

# MARITIME BATTERY

36 Fielding Avenue, Dartmouth, Nova Scotia  
B3B 1E4  
Tel: 468-8488 Fax: 468-5809

January 19, 2004  
Chris Daly  
Nova Scotia Department of Environment & Labour  
PO Box 697  
Halifax, NS  
B3J 2T8

Tel: (902) 424-5300  
Fax: (902) 424-3571

Subject: Environment Assessment – 36 Fielding Ave., Dartmouth

The Nova Scotia Department of the Environment & Labour has informed Maritime Battery Ltd. that it now requires approval for Dangerous Waste/Dangerous Goods handling Facility.

As part of the approval process, we are informed that an environment assessment review is required. In reviewing the Environment Assessment Regulations under the Nova Scotia Environment Act, the first step in the environment assessment is registration.

Please consider this letter as our Environmental Assessment Registration application.

We have included the minimum requirements in our application, as well as more detailed material, which were requested through the draft review process.

Yours truly,

MARITIME BATTERY LTD.



Wayne Nolter,  
President

Ref: NS Environment Assessment

Minimum Requirements

The following information is the minimum required for registration, as prescribed in the Environment Assessment Regulations.

a. Name of the Undertaking

The undertaking is a “Battery Storage Facility”

b. Location of the Undertaking

36 Fielding Ave.  
Dartmouth, Nova Scotia  
B3B 1E4

c. Identification

Maritime Battery Ltd.

d. Nature of the Undertaking

Maritime Battery Ltd. is a distributor of lead-acid batteries, for starting, lighting and ignition (SLI) applications, as well as standby power applications. Our site at 36 Fielding Ave. contains our head office as well as our warehouse facility, from which we run our operations. As part of our business we also pick up spent lead acid batteries from the marketplace, and ship them on to authorized recycling centers, where they are broken down into their basic components and recycled. Scrap Batteries are transported by our own personnel with company trucks. Quantities usually range from one to six batteries. All batteries are inspected for cracks and then loaded into the truck. If any batteries are damaged or cracked they are put into a self contained tub. If quantities are greater they would be palletized and shrink wrapped and all the rules for shipping batteries would apply.

e. The Purpose and Need for the Undertaking

As a distributor and recycler of lead acid batteries, Maritime Battery Ltd. requires a warehouse facility to store both new batteries to be offered for sale, scrap used batteries and defective batteries returned to us. The facility at 36 Fielding Ave. suits the need for a storage site to support these business requirements and recycling operations

f. Operation Schedule

The hours of operation for our facility are Monday to Friday 8:00 a.m. to 5:00 p.m. There are no planned shutdowns at this time except for statutory holidays.

g. Description of the Undertaking

Maritime Battery Ltd. will bring new lead acid storage batteries into its warehouse, where they will be stored, and then shipped out to customers. Maritime Battery Ltd. will also pick up used lead acid storage batteries from the field, bring them into the warehouse, and store them until we have a maximum of 2 to 3 skids. Each skid consists of 40 batteries. We can have any scrap skids picked up on a weekly basis.

h. Approvals Required

As advised by the Department of the Environment, Maritime Battery Ltd. will require an approval as a Class I undertaking pursuant to Schedule “A” of the Environmental Assessment Regulations. Maritime Battery Ltd. also requires approval for a dangerous waste/dangerous goods handling facility pursuant to Section 10 of the Activities Designation Regulation, for which the above Class I approval is required.

i. Sources of Public Funding

There are no sources of public funding for this undertaking.

### 1. Surrounding Area

The facility is situated in a commercial/industrial area known as Burnside Industrial Park. This area is dedicated to commercial and industrial businesses. There is no residential development in the area. The facility is located on its own lot consisting of two buildings with businesses on either side. The Pepsi Bottling Group is located on one side and Mander's Fine Woodworking Inc. is on the other. The nearest ecological receptor is the Halifax harbour which is located approximately three kilometers from our site.

