



PROJECT SUMMARY

Name of Project: ANSA McAL West Bank Land Development

Name of Developer/ Company: ANSA McAL Trading Ltd.

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Date: 12th October, 2023.

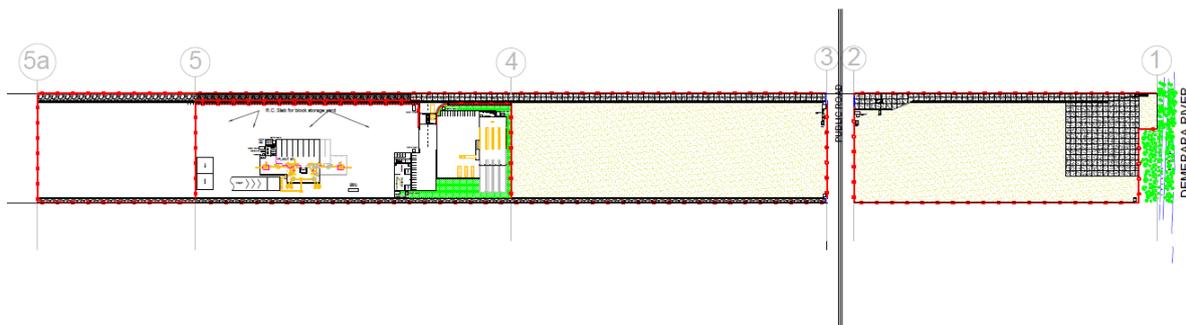
Site Description:

The proposed site (plots 2 – 7 Milmount, formerly known as ‘Free and Easy’) is located in the Wales Development zone on the West bank of the Demerara, 14 km South from the Demerara Harbour Bridge. The spatial boundaries of the land owned are 408 ft (wide) x 8921 ft (long) of privately owned land. The temporal boundaries of the project are from November 2023 to August 2025.

Land Requirements and Layout:

The area of the land to be developed will be 408 ft (wide) x 4137 (long) to accommodate its operations and infrastructure. The development would include the installation of basic infrastructure such as access roads, drainage, street lighting, and perimeter fencing, as well as the construction of a concrete block making factory.

Layout of the operation:



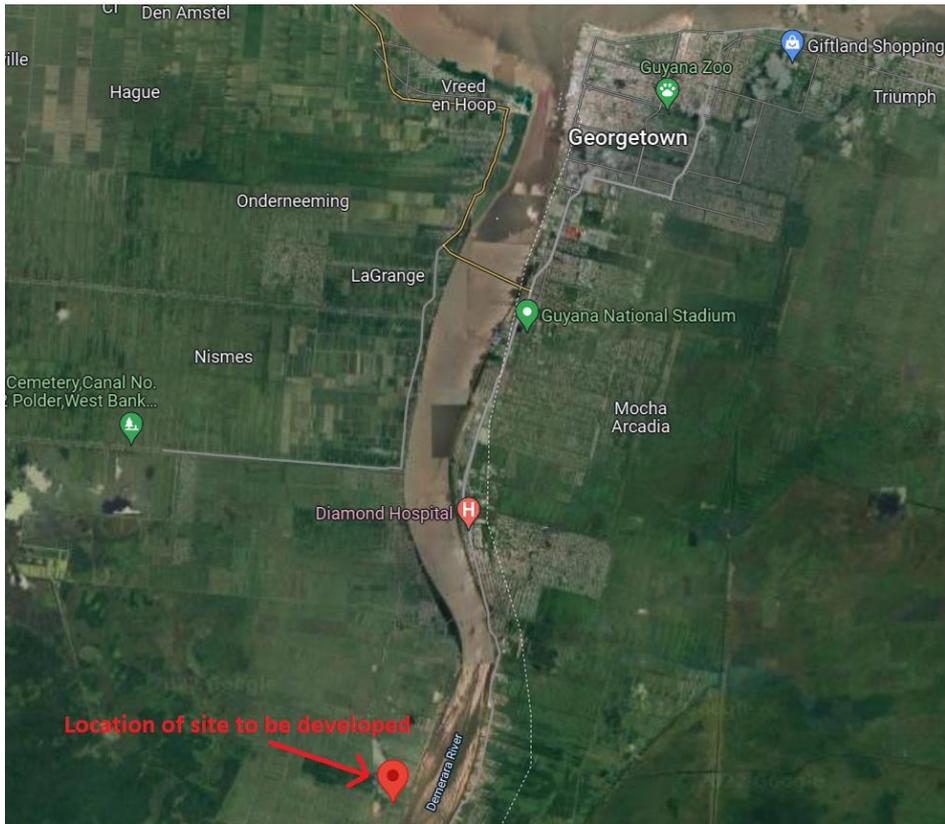
Receiving Water:

