

**Project Name:** Yarrowkabra Service Station

**Principal:** Shairaz Ali

**Contact Details:** +592-260-2282

**Prepared by:** SHI-OIL

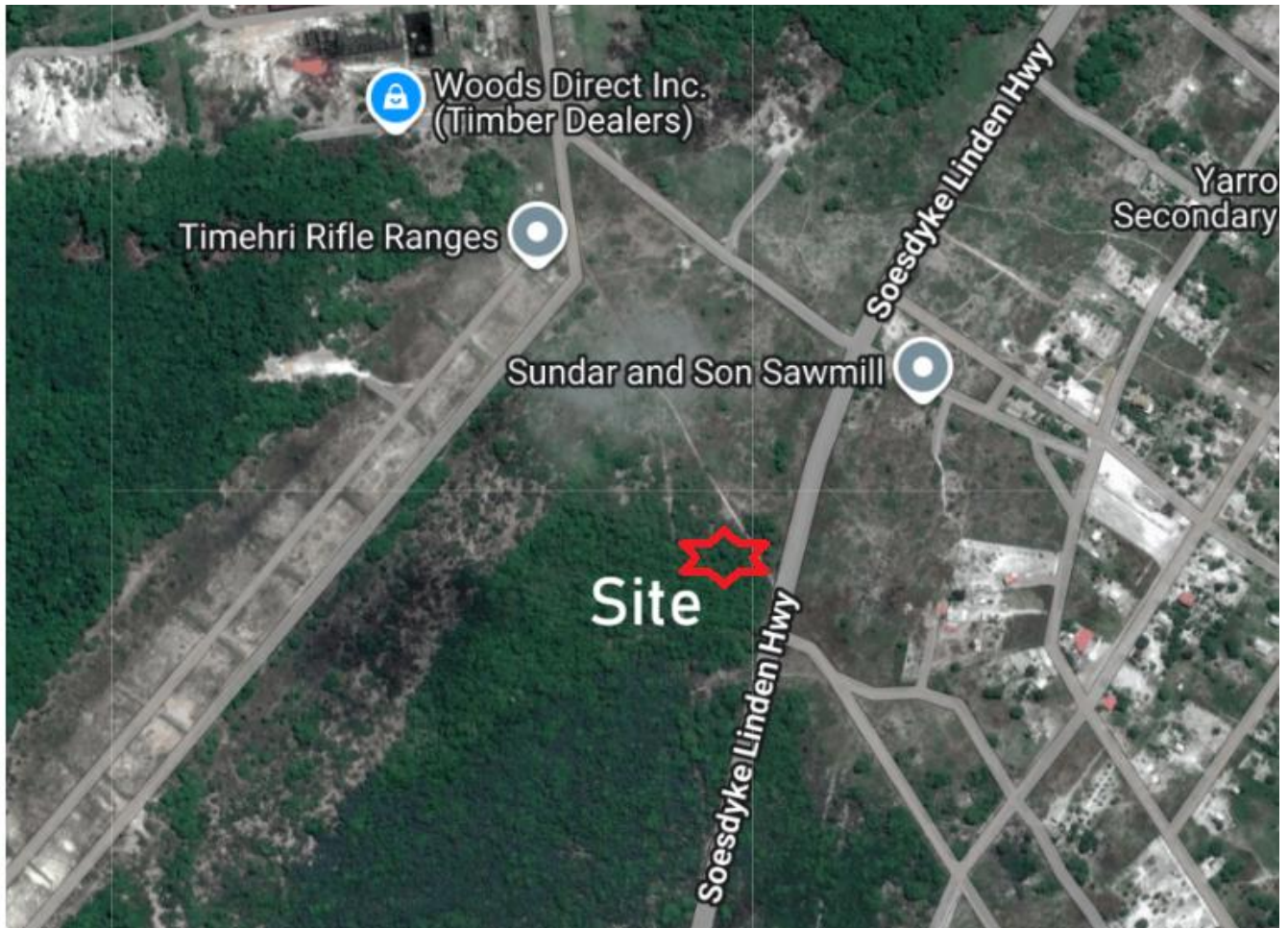
## **1. Project Site Description**

**Location:** Tract SA Yarrowkabra, Western Side Linden Soesdyke Highway, Right Bank Demerara River, Guyana. The site is located on the Linden-Soesdyke Highway, as shown in the attached site plan.

### **Adjacent Land Use:**

- **South:** Vacant land
- **West:** Vacant land
- **East:** Linden-Soesdyke Highway
- **North:** Vacant unfinished residential property
- All other development is more than 300 meters from the site.

