pinamungajan Municipal Government	Hon. Glenn Baricuatro	Mayor	Municipal Building, Pinamungajan, Cebu
	Hon. Maria Honeylette Lingad	Vice Mayor	Municipal Building, Pinamungajan, Cebu
	-	Municipal Council Members	Municipal Building, Pinamungajan, Cebu
	Mr. Oscar M. Canino	Municipal Planning and Development Officer	Municipal Building, Pinamungajan, Cebu
	Mr. Marlon B. Aniñon	Municipal Agriculturist Officer / Municipal Environment and Natural Resources Officer	Municipal Building, Pinamungajan, Cebu
	Ms. Maria Eleanor P. Gigante Ms. Bernadette Atil	Municipal Health Office Representatives	Municipal Building, Pinamungajan, Cebu
	Rodolfo P. Patong	Municipal Engineering Office	Municipal Building, Pinamungajan, Cebu
	To All Department Heads	Department Heads	Municipal Building, Pinamungajan, Cebu
CENRO-Argao	Mr. Roldan R. Cotejo	OIC, CENR Officer	Lamacan, Argao, Cebu
Barangay Agencies			
Barangay Magsico, San Fernando	Hon. Johnny S. Arriesgado	Punong Barangay, Kagawad and Barangay Councilors	Barangay Magsico, San Fernando
Barangay Cabatbatan, San Fernando	Hon. Tomas G. Baclaan	Punong Barangay, Kagawad and Barangay Councilors	Barangay Cabatbatan, San Fernando
Barangay Bugho, San Fernando	Hon. Florenda Basalo	Punong Barangay, Kagawad and Barangay Councilors	Barangay Bugho, San Fernando

Agency/Institution	Name of Representative	Designation	Address
Barangay Tabionan, San Fernando	Hon. Pedro S. Degumbis	Punong Barangay, Kagawad and Barangay Councilors	Barangay Tabionan, San Fernando
Barangay Guimbawi-an, Pinamungajan	Hon. Rolando Alia	Punong Barangay	Barangay Guimbawi-an, Pinamungajan
	-	Kagawad, Barangay Councilors, and Personnel	
Barangay Sibago, Pinamungajan	Hon. Paulino Canoy	Punong Barangay	Barangay Sibago, Pinamungajan
	-	Kagawad, Barangay Councilors, and Personnel	
Other barangays of San Fernando and Pinamungajan	-	Punong Barangay, Kagawad and Barangay Councilors	Pinamungajan, Cebu
Interest Groups			
Fisherfolk group/ organization on Impact Barangays/ Municipalities	-	Representative	Pinamungajan & San Fernando, Cebu
Senior Citizen group/ organization on Impact Barangays/ Municipalities	-	Representative	Pinamungajan & San Fernando, Cebu
Women's group/ organization on Impact Barangays/ Municipalities	-	Representative	Pinamungajan & San Fernando, Cebu
Youth's Organization on Impact Barangays/ Municipalities	-	Representative	Pinamungajan & San Fernando, Cebu
Elementary School on Impact Barangays/ Municipalities	-	Principal	Pinamungajan & San Fernando, Cebu
Secondary School on Impact Barangays/ Municipalities	-	Principal	Pinamungajan & San Fernando, Cebu
Tertiary School on Impact Barangays/ Municipalities	-	Principal	Pinamungajan & San Fernando, Cebu
Churches on Impact	-	Representative	Pinamungajan & San Fernando,

Agency/Institution	Name of Representative	Designation	Address
Barangays/ Municipalities			Cebu
Hospitals on Impact Barangays/ Municipalities	-	Representative	Pinamungajan & San Fernando, Cebu

ATTACHMENT 5

DRAFT INVITATION LETTER AND IEC MATERIALS FOR THE PUBLIC SCOPING

Date

NAME OF REPRESENTATIVE
Designation
INSTITUTION / ORGANIZATION
Address

Dear **Sir/Ma'am:**

We are pleased to invite you to the Public Scoping for the ECC amendment application of the Siliceous Clay Quarry Expansion Project of Solid Earth Development Corp. (SEDC) located at Barangays Magsico, Cabatbatan, and Bugho in the Municipality of San Fernando, and Barangays Sibago and Guimbawi-an in the Municipality of Pinamungajan, Province of Cebu. The Public Scoping will be held on **(Date), (Time)** at **(Venue)**.