Wastewater will be effectively treated and channeled into drains in accordance with EPA standards and guidance. Stormwater runoff will also be channeled via a drainage system on the site, to catch basins. Final discharge will be drained into the drainage canals along the public roadway.

Present Land Use:

The project area is currently characterized for light industrial use. This area was formerly the Wales Sugar Estate and was previously used for growing mainly sugar cane crops.

Site Location:



Site Boundaries:



Construction Stage:

This would include clearing and grubbing the existing vegetation, filling the site approximately 1 meter with sand, constructing reinforced concrete access roads, installing 3-foot-wide box drain infrastructure, installing perimeter fencing with gates, and installing utility (water and power) infrastructure.

For the buildings, reinforced concrete piles will be driven for the foundations, then a reinforced concrete foundation slab will be cast. A steel frame structure will then be erected and surrounding concrete block walls and galvanized roof sheeting will be installed.

The block factory will include a building to house the block making equipment with a kiln where the blocks can cure, a garage to service and repair mobile equipment, a workshop to service and repair plant equipment, an administration office, security booth, and an aggregate storage shed.

Operation Stage:

Types of blocks to be made: The types of blocks that will be made are 4", 6" and 8" hollow core concrete blocks.

Raw Materials Consumption: The block making operations will consume approximately 43 cubic meters of $\frac{3}{4}$ " gravel, 49 cubic meters of sharp sand, 10 cubic meters of cement and 264 gallons of water per day in the manufacturing process.

On-site Storage: We intend to store 950 cubic meters of $\frac{3}{4}$ " gravel and 1,090 cubic meters of sharp sand in the aggregate shed, 165 cubic meters of cement in two cement silos, and 10,000 gallons of water in tanks on site.

Description of process onsite: In the block making process, the aggregates ($\frac{3}{4}$ " gravel and sharp sand) and cement are mixed with water in a mixer, and the resulting concrete placed into molds and compacted. The newly formed, wet blocks are then taken to the kiln to cure/harden overnight. After the blocks are cured, they are placed onto rollers and then stacked into cubes. The stacks of blocks are then placed outside in the storage yard, using forklifts, to be sold. The block making process does not produce waste, as the raw materials can be reused and reinserted into the beginning of the manufacturing process or repurposed on site.

Transport of materials to and from site: As for the transport of the raw materials, the aggregates will be brought to the site via barges to the wharf, and from the wharf they will be loaded onto dump trucks and transported to the aggregate shed. The cement would be brought to the site using bulk cement trailers and pumped into the two cement silos. The finished concrete blocks produced by the factory will be either transported via flatbed trucks directly to the customer, or to the wharf where it would be loaded onto a barge and then sent to the customer.

The building which houses the block making equipment will be expanded in the future in order to add a second block making plant. See attached site layout concepts.

Warehouse:

The warehouse building (280m long x 100m wide) that is to be built will be a separate building from the factory. It is planned that this will be for the storage of coatings, paints and paint related items (such as paint cans, covers, buckets, and accessories).