### 2. Spill Considerations

A spill occurs if one or more batteries leaks acid. This is usually a slow drip, and what little acid escapes stays by the battery. Larger spills involving multiple batteries are rare. When they do happen, the acid tends to stay in a pool on the floor slab, which is flat and has a 1.5 to 2" lip around the outside wall, and does not follow any particular course. There is one floor drain in the building, which has been covered by a 3/4 inch steel cap and silicone to prevent acid from going down the drain. The storm drain is located outside the building, 5 meters away from the building. The potential for acid leaving the building is extremely remote. It would involve a very large spill near a doorway. In the extremely remote chance that it did happen, the acid would still be on the pavement outside, where it would be neutralized before it could reach the drain. The outside drain is a storm sewer drain which runs wherever the city has designated.

### 3. Volume of Batteries

Both new and used batteries are stored at the facility. The average number of new batteries stored in 2000 units. If all the racks were full of pallets, the maximum number of new and scrap batteries are 4000 units. The average amount of scrap held is 3 to 4 skids, 40 units per skid or 160 units weighing 6400 lbs or 2905 kg. The maximum amount of scrap held are 240 units weighing 9600 lbs or 6800 kg. The average amount of acid stored or contained in new and scrap batteries is 6800 liters. The maximum amount of acid contained in new and scrap batteries is 13600 liters. In addition to acid found in batteries, there are up to 10 containers of bulk acid, holding 20 liters each, for a total of 200 liters of bulk battery acid. There is no waste acid stored on the site.

### 4. Transportation Routes

Local transportation routes used for battery shipments are Fielding Avenue, Burnside Drive and Highway 111. These are all streets in and around Burnside Business Park. Trucks do not travel through residential areas.

### 5. Handling Procedures and Documentation

Scrap batteries are inspected for leaks when they are picked up at the customer, when they are loaded on our trucks, when they are unloaded from our trucks, when they are stored in racking, and when they are loaded for shipping. Batteries are either received on full pallets, or are assembled on pallets and stretch-wrapped, when they come into the building. For shipping, new and used batteries are assembled on full pallets, and contained in stretch wrap to ensure a secure load. All work is done by employees trained in the handling of dangerous goods, and they generally work in teams to ensure safety. All movements of new and scrap batteries into and out of the building are recorded and documented.

## Minimum Requirements

With respect to storage, all batteries being stored are on pallets and racked. The few pallets that are stored on the floor have sufficient space to allow unobstructed access for inspections, transfer equipment, fire protection equipment, spill control equipment, and decontamination equipment to any part of the facility.

### 6. Activities and Staffing

The facility is dedicated to the storage and distribution of new and used lead acid batteries. We also operate a rebuild and repair facility for electrical units such as alternators and starters at the same site. There are fourteen employees currently on site.

### 7. Building Layout

A copy of the land & building layout is included as Schedule 2. The batteries are stored on metal racking, against the walls of the warehouse in an L – shaped pattern which is labeled as the battery storage area. Our Site Description is included as schedule 3.

### 8. Battery Maintenance and Handling

The great majority of new and scrap batteries that pass through the warehouse are handled like any non-dangerous inventory item. Nearly all batteries are filled with acid, but they do not leak. Therefore they are received, stored and shipped with no handling related to their acid content. A small number of new batteries do not have acid in them, and they are filled with acid at the warehouse. Employees filling new batteries wear the required protective equipment. For example: gloves and eye protection and protective clothing. There is no waste acid stored on site, except in scrap batteries. Waste acid that leaks from scrap batteries is neutralized and removed according to spill containment procedures described under point #9, which follows.