This Public Scoping is a part of the Environmental Impact Assessment (EIA) process per Presidential Decree (P.D.) 1586, (Environmental Impact Statement System) and its Implementing Rules and Regulations to solicit and address issues and concerns about the project.

A copy of the Project Description Report for Scoping is downloadable at our website: www.emb.gov.ph (kindly access the Notice of Public Scoping link found at the lower right portion of our website) while hard copies are available in _____.

For more details, please contact the EMB Central Office at DENR Compound, Visayas Avenue, Diliman, Quezon City or telephone no. 920-22-32.

We look forward to your participation.

Sincerely yours,

DENR ADMINISTRATIVE ORDER 2017-15
GUIDELINES ON PUBLIC PARTICIPATION UNDER THE PHILIPPINE ENVIRONMENTAL IMPACT STATEMENT (EIS) SYSTEM

Consistent with the State Policies and Principles of the Philippine Constitution on the right of the people to a balanced and healthful ecology and on encouraging non¬governmental, community-based, or sectoral organizations that promote the welfare of the nation, the provisions of PD 1151 and PD 1586 on the implementation of the Philippine EIS System and the 1992 Declaration of United Nations Conference on Environment and Development (UNCED) emphasizing that environmental issues are best handled with the participation of all concerned citizens as well as with the thrust of the Department of Environment and Natural Resources (DENR) to promote social justice, the following guidelines on Public Participation are hereby promulgated.

Section 1. Basic Policy and Principles

It is hereby declared a policy that amidst the country's economic development initiatives, common good shall be promoted through public participation in the implementation of the Philippine EIS System. It shall employ the following basic principles.

a) Public Participation should be initiated early and sustained at the various stages of the EIAProcess.
b) Public Participation should be well planned and should involve the stakeholders in the assessment, management and monitoring of environmental impacts
c) Timely public disclosure of all necessary relevant information especially to the stakeholders who shall be made to understand and appreciate the specific purpose and context of their participation for each stage of the process.

Section 2. Objectives and Outcome

The objective of this Administrative Order is to improve and rationalize Public Participation under the Philippine EIS System by incorporating best practice principles and standardizing the procedures and requirements.

The intended outcome of this order is to achieve meaningful public participation under the Philippine EIS System at the various stages of the EIA Process through:

a) An adequate, timely and effective information disclosure and feedback mechanism for:
   - The gathering of all relevant baseline data / information, issues and concerns that should be included in the EIA study
   - The review of the contents of the EIS
   - The management and monitoring of environmental impacts of projects/undertakings
b) Consideration of the needs of the vulnerable and disadvantaged and of gender concerns.
c) Discussion of relevant views of the affected people and other stakeholders for incorporation into the decision-making, such as project alternatives/design, mitigation measures, the sharing of development benefits and opportunities and implementation issues.
d) Defined roles and empowered citizens in taking responsibility in environmental protection

Section 3. Scope of Public Participation Requirement

Public participation under the Philippine EIS system shall be required for the entire EIA Process from social preparation prior to scoping to impact management and monitoring during project implementation/abandonment.

Environment - shall refer to the totality of the external conditions affecting life, development and survival of organisms including the surrounding air, water (both ground and surface), land, flora, fauna, humans and their interrelations.