Water Supply and Treatment:

The main source of water supply will be from the Municipal Water system (Guyana Water Inc.). This involves connecting to the public water network and paying for water usage based on consumption. Purified drinking water will be purchased for drinking purposes.

Energy/ Electricity:

We plan to connect to the local power grid provided by Guyana Power and Light Inc (GPLI). We will also have 3 back-up generators of 750kVA (block factory), 400kVA (street lighting and pumps) and 135kVA to provide a back-up supply for the operations on site. These generators will be installed in accordance with EPA and other applicable regulatory standards. This will help to ensure a consistent power supply and reduce dependency on Guyana's power grid, which is known to experience its challenges. Fuel for the generators will be stored in diesel tanks with containment walls for prevention of spillage.

Communication Facilities:

Hotspot devices will initially be used in order to get internet access on site. We will coordinate with relevant communication companies to try to bring communication lines to our site, but at the moment due to its remote location, communication lines do not currently run in front of our site. We plan to use cell phones for phone communication during operations.

Waste Management:

The types of waste that would be produced by this project are:

1. Waste from toilets
2. Office waste
3. Construction Waste
4. Operational Waste

Sewer Waste:

For the sewage waste, it is planned to install septic tanks with a soak-away system. The wastewater will be treated and discharged in accordance with EPA standards.

Office Waste:

For the waste created by construction and office/administrative activities, a waste collection contractor will be hired to collect the garbage. The main types of waste created by the office would be paper and plastics. These materials would be properly disposed of. Any separation and/or recycling will be done prior to disposal.

Operational Waste:

The waste created during operations includes cement, and aggregates from the manufacturing process. This process produced little to no waste and these waste materials are recyclable and will be reused as inputs into the manufacturing process. Any waste created from the machinery will be properly disposed in accordance with EPA regulations.

Waste audits would be conducted weekly to assess the amounts of waste that is being generated to improve upon our processes and to make them more efficient. ANSA McAL is committed to reducing the amounts of waste in its operations by becoming more efficient.

Construction Waste:

All construction waste will be properly handled, sorted and disposed of in accordance with EPA standards.

Proper Handling and Storage:

All waste materials will be handled and stored in designated containers in order to prevent contamination and to facilitate proper disposal or recycling. Any staff who is handling waste materials will be required to wear appropriate PPE when handling same.

Maintenance Waste:

Lubricant sand oils used in machinery or vehicles require proper disposal or recycling to prevent environmental contamination. It will be ensured that these materials are properly disposed of and there will be no storage waste oil onsite.

Noise and Dust:

The noise emission rate that is produced by the block machine is estimated to be 70 decibels. The dust emission rate produced by the mixing of the aggregates is estimated to be 1.3 mg per cubic meter of concrete mixed.

Mitigation measures:

In order to mitigate the noise spread to the surrounding environment, the block plant equipment will be housed in its own building in order to significantly reduce the noise that is created. Workers who work in the building will be required to wear ear plugs when the machine is operational.

The housing of the plant and equipment in its own building also reduces the amount of dust spread to the environment, most of the dust will therefore be contained in the building and would be swept up and recycled after each day of operation.

Project Size:

Employee projections per phase of development:

Land Development Construction – 65

Block Factory Construction – 65

Block Factory Operation – 25

Rates of Production:

4" Hollow core Blocks - 3000 per month

6" Hollow core Blocks – 3000 per month

8" Hollow core Blocks – 580 per month

Quality Assurance:

ANSA McAL has stringent quality control procedures and practices to ensure that high standards and waste reducing functions are maintained throughout its manufacturing processes. This includes regular material quality inspections, company policies and procedures, operation audits, and testing. ANSA McAL adheres to international standards and is proud to be one of the Caribbean region's leaders in manufacturing.

Employee Training and Awareness:

Employees will be trained on waste management practices, including waste segregation, recycling, and proper disposal procedures. Workers will also be trained to operate and maintain the equipment efficiently to ensure as little waste creation as possible.