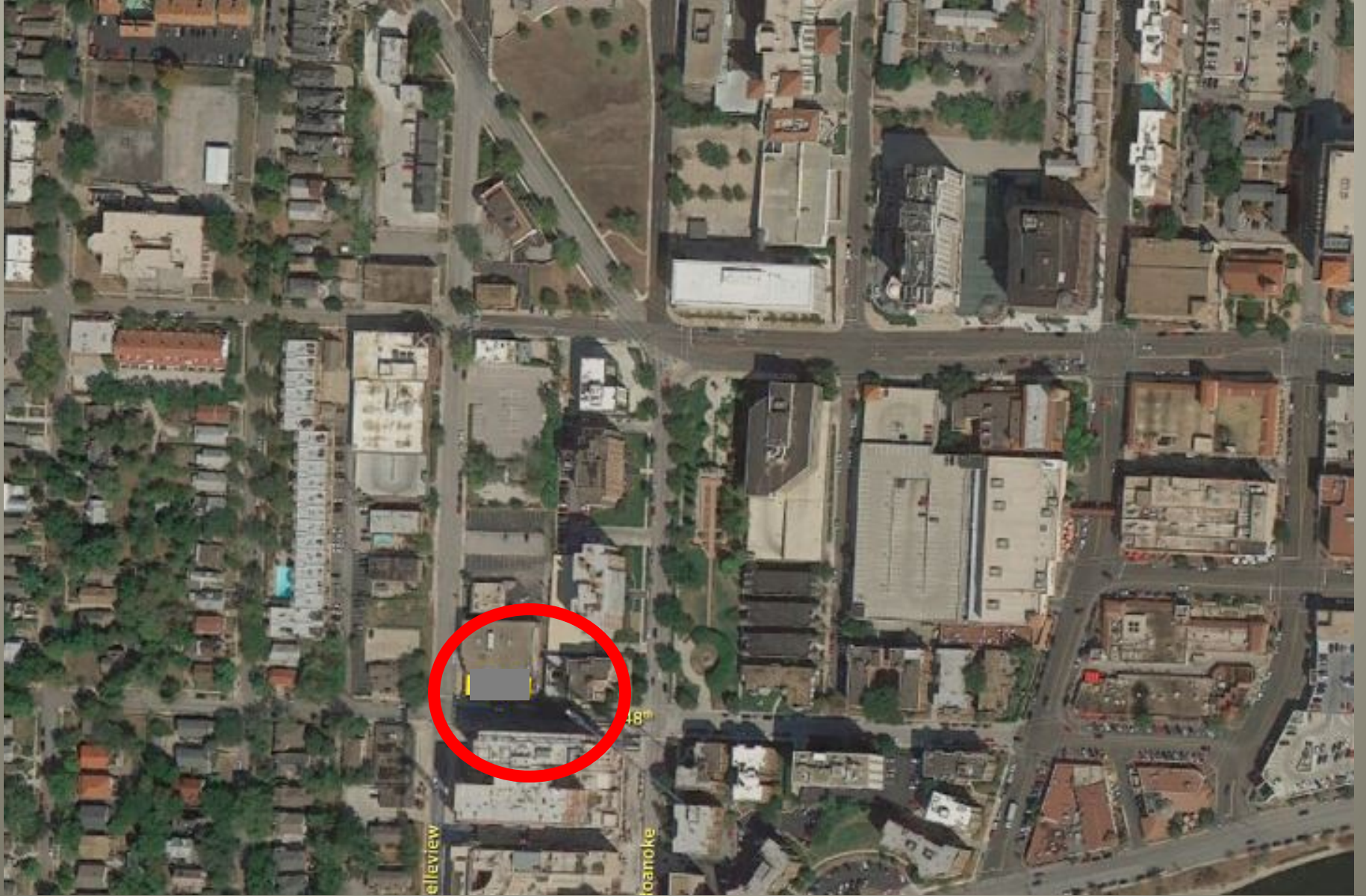


Case Study of a Gas Accident

The Location



First Indication Of A Problem

- **4:36 pm:** Fire department calls gas company to report hit gas line at 4th and Main
- That is all they know -- the FD crew is in route
- At this point there have been no odor calls and no call from the excavator that hit the line



First Indication Of A Problem

- What questions should the gas utility ask the caller?
- What is the first action the gas company should take?
- Who should be dispatched – what skill sets?
- What should the gas utility tell the caller?