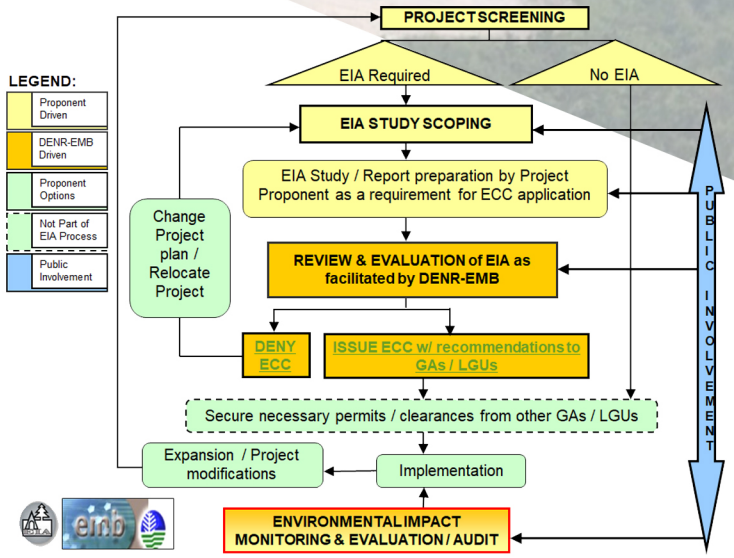
Environmental Aspects - elements of an organization's activities, products or services that can interact with the environment.

Environmental Compliance Certificate (ECC) - is a document that may be issued after thorough review of the EIA Report. It certifies that the proposed project has complied with the requirements of the EIS System and that the proponent has committed to implement its approved Environmental Management Plan (EMP) to address the environmental impacts and to operate within the best environmental practice.

Environmental Impact Assessment (EIA) - a process that involves predicting, monitoring and evaluating the impacts of a project (including cumulative impacts) on the environment during construction, commissioning, operation and abandonment. It also includes designing appropriate preventive, mitigating and enhancement measures to address these consequences to protect the environment and the community's welfare.

Environmental Impact Statement (EIS) - an EIA Report type that is required to be submitted for ECC application for proposed ECPs and other project types that are expected to have a high degree of environmental impact significance.

Project or Undertaking -any activity, regardless of scale or magnitude, which may have significant impact on the environment.



THE EIA PROCESS

SEDC SOLID EARTH DEVELOPMENT CORPORATION

SEDC SAN FERNANDO-PINAMUNGAJAN 626.83 HA CLAY AND SILICA QUARRY EXPANSION PROJECT (MPSA 131, MPSA 330)

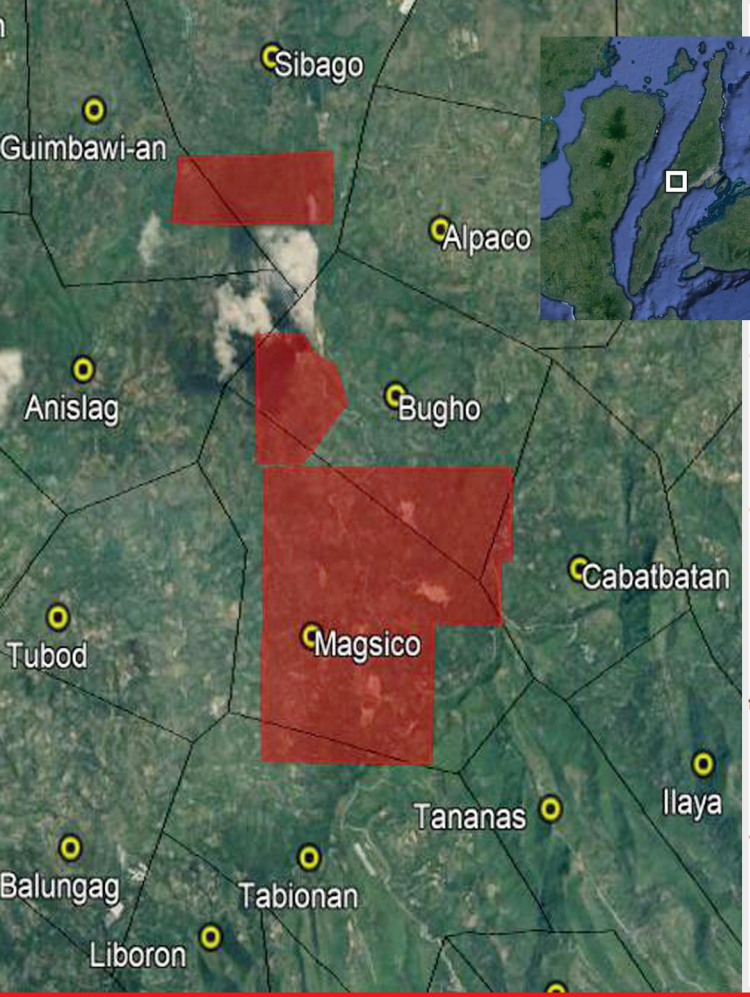
Para sa Kahiluwasan, Panglawas, Kalikupan Ug Pagdumala.