**Map:** A site plan showing the location of the proposed service station and its layout is attached.



## 2. Project Design

This project is in its developmental phase. The proposed development encompasses the operation of a conventional gas station, providing fuel refills to land-based vehicles, with an integrated convenience store. The site plan indicates the installation of two underground storage tanks: **one 2,000-gallon kerosene tank, and one 5,000-gallon gasoline tank. diesel will be stored in aboveground tank one 50,000-gallon diesel tank,**

**Project Stage:** Developmental phase

**Description:** The operation of a conventional gas station, providing fuel refills to vehicles and offering a convenience store.

### Utility Services:

- **Water Supply:** Guyana Water Incorporated (GWI) & Private well on property
- **Electricity Supply:** Guyana Power and Light (GPL) with a generator for backup power
- **Communication Services:** Guyana Telephone and Telegraph Company (GT&T)

## **Waste Management:**

- Solid waste will be collected weekly by the local authority.
- No waste treatment is planned for on-site prior to removal.

## **3. Project Economy**

The estimated cost to establish the facility is **GYD 40,000,000**. The project will have a positive impact on the local economy through direct employment and the provision of essential energy products.

- **Employment:** The project will create approximately **40 jobs during the construction phase** and **16 permanent jobs** during the operational phase.
- **Local Economy:** The service station will provide a ready supply of energy products (diesel, gasoline, and kerosene) for vehicles and machinery, which is crucial for the nearby timber and logging industries. This will reduce transportation costs and increase operational efficiency for local businesses.

## **4. Potential Environmental Effects**

There is expected to be minimal effect to the environment from this project. Potential effects include:

- Fuel spills, which could pollute surrounding land and contaminate groundwater.
- Noise pollution from vehicle traffic and the operation of the station.

## **5. Proposed Plans to Mitigate Environmental Impacts**

To mitigate potential environmental impacts, the project will be equipped with an oil/water separator and all safety features as installed at our other sites. Additional plans include:

- **Underground Storage Tank Mitigation:**
  - All tanks and associated piping will be double-walled with interstitial monitoring for leak detection.
  - A continuous leak detection system will be installed to provide immediate alerts for any product release.
  - Monitoring wells will be placed around the tank farm to allow for routine groundwater testing.
  - The tanks will have an impressed current cathodic protection system to prevent corrosion.

- **Water Supply Mitigation:** To mitigate the risk of GWI failing to supply water, a new **artesian well will be constructed** on-site. This well will serve as a reliable backup water source for all operational needs, including sanitary facilities and fire suppression, ensuring the facility remains operational at all times.
- Secondary containment systems under fuel dispensers.
- Regular inspections of fuel lines, hoses, and tanks for leaks or corrosion.
- Staff training in proper fueling procedures to avoid overfills and accidental spills.
- Use of automatic shut-off valves and emergency fuel cutoffs.

An Emergency Response Plan (ERP) will be developed and implemented to mitigate these potential environmental impacts.

## 6. Summary of Proposed Oil Spill Management

The goal is to ensure a swift, organized response to fuel spills, minimizing environmental impact, safeguarding human health, and ensuring proper cleanup efforts. This applies to all fuel spill incidents at the Yarrowkabra Service Station, including spills during fuel transfer, storage, and handling. The plan will cover spills affecting the surrounding land.

**Regulatory Framework** Developed under Guyana's Environmental Protection Act, Cap. 20:05, and other applicable regulations.

### Responsibilities

- **Incident Co-Ordinator (IC):** Manages response, coordinates efforts, and liaises with regulatory agencies.
- **Spill Response Team:** Deploys booms, skimmers, and cleanup equipment.
- **Safety Officer:** Ensures responder safety and mitigates risks.
- **Environmental Officer:** Assesses impact, monitors cleanup effectiveness, and advises on remediation.

### External Agencies Involved

- Environmental Protection Agency (EPA): Oversees compliance and response efforts.
- Guyana Fire Service: Provides fire suppression if needed.
- Guyana Police Force: Provides security and crowd control.
- Local Authorities: Assist with waste management and local support.

**Prevention & Control Measures** Includes routine inspections, secondary containment systems, personnel training, and proper fuel transfer protocols. Essential spill response equipment will be maintained onsite.

**Detection & Notification** Spills must be reported immediately to the IC and relevant agencies, detailing location, time, estimated volume, and type of fuel.

### **Emergency Response Procedures**

- **Initial Response:** Assess situation, activate ERP, contain spill, and stop the source.
- **Cleanup & Remediation:** Deploy absorbents and other cleanup methods. Manage waste and conduct environmental monitoring.
- **Post-Spill Activities:** Assess damage, complete cleanup, and revise the ERP based on lessons learned.

**Resources & Equipment** Includes skimmers, absorbents, storage containers, personal protective equipment (PPE), and communication tools.

**Training & Drills** Regular training and drills will ensure personnel readiness, with documentation for compliance.

**Plan Review & Updates** The project's environmental and spill response plans will undergo periodic review to enhance effectiveness and adapt to regulatory changes