While Utility Personnel Are In Route

4:50 pm:
Outdoor odor
call from 410
Main
(Dental office)



4th &
Main

Call

Odor

5:00

5:30

6:00

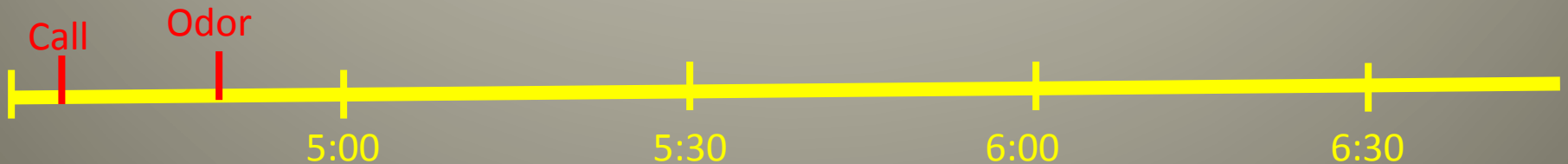
6:30

4:30

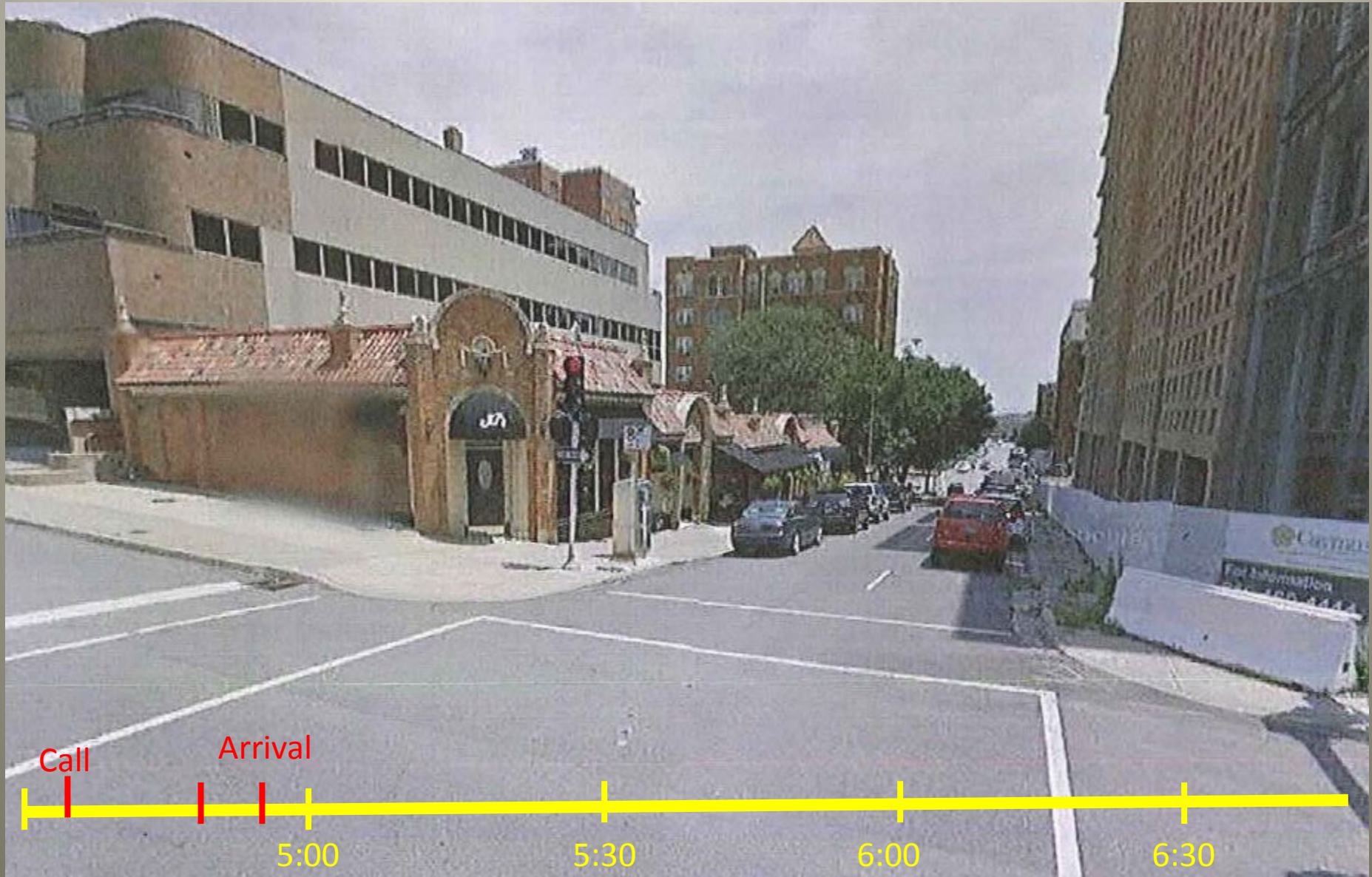


