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SURUJ SERVICE STATION

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INTRODUCTION

The Suruj Service Station will be a modern gas station with the added amenities of a convenience store and quick service restaurant with a drive through. The station will be branded “RUBIS” and will be supplied with fuel and lubricants exclusively by Rubis Guyana. The project was conceptualized to meet the growing demand for fuel in the region as well as location where commuters can refuel and access services from the convenience store and quick service restaurant. This facility would set a new standard of service for commuters in Region 6.

PROJECT LOCATION AND SITE DESCRIPTION

The Suruj Service Station will be located at Tract 'PS', Johns South Public Road, Coretyne, Berbice, Guyana. As shown in figure 1 the project will occupy 0.8 acres of land. It is bounded in the Northern by the main public road, in the Southern direction by the remaining area of the property, in the Eastern direction by the Bloomfield Village Street and to the Western direction there is a minor trench which is independent of the main drainage system as shown in Figure 1 in pink. The area is mixed with residential, commercial and institutional activities. The land is bounded by a drainage trench with runs from vertically from the eastern direction then horizontally to the northern direction as show in Figure 1 highlighted in blue. Figure 2 shows the site plan for the project, Figure 3 shows the site plan imposed onto the project location and figure 4 gives an expanded view of the project location and surrounding areas.

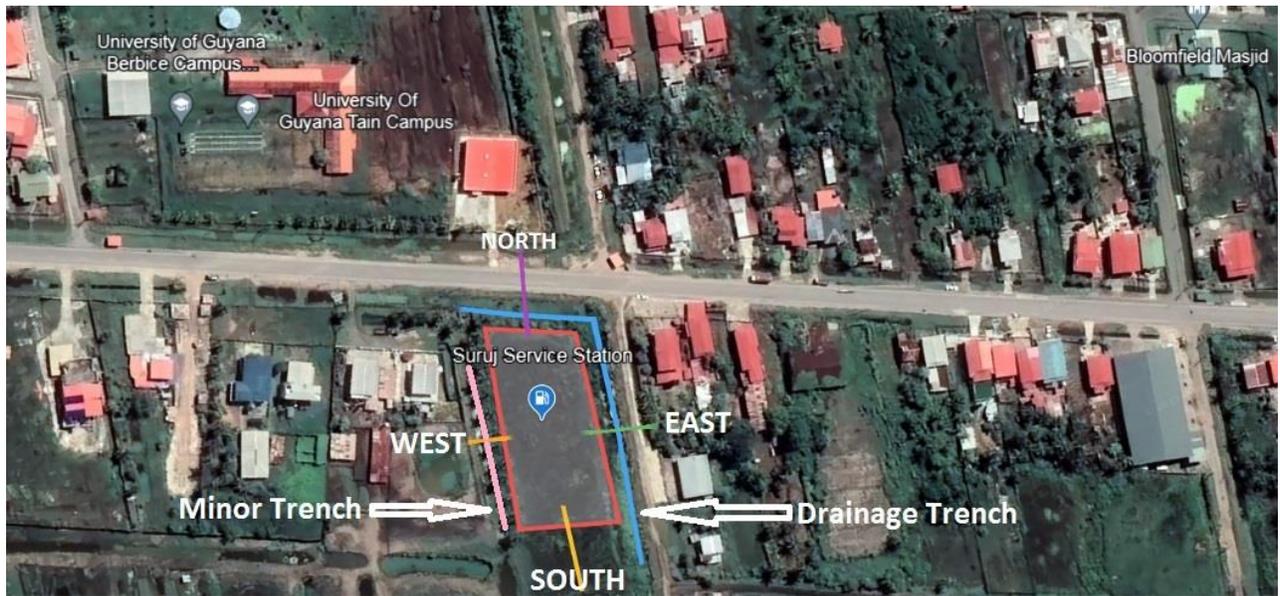


Figure 1: Project location and surrounding land uses

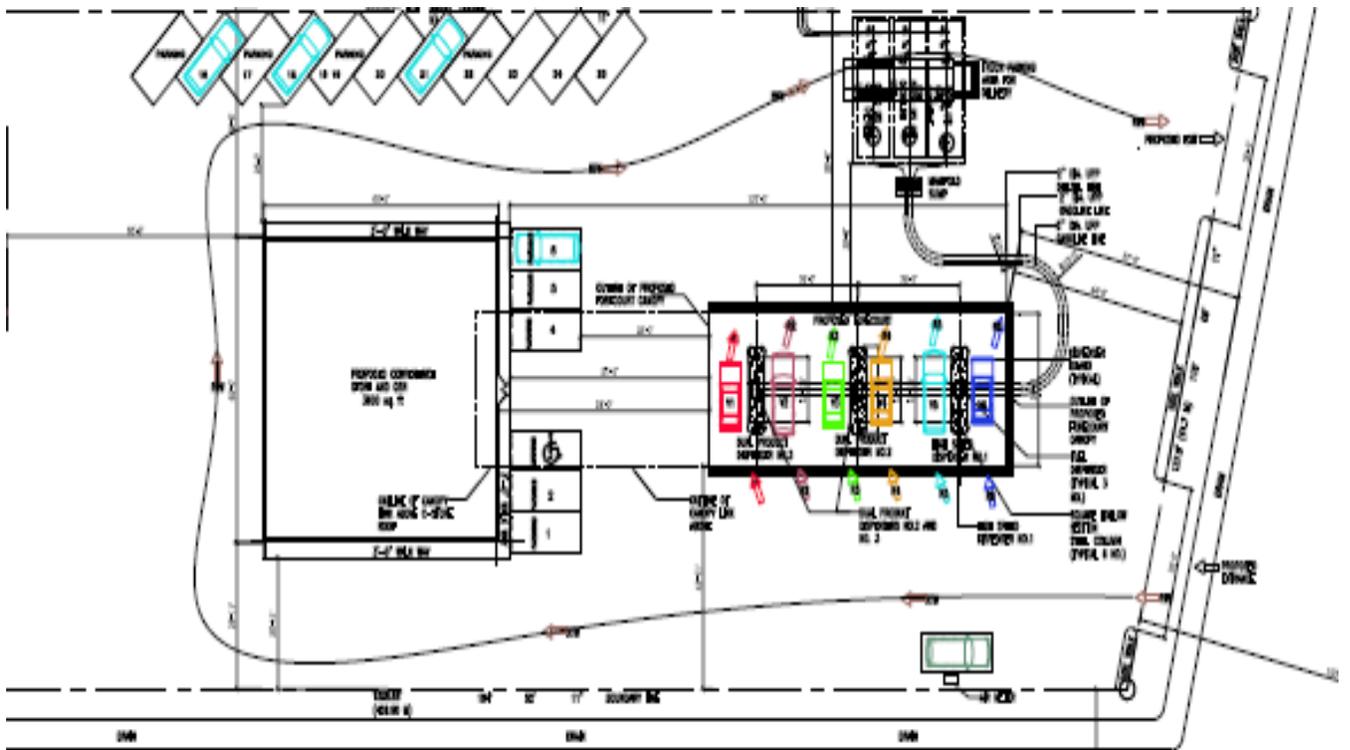


Figure 2: Site plan for project

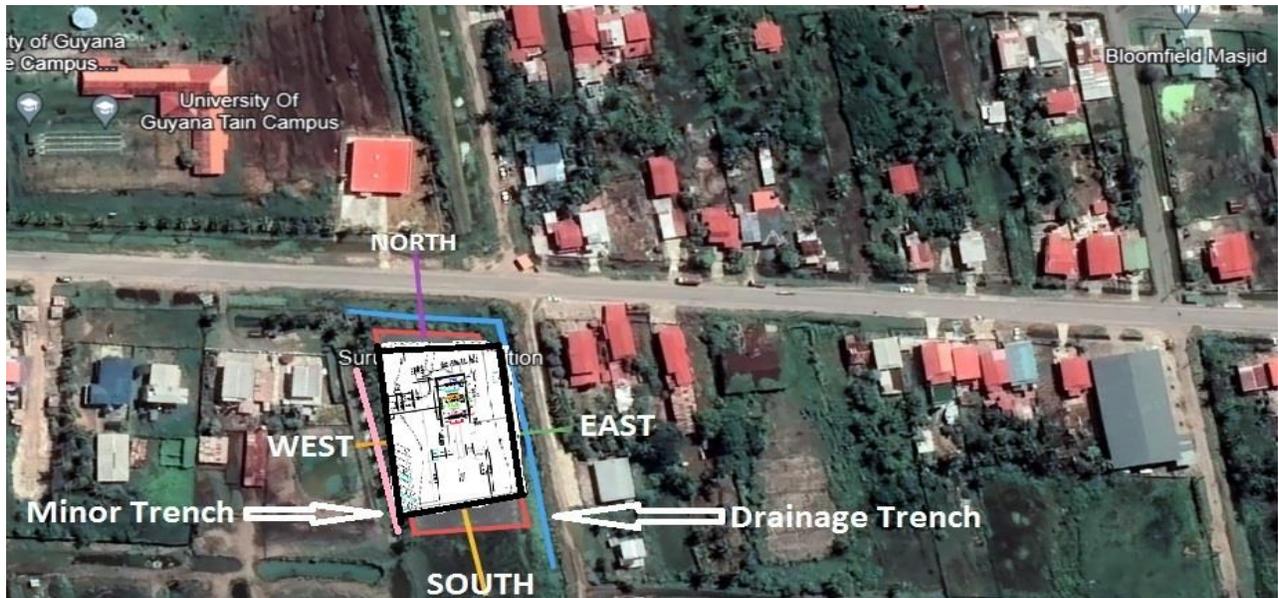


Figure 3: Site plan imposed onto project location



Figure 4: Expanded view of project location and surrounding land uses



Image showing proposed equipment location on site

Legend:

- Yellow figure labeled “A” indicates the position of the three underground fuel storage tanks on the premises.
- Pink figure labeled “B” indicates the position of the oil-water separator on the premises.
- Blue figure labeled “C” indicates the position of the septic tank on the premises.
- Red figure labeled “D” indicates the position of sub-surface drains.

Project Design – Stages, Utilities, Waste Management

The project will be executed in the following stages:

- Land Preparation
- Construction
- Operation

Land Preparation:

- Land clearing of minor vegetation comprising mainly of scrubs.
- Filling of the land with sand aggregate to ensure adequate height in relation to the established road network so as to mitigate flooding.
- The filling material will then be compacted.

Construction:

- The establishment of the building for the convenience store and quick service restaurant.
- Installation of the fuel tanks at the site
- Construction of the pump islands
- Installation of the fuel dispensers and associated equipment
- Construction of concrete drains with oil/water separator
- Installation of Canopy
- Establishment of concrete bridges and pavement.
- Construction of Septic Tank
- Painting of building and other structures
- Electrical wiring for premises
- Plumbing for building
- Branding of canopy and building

Operation:

- Fuel will be stored in three underground fuel tanks, two eight thousand (8000) USG tanks for gasoline and one six thousand (6000) USG tank for diesel. The fuel will be dispensed by three pumps, two for gasoline and one for diesel.
- Fuel that will be retailed is gasoline and diesel.
- The building will be utilized for the convenience store and quick service restaurant.
- Train workers in the proper use and maintenance of equipment and machinery.
- Provide appropriate Personal Protective Equipment which is to be worn during operational phase.
- Ensure there is no unwanted or deleterious discharge into the surrounding environment.
- Implement a strict no dumping policy
- Ensure the service station is outfitted with all necessary firefighting equipment including fire hoses, extinguishers and sand buckets.
- Provide first-aid kit on site
- Establish muster point and identify emergency procedures.
- Comply with the National guidelines regarding occupational health and safety.
- Station will be open from 7 am to 9 pm daily, 7 days per week with 6 fulltime employees.