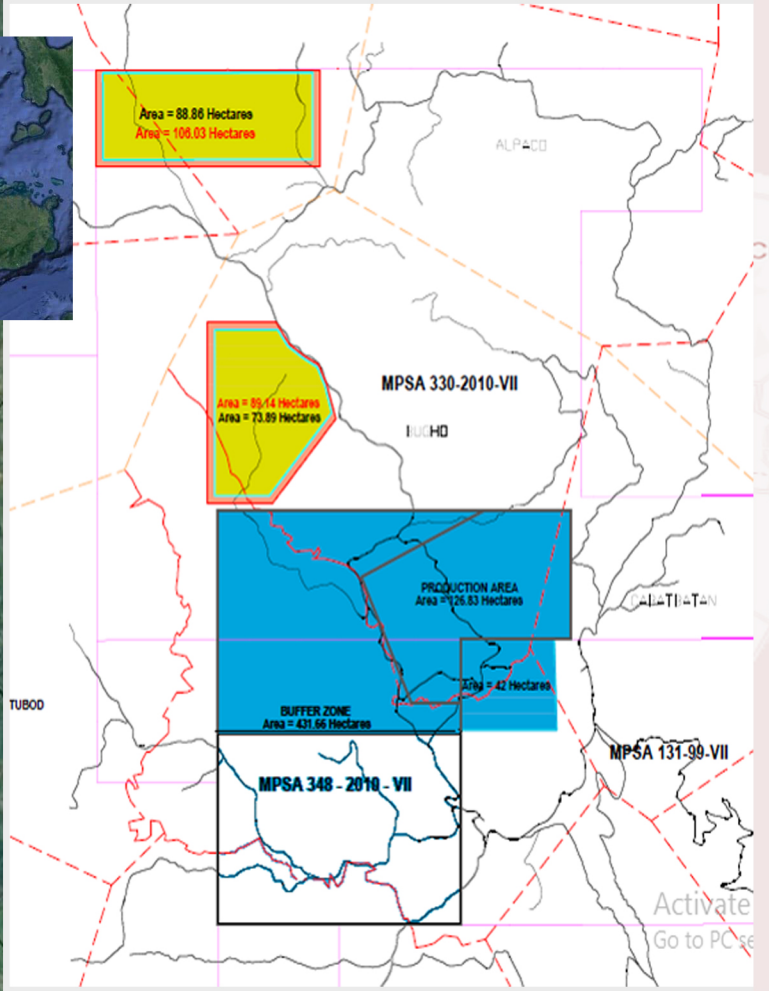
Isip usa ka responsabling kompanya sa mina, ang SEDC mipatuman ug misunod sa kinatas-ang basehan sa kahiluwasan,panglawas, kalikupan ug pagdumala.

Maoy labing unang priyuridad ang kahiluwasan sa mga tao ug sa komunidad kung asa kami nag-operate.

Kahiluwasan ang Una

- Safety First -





Safety and Health Policy

We are committed to manage a safe and responsible mining and port operations by providing safe and healthyworking conditions to our employees and serviceproviders and adhering to safety and health standards.

Under this policy, incident prevention is the ultimate goal to eliminate/minimize potential pre-determined hazards and risks associated in each stage of our operations through established operational controls and strategies for continual development.

Environmental Policy

SOLID EARTH DEVELOPMENTAL CORPORATION iscommitted to the continual Environmental ManagementSystem improvement through responsible extraction,development and utilization of mineral resources.Implement activities that can address operational aspects, impacts and socio-economic programs to co-exist with stakeholders.