The First Odor Call

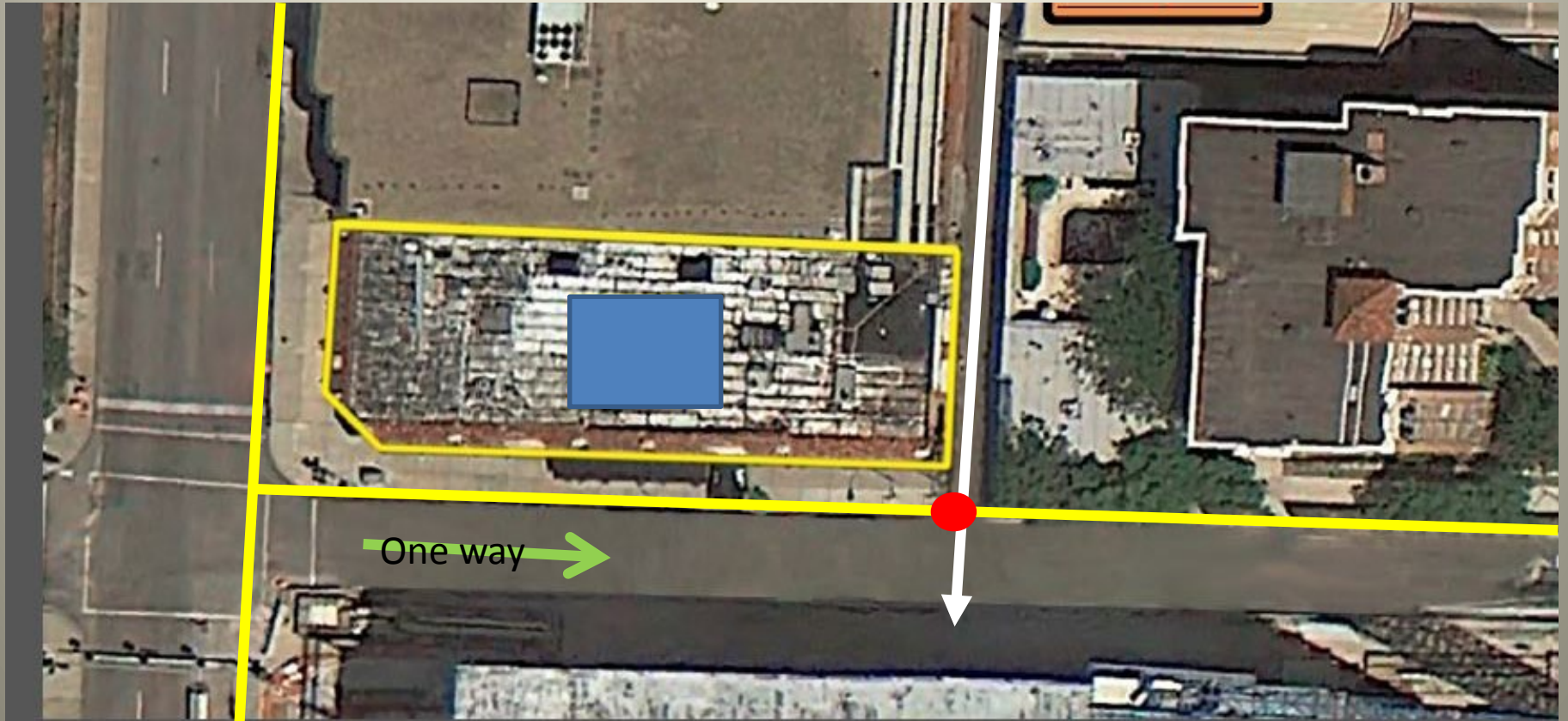
- Does the odor call affect the instructions given to the already dispatched personnel?
- Do you send another person to investigate this call?



