



MINE RESCUE

NATIONAL MINE RESCUE

WKMI SAFETY DAYS CONTEST

May 22, 2019

Thank you for answering our call for help! You are located at the Fresh Air Base of the Amibroke Coal Company. It looks as though we may have ran into a problem. Here is what we have been able to find up to this time.

A foreman and four others went in early this morning to make sure that the unit was ready. When I arrived the dispatch said that the foreman had called out wanting to know if the pump man had got here yet. He said that they had ran into an issue with some unexpected water. A few minutes later the pump man showed up and got some things together and went in to help. A little while later the foreman called out in a panic saying that the water was rising and that he was trying to get everybody together so that they could evacuate the mine. They should have been out an hour ago. All attempts to contact the section foreman or any of the crew has been unsuccessful. That is when we called for help.

We have had our problems with bad roof & ribs, water and methane. We have a competent life line person to give and take life line signals if necessary.