To ensure that the associated impacts concerning our activities are not detrimental to the environment, we shall;

- *Conduct activities in compliance with all applicable environmental regulations.*
- *Establish a systematic environmental management that is geared to the delivery of quality raw materials and people development as well as protection of Mother Earth within the framework of sustainable development.*
- *Enhance environmental protection programs through systematic development and efficient continual energy/material conservation efforts.*
- *Ensure implementation of pollution control and prevention programs*
- *Educate, train and motivate stakeholders to carry out tasks in an environmentally responsible manner.*
- *Implement environmental protection among vendors and any of the interested parties with consideration to the life cycle impacts of their aspects.*

PROJECT INFORMATION

PROJECT NAME: SEDC SAN FERNANDO - PINAMUNGAJAN 626.83 HA CLAY- - SILICA QUARRY EXPANSION PROJECT

PROJECT TYPE: QUARRYING – EXTRACTION OF NON-METALLIC MINERALS

PROJECT LOCATION: MAGSICO, CABATBATAN, BUGHO, SAN FERNANDO, CEBU SIBAGO, PINAMUNGAJAN, CEBU

PROJECT SIZE: 626.83 HECTARES

MANPOWER REQUIREMENTS: EXISTING +- 150

COMPONENTS:

- PRODUCTION AREA
- OVERBURDEN/TOPSOIL/STOCKYARD
- RAW MATERAIALS STOCKYARD (LIMESTONE,CLAY, SILICA, POZZOLAN
- POLLUTION CONTROL FACILITIES (DRAINAGE SYSTEM, SILT POND AND OIL WATER SEPARATORS, WATER TRUCKS),

PROPONENT PROFILE

PROPONENT: SOLID EARTH DEVELOPMENT CORPORATION (SEDC)

REPRESENTATIVE: ATTY. DENNIS B. TENEFRANCIA

DESIGNATION: PRESIDENT

ADDRESS: 9TH FLOOR INSULAR LIFE BUSINESS CENTER,CEBU BUSINESS PARK, CEBU CITY

CONTACT DETAILS: TEL NO.: (032) 340-8146
FAX NO.:(032) 340-6313

SEDC SOLID EARTH DEVELOPMENT CORPORATION

RASON

ARON PAGPADAYON SA PAG-SUPPLY OG CLAY-SILICA PARA SA PAGHIMO OG SEMENTO.

PAGKINAHANGLAN SA PROYEKTO

PAG-SUPORTA SA PADAYON NGA PANGINAHANGLAN OG LIMESTONE, CLAY OG SILICA

TUYO

ANG PAGKUHA OG CLAY-SILICA SUBAY SA BALAOD SA GOBYERNO KABAHIN SA KALIKOPAN NGA GILATID SA IYANG MPSA NGA ADUNAY LABING DAKO NGA PAGHUNA-HUNA SA PAGSANTA SA BISAN UNSA MAN NGA DILI MAAYO NGA EPEKTO SAMTANG MAGPALAMBO SA MAAYO NGA EPEKTO SA NATURAL OG PISIKAL NGA PALIBOT APIL NA ANG KATILINGBANONG EKONOMIYA

TUMONG

PAGPALAPAD SA KASAMTANGANG PRODUKSYON NGA LUGAR GIKAM SA 331.60 EKTARYAS NGADTO SA TINUIG NGA PRODUKSYON NGA 1,080,000 TONELADAS

MGA BENEPISYO

PROGRAMA PARA SA KATILINGBANONG KALAMBOAN, PANARBAHO, MGA PROYEKTO NGA MAPANGINABUHIAN, OPORTUNIDAD NGA MOKITA, KITA SA LOKAL NGA GOBYERNO O MUNISIPYO PINAAGI SA BUHIS