1st Utility Person Arrives at 4:55 pm



The Location



4th St, Looking toward Main



Minute 19: Utility Responder Arrives

- Finds gas blowing from a pothole ~ 50 feet down 4th St, hit by horizontal boring tool
 - ~20 feet from the corner of a restaurant
 - ~40 feet from a medical office
- Cars are driving down 4th street (a one-way St)
- Restaurant employees and customers are on sidewalk, gawking
- Boring crew wants to pull back tool and leave

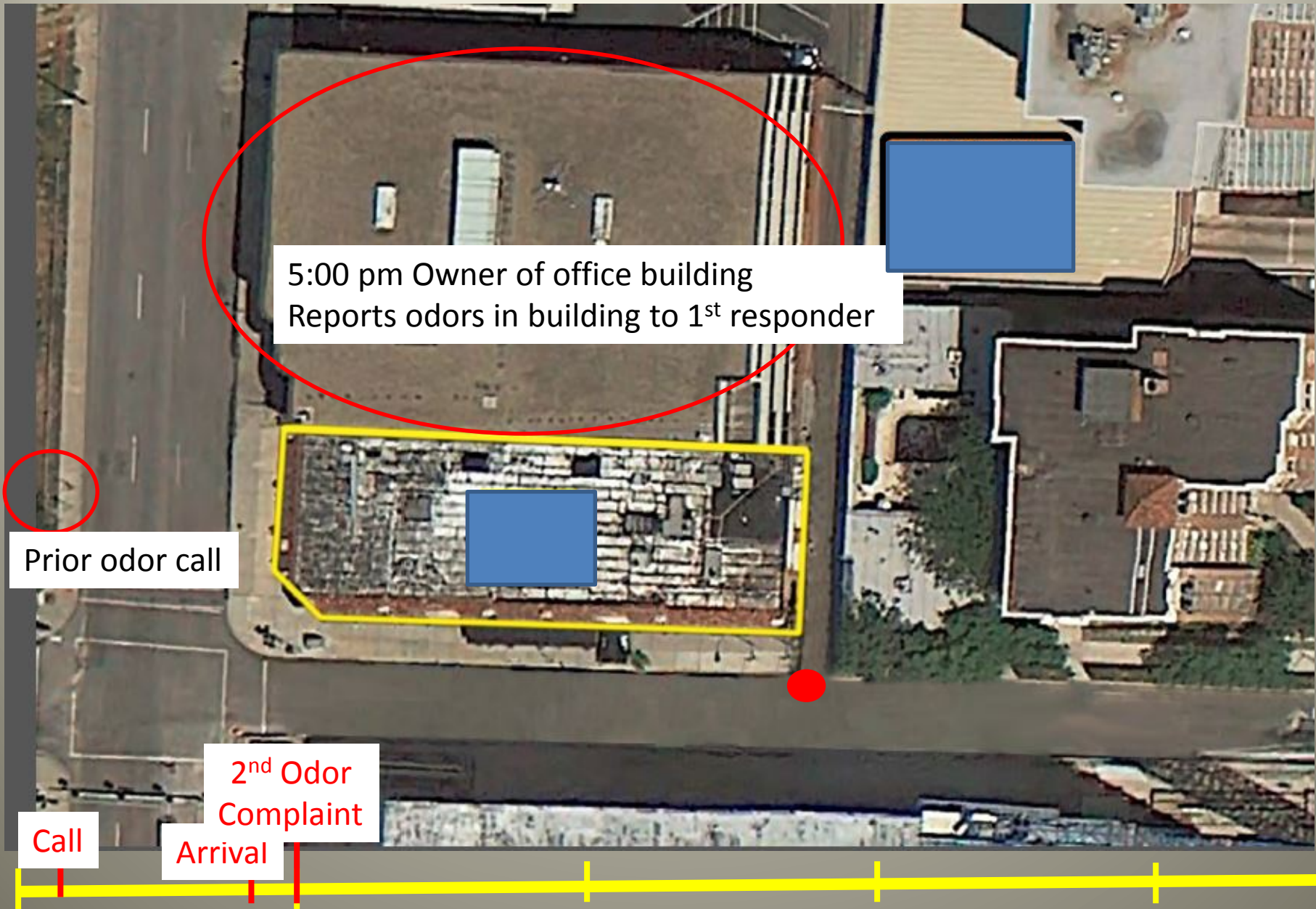


What Action(s) Should the 1st Responder Take?