### 9. Spill Containment

Batteries contain a dilute solution of sulfuric acid. The acid reacts with soda ash, which is the commercial name for sodium carbonate, a non-hazardous powder, to produce sodium sulphate, a neutral salt. Carbon dioxide and water, which are substances, found naturally in the environment, are the other substances produced in this reaction. When a small spill or leak occurs, the following procedures take place;

- Stop leak or spill at source
- Ventilate the area
- Remove combustible material
- Wear protective clothing
- Segregate the spill and neutralize with soda ash or an appropriate acid absorbent
- Test to make sure acid is neutralized with pH paper
- Contain the spill material and manage it as a hazardous waste

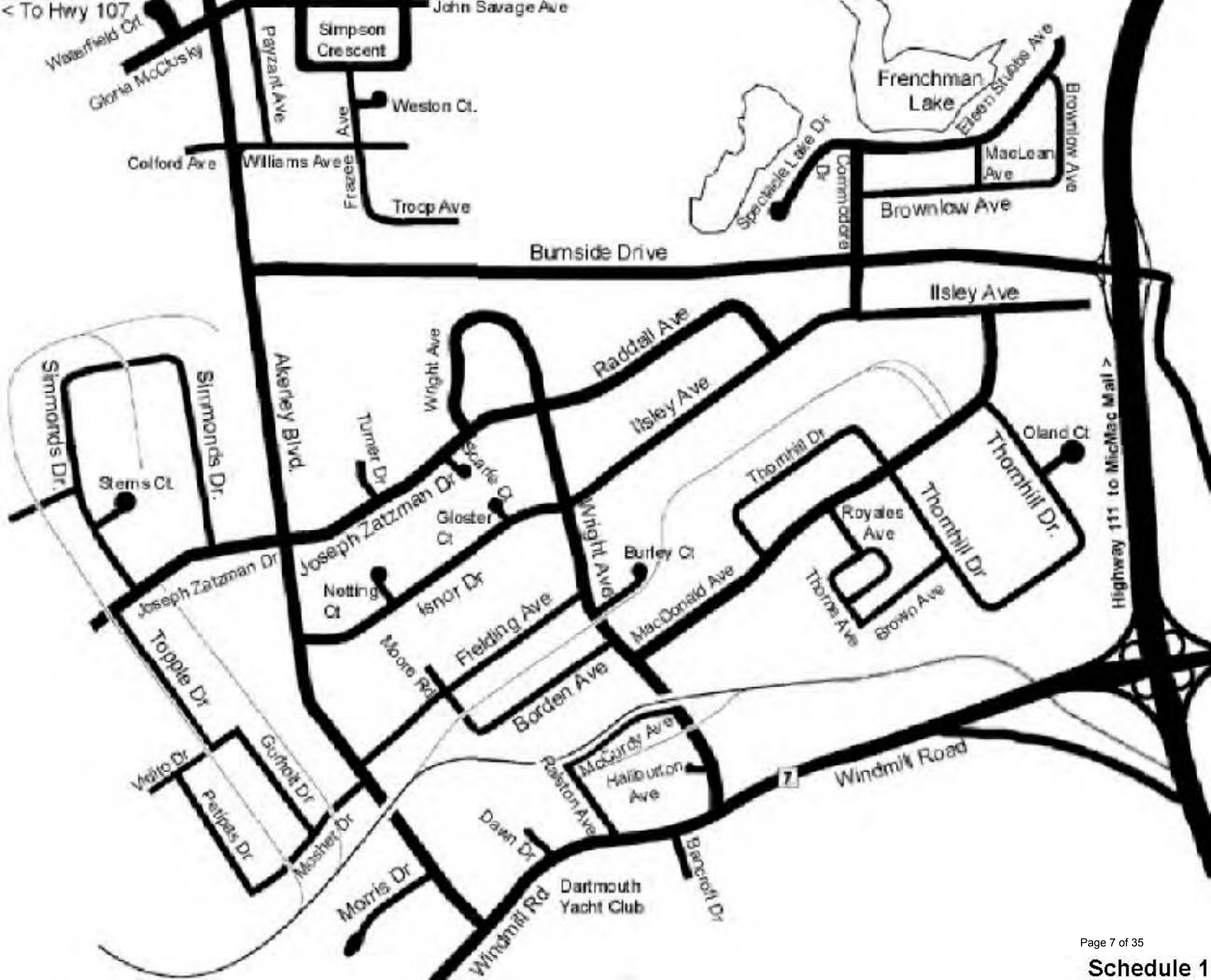
This procedure is handled by employees trained in the handling of dangerous goods, and protective equipment is worn. For example: eye protection, gloves and protective clothing. Emergency response equipment is stored in a metal locker in the battery department entrance.

