MODIFICATIONS:

Large wheels with treads are in the back and small foam wheels are in the front. I wanted to make sure that the battery was either parallel to the floor or raised in the back to aid the dog when going up or down hills. Think: tractor design.

In order for the small wheels to touch the ground, I had to flip the steering mechanism over so the servo is on the underside of the dog. Making sure the wheels stay secured is crucial because loose wheels can result in the steering mechanism touching the ground. This creates unwanted drag.

I made the wheel base quite small in comparison to other dogs. This gives the dog the ability to make tight turns which will aid in environmental sensing.

SMALL TURNING RADIUS:

The small turning radius is helpful when exploring areas which require tight maneuverability. I'm interested in learning about what types of ground conditions, land layout, or debris make turning especially difficult and what can be done to counteract possible negative conditions.

CHOOSEN SITE AND TOXINS:

The cleared area behind Yale’s Sculpture Department is my site of interest. It is behind the walking trail behind Hammond Hall at 14 Mansfield Street. This land, now abandoned, used to be "American Linen" mass quantity laundry business. Instead of being a typical laundry or dry cleaning business, "American Linen" was used to clean sheets and uniforms for hospitals and schools. It closed down fifteen years ago and the land has been plowed over. Among all the rubble, there is a possibility of finding the toxin, PERC, which is involved in the dry cleaning business. It can induce nausea and vomiting and has possible cancer risks.

WHO WOULD BE AFFECTED:

If present, these toxins could affect children who play on or around that area, people who walk on the walking path, and people in the nearby neighborhood. There is also a childrens' playground within several hundred feet of the site.

FERAL DOG DATASHEET

- **Species Name:** Dylan
- **Reverse Engineer:** Jeff Warren

**Social Issue:**

What are the differences between toys and AI research?

While AI research involves the goal of creating a man-made and competitive mind and body, toy manufacturing is based on what kids want and what their parents will buy for them. For AI, the ultimate goal is an accurate complexity whereas in toys, it may not be. Often the best selling and most interesting toys or games do not involve computers or complicated mechanics. They are portable, inexpensive and require the person(s) to think, make decisions, and solve puzzles. Examples: cards, chess, rubix cube, checkers, etc. For a toy to continue to be interesting, it must allow for the person or player to do most of the thinking and take on most of the responsibility for winning or losing. That way, the player feels that he can determine his own fate through practice and experience rather than through chance or luck. Robotic toys run definite risks. They may be interesting at first, but as soon as the child, player, or adult feels that he has figured it out, or solved the puzzle, he may turn away and pick up a deck of cards.