- Protect people and property first
 - Establish an exclusion zone around leak?
 - Isolate the leak by closing valves?
 - Test nearby buildings for gas?
 - Evacuate nearby buildings?
 - Have excavator pull out boring tool and leave?
 - Call for additional utility personnel?
 - Call for police and/or fire department help?



Minute 24: 2nd Odor report



5:00 pm Owner of office building
Reports odors in building to 1st responder

Prior odor call

2nd Odor
Complaint

Call

Arrival



Minute 24: First Responder Actions

- Tells contractor NOT to pull back boring head
- Relocates truck to block one way street at Main Street
- At 5 pm is told of people smelling gas in office building behind restaurant
- Calls for additional utility personnel to check office building for gas
- What else should 1st responder have done?

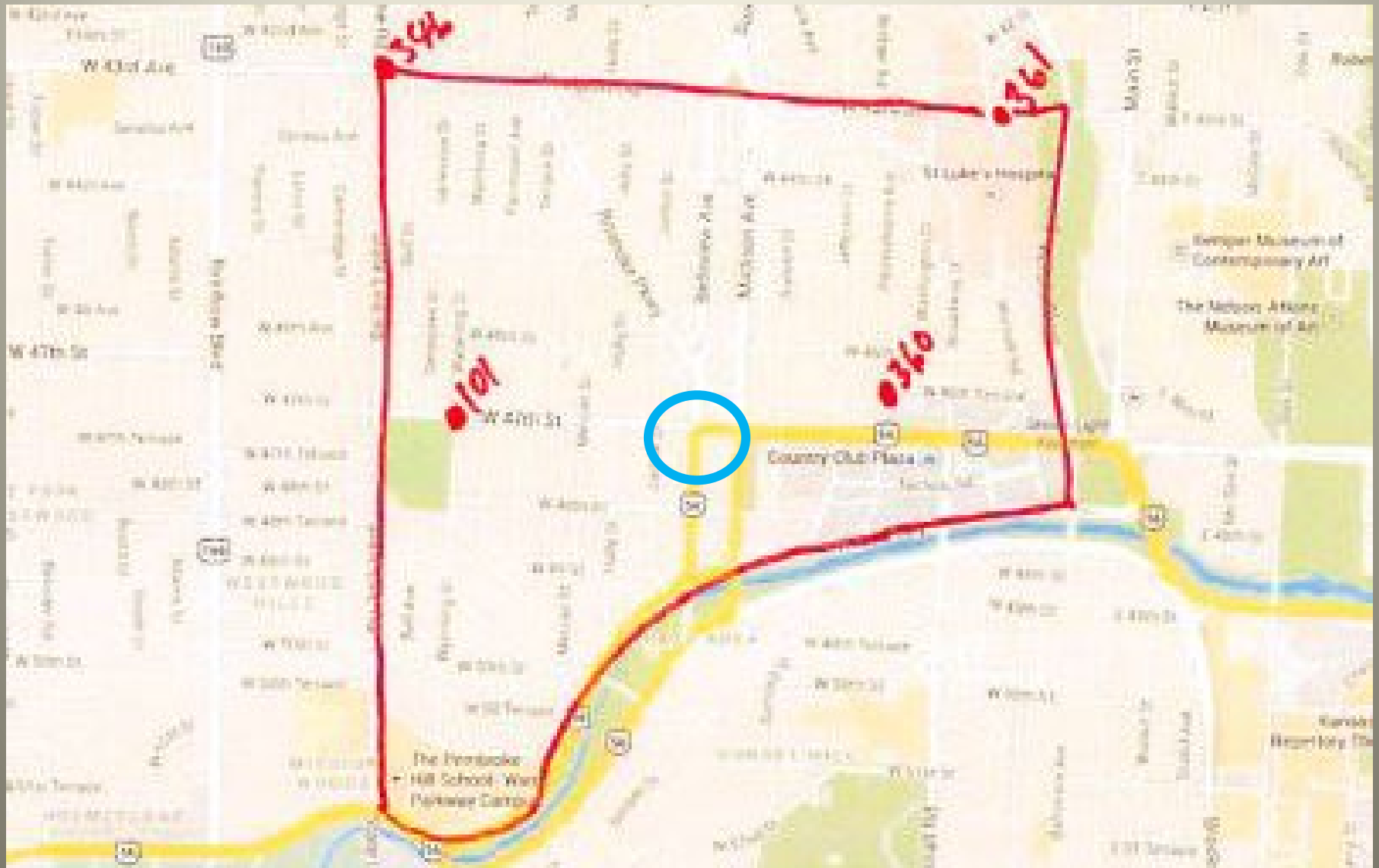


Minute 24: First Responder Actions

- Calls utility again - Learns that gas line is 2", 20 psig PE plastic pipe
- 2 way feed
- 2 more service technicians are on the way
 - One dispatched to dentist's office (1st odor call)
 - One dispatched to leak site