### 10. Contingency Plan

A contingency plan is in place in case of a major spill or incident. The plan is consistent with the Nova Scotia Contingency Plan Criteria developed in March 1990. A plan copy is attached as Schedule 4. Our Emergency Response Plan in case of fire is attached as Schedule 4a.

11. Employee Training

As part of the new employee orientation process, all employees that are involved in the handling of batteries in any procedure are given training in WHMIS and Transportation of Dangerous Goods, specifically related to the handling of lead acid storage batteries. Materials are provided concerning MSDS sheets, product labeling, and protective gear for handling batteries. Materials are also provided concerning shipping paperwork, corrosive goods identification, and safe and secure methods for storing and shipping batteries. Employees are also given on-the-job training for containing and handling spills of battery acid, as outlined in the contingency plan. The training materials issued for TDG are included as Schedule 5. The training materials used for WHMIS are included as Schedule 6. Examples of training cards issued to employees are included as Schedule 7



< To Hwy 107

John Savage Ave

Waterfield Ct  
Gloria McClusky

Simpson Crescent

Payzant Ave

Ave  
Frazee

Weston Ct.

Colford Ave

Williams Ave

Troop Ave

Spectacle Lake Dr

Frenchman Lake

Eileen Stubbs Ave

Brownlow Ave

MacLean Ave

Brownlow Ave

Burnside Drive

Isley Ave

Raddall Ave

Isley Ave

Akerney Blvd.

Wright Ave

Turner Dr

Scarfe Ct

Joseph Zatzman Dr

Gloster Ct

Notting Ct

Isnor Dr

Fielding Ave

Wright Ave

Burley Ct

MacDonald Ave

Thornhill Dr

Royales Ave

Thornhill Dr

Oland Ct

Simmonds Dr.

Simmonds Dr.