ATTACHMENT 6

DRAFT PRESENTATION OF THE PROJECT DURING PUBLIC SCOPING

SILICEOUS CLAY QUARRY EXPANSION PROJECT

PUBLIC SCOPING

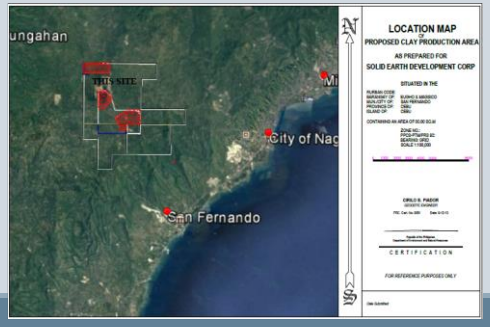
PROPOSED PROJECT COVERAGE

Project Name	Siliceous Clay Quarry Expansion Project
Project Type	Quarrying – Extraction of Non-metallic minerals
Project Location	Barangays Magsico, Cabatbatan, and Bugho in the Municipality of San Fernando, and Barangays Sibago and Guimbawi-an in the Municipality of Pinamungajan, Province of Cebu
Project Scale/Limit	Total extraction rate: 1,080,000.00 MT Total Production Areas: 315.57 has o Magsico (MPSA 131): 42.02 has o Sibago/Guimbawi-an, North Bugho & South Bugho (MPSA 330): 254.63 has o South Bugho (MPSA 348): 18.92 has
Major Project Components	Quarry i. Production Areas ii. Overburden/topsoil stockyard iii. Access and Haul Roads iv. Siltation Control Facilities v. Quarry Administration Building vi. Nursery

PROFILE OF THE PROPONENT

Name of the Company	Solid Earth Development Corporation (SEDC)
Contact Person	Atty. Dennis B. Tenefrancia President
Office Address	9th Floor Insular Life Business Center, Cebu Business Park, Cebu City
Contact Details	Tel. No.: (032) 350 2908 Fax. No. (032) 234 2795

PROJECT LOCATION



PROJECT ALTERNATIVES

SEDC conducted geological exploration in the project MPSAs, among others, to identify the specific sources of raw materials suitable for the cement manufacture of TCPI. From the initial exploration results, the resources within the quarry locations proposed in this application meet the material quality criteria and were found economically feasible for quarry operations to supply TCPI requirements.

The exploration activities were undertaken covering various promising locations within the project MPSAs, and only the areas proposed herein are deemed feasible for the quarry operations due to the material quality, quarryable volume and contiguity of the proposed extraction area which contribute to operational efficiency and a better profitability profile.

PROJECT COMPONENTS

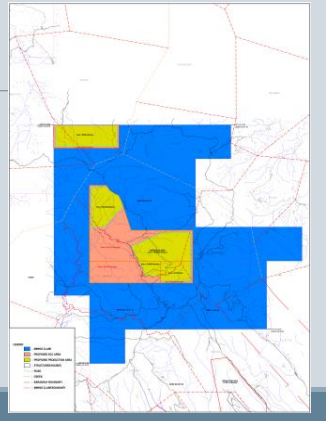
QUARRY AREA

<u>Total Production Areas</u>: 315.57 has

Magsico (MPSA 131): 42.02 has

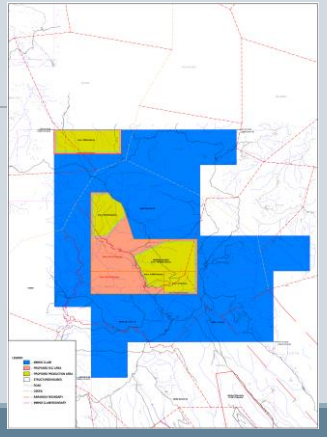
Sibago/Guimbawi-an, North Bugho & South Bugho (MPSA 330): 254.63 has

South Bugho (MPSA 348): 18.92 has

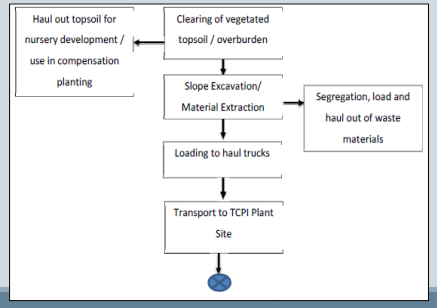


PROJECT COMPONENTS

- Haul Roads
- Access Roads
- Stockpiles
- Siltation Control Devices
- Quarry Administrative Building
- Nursery



PROCESS/TECHNOLOGY



Quarry Operations/ Activity Flowchart