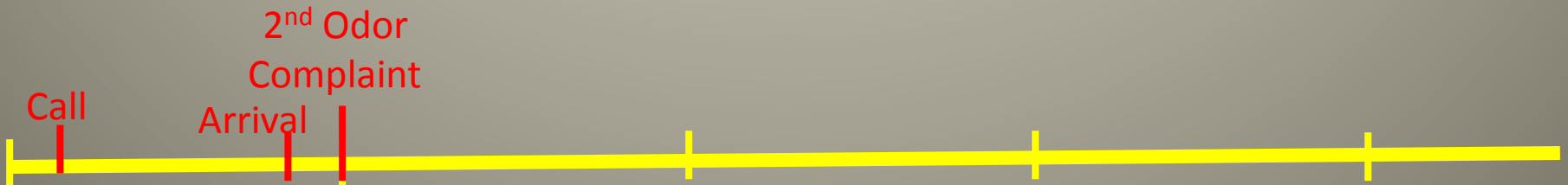


Isolation Valves



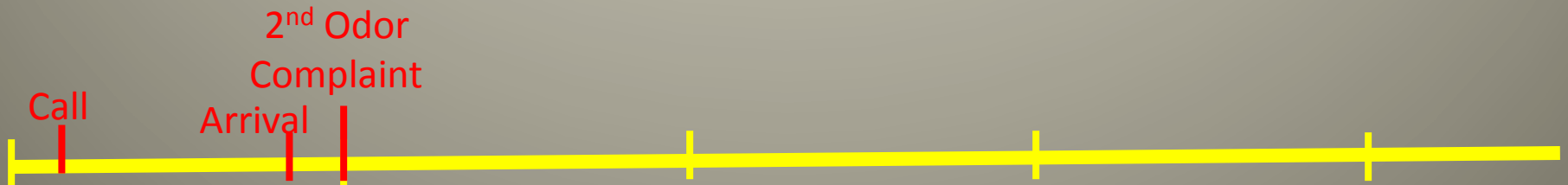
Isolation Area

- 4 valves are listed in procedures to isolate this area
- Would shut off gas to 1,000 customers
- Would shut off gas to a hospital
- Would shut off gas to a major commercial area



Minute 24: 1st Actions on site

- What is the first action the utility 1st responder should take?
- What next?
- What are other actions the 1st responder should take?



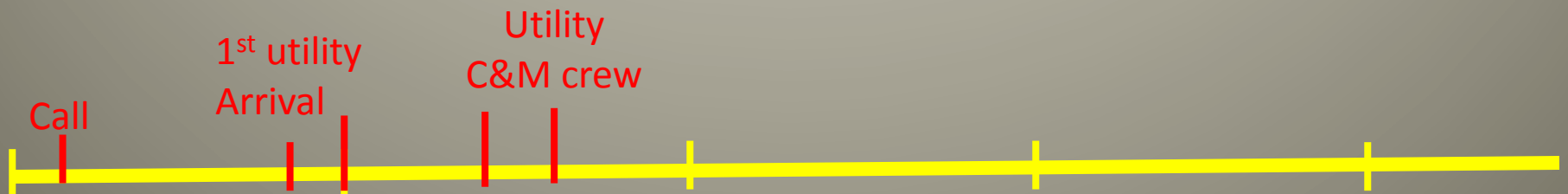
Minute 37 – 2nd Utility Person Arrives

- Was dispatched to investigate odor call from 410 Main St
- Checks outside and inside building, finds no gas
- Barholes near meter, finds no gas in soil
- Procedures call for meter “clock test”
- Minute 52 -- What should 2nd person do next?



Minute 43 – C&M Crew Arrives

- Construction and Maintenance crew arrives with backhoe, 2 crew members and a foreman
- What should these personnel do?
- Who is in charge of overall emergency response?



Minute 58

- 2nd utility person is instructed by 1st utility person to check office building for gas (where gas odors had been reported at minute 24)
- On the way to the office building, the 2nd utility person enters the restaurant and detects 3% gas just inside the doorway
- There are 5 employees and 6 customers inside
- What should the utility person do?



Discussion