Stems Ct

Joseph Zatzman Dr

Topple Dr

Walto Dr

Patipas Dr

Gurholt Dr

Mosher Dr

Moore Rd

Borden Ave

Dawn Dr

Ralston Ave

McGurdy Ave

Halibuton Ave

Beacroft Dr

Windmill Road

Dartmouth Yacht Club

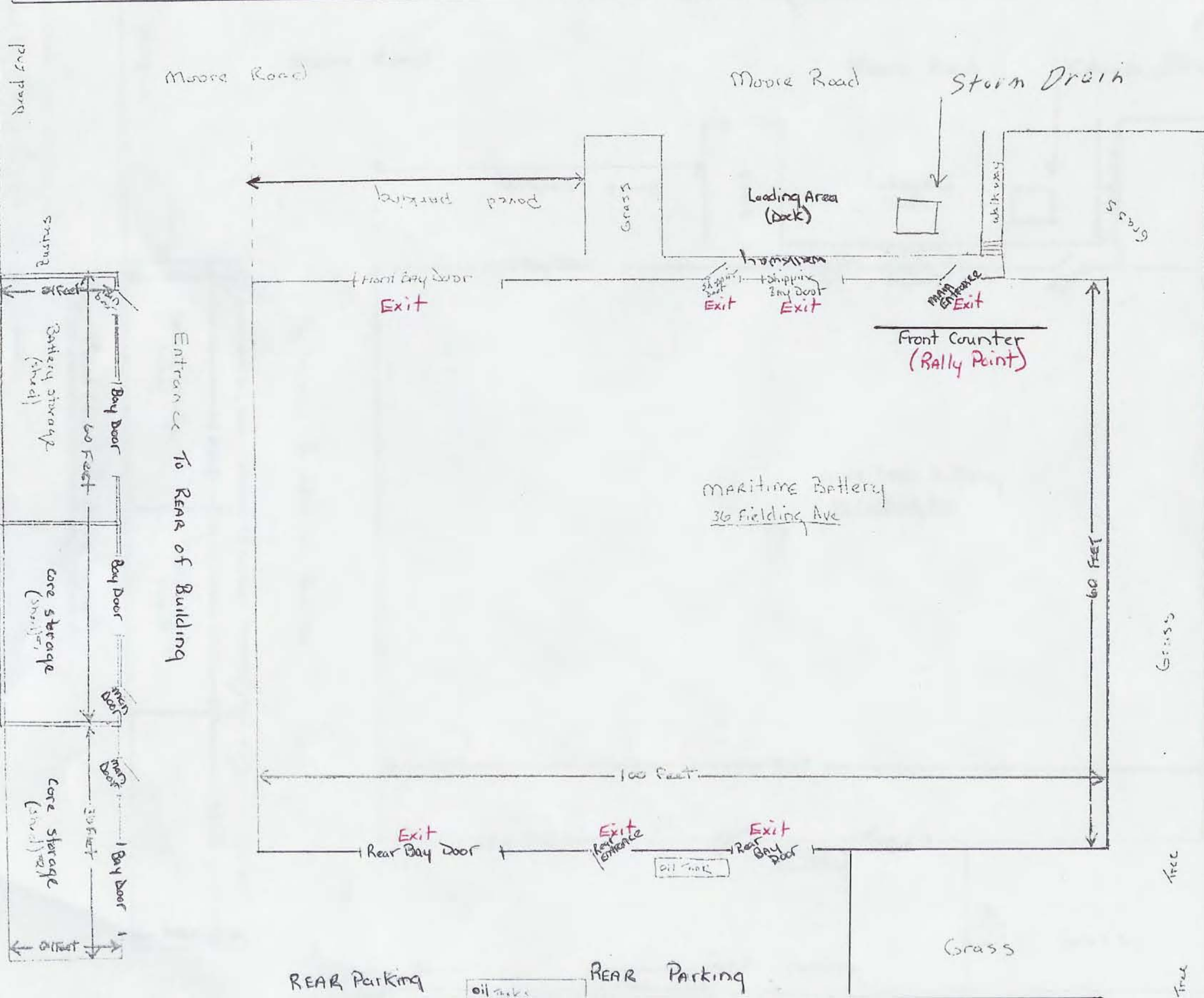
Highway 111 to MicMac Mall >

# Schedule 2a

Pepsi Building  
34 Fielding Ave.

Pepsi Building  
33 Fielding Ave.

Fielding Ave



Top Views (land + Building layout)