Utilities:

- Electricity will be sourced from Guyana Power and Light
- Water will be sourced from Guyana Water Incorporated
- Communication services will be sourced from Guyana Telephone and Telegraph
- A 12 KVA generator will supply power to the establishment in periods of power outage or emergencies.

Waste management:

- Consumer waste will be collected in receptacles that will be placed throughout the facility after establishment, the collection and disposal of this waste will be outsourced to a company that offers this service.
- The constructed septic tank will be used to collect sewage



Figure 5: Site before land filling



Figure 6: Site after land filling



Figure 7: Concept of site in operational phase (front)



Figure 8: Concept site in operational phase (side)

Project Details

The gross annual turnover for the project is estimated to be 120,000,000 GYD annually. The investment cost to bring the project to operation s projected at approximately 250,000,000 GYD. At the land preparation and construction phase of the project it will require 10 employees and in operational phase it will require 6 fulltime employees. It is estimated that the timeline for the project will be 9 to 10 months; Land preparation will talk approximately 1 month, Construction will take approximately 8 to 9 months. Project should be operational by near end of fourth quarter 2024.

Environmental Impact and Mitigation

Land Preparation, Construction and Operational Phase

Expected Impact	Mitigation Measures
<p>Waste from Construction activity</p> <p>Construction activity will create general waste such as end pieces of lumber, formwork, cement bags, and other types of waste.</p> <p>The workers will generate domestic waste including food boxes, plastic bottles, and other forms of solid waste.</p> <p>Solid Waste from Operation</p> <p>Mainly waste such as product packaging and wrappers as a byproduct of consumer purchases at the establishment.</p> <p>Effluent Discharge from Operation</p> <p>The building will have washroom faculties which will produce sewage.</p>	<p>The developer will utilize the services of a private waste collection service to remove construction waste from the site. Waste will be loaded into large receptacles daily. Waste will be disposed at an approved site.</p> <p>Domestic waste will be collected in trash receptacles placed onsite and will be disposed of by a private waste collection service.</p> <p>Solid waste will be collected in receptacles placed strategically throughout the establishment, a private trash collection service will be contracted to collect and dispose of was from the receptacles.</p> <p>Discharge of sewage from washrooms will be routed to a septic tank system.</p>
<p>Dust Nuisance during Construction</p> <p>Construction activities can cause excessive dust in the air. This will be minimal.</p> <p>Dust Nuisance during Operation</p>	<p>In cases when the site becomes too dusty during construction, it will be soaked with a sprinkler system to settle the dust.</p> <p>Workers will utilize masks, respirators, and goggles where necessary.</p> <p>Dust nuisance will not be an issue during the operational phase as facility will be have concrete pavement.</p>

Impact to Water

Potential spills from gasoline during dispensing that could run off.

Installation of Sub-Surface drains and an oil-water separator as a pretreatment apparatus.

Environmental Monitoring – Operation Phase

Any waste oily substances will be channeled to the oil/water separator before discharge into the existing drainage system in order to prevent contamination of water in drainage channels. The underground fuel tanks will be painted with anti-corrosive protective paint and fitted with spill and overflow protection and also a leak detection system, vent pipes will be installed to channel any fumes into the atmosphere. The underground tanks will be placed on tank pads in a concrete enclosure which will have a total volume of 110% of the total fuel volume of three tanks when at max capacity, preventing leaking into the environment in case of a leak. All underground piping leading from fuel tanks to the fuel dispensers will be secured in a concrete encasement.