Entrance To Rear of Building

Maritime Battery  
36 Fielding Ave

Fire Hydrant

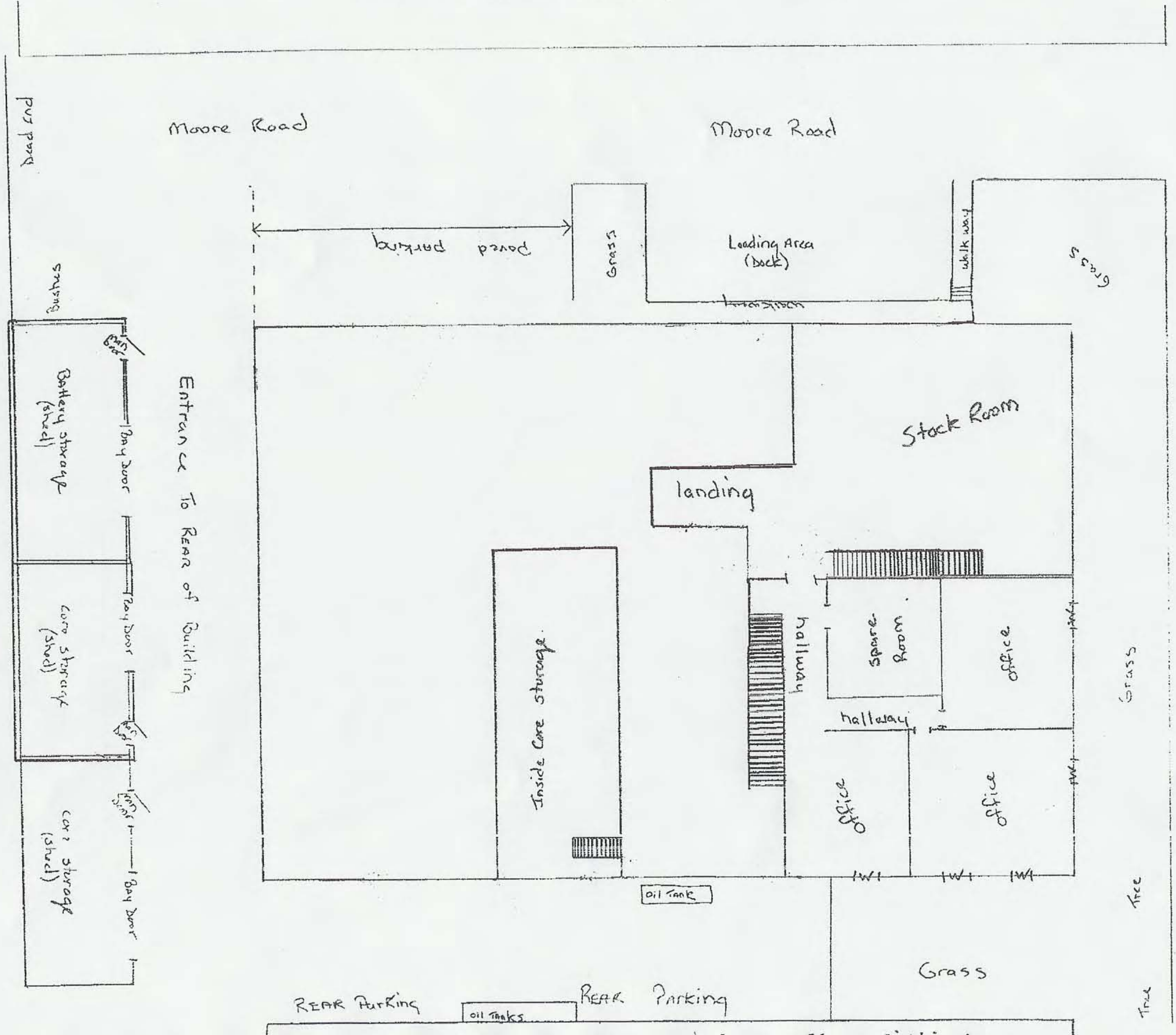
Fielding Ave

GH Factory Building  
35 Fielding Ave.



# Schedule 2b

Pepsi Building  
34 Fielding Ave.



Top View (Top Floor layout)

Heavy storage shed has 5" lip around it's perimeter.  
re storage shed has 5" lip around it's perimeter.

# Schedule 2c

2c

Pepsi Building  
34 Fielding Ave.

Moore Road

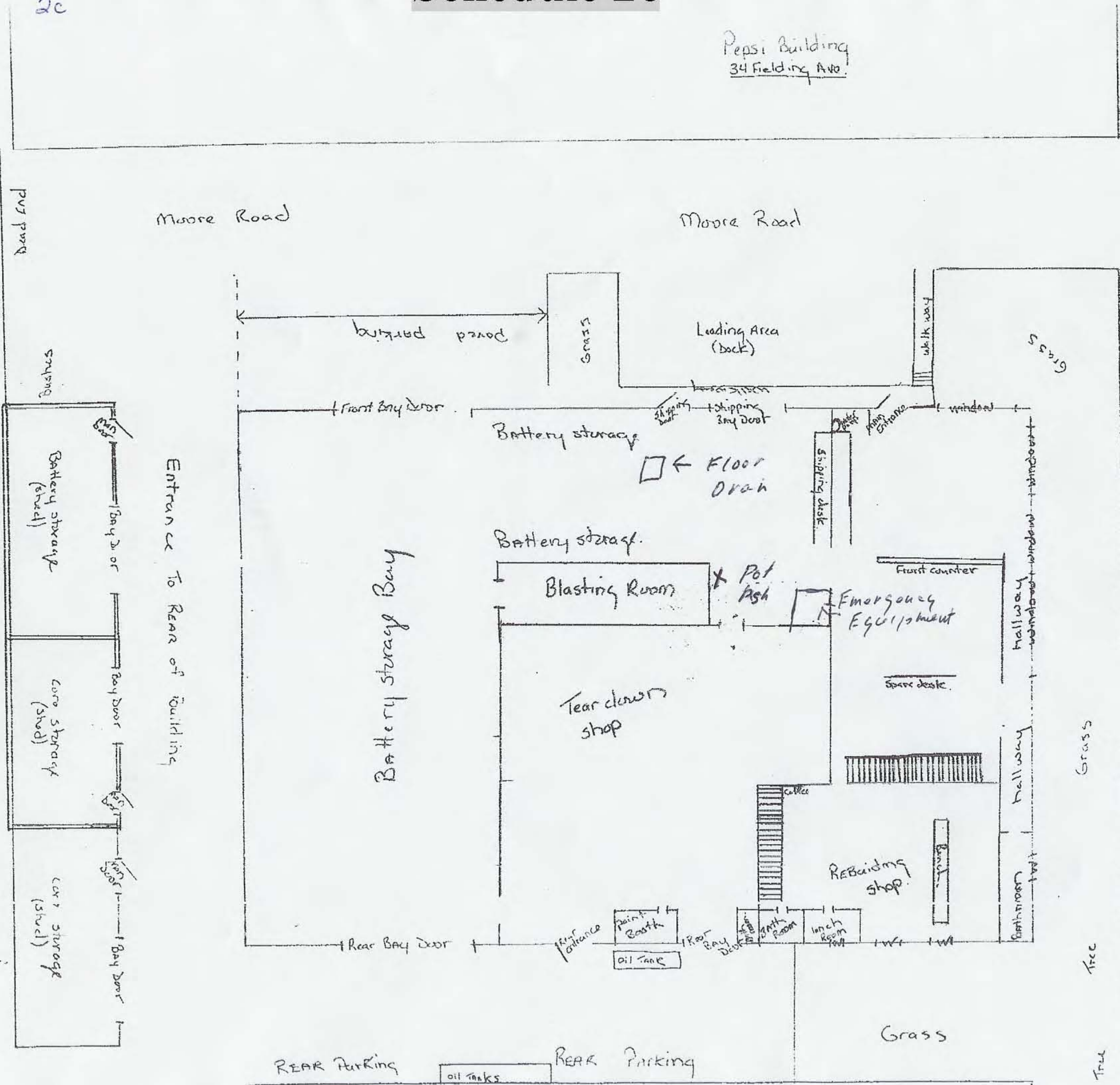
Moore Road

Fielding Ave.

Fielding Ave.

- Battery storage shed has 9" lip around it's perimeter.  
- 1 1/2 hrs @ 110 around it's perimeter.

## Top View (Bottom Floor layout)



puv puv

scrapping

Battery storage (shed)

core storage (shed)

car's storage (shed)

Entrance To Rear of Building

Battery storage Bay

REAR Parking

REAR Parking

oil tanks

Grass

Grass

Tree

Tree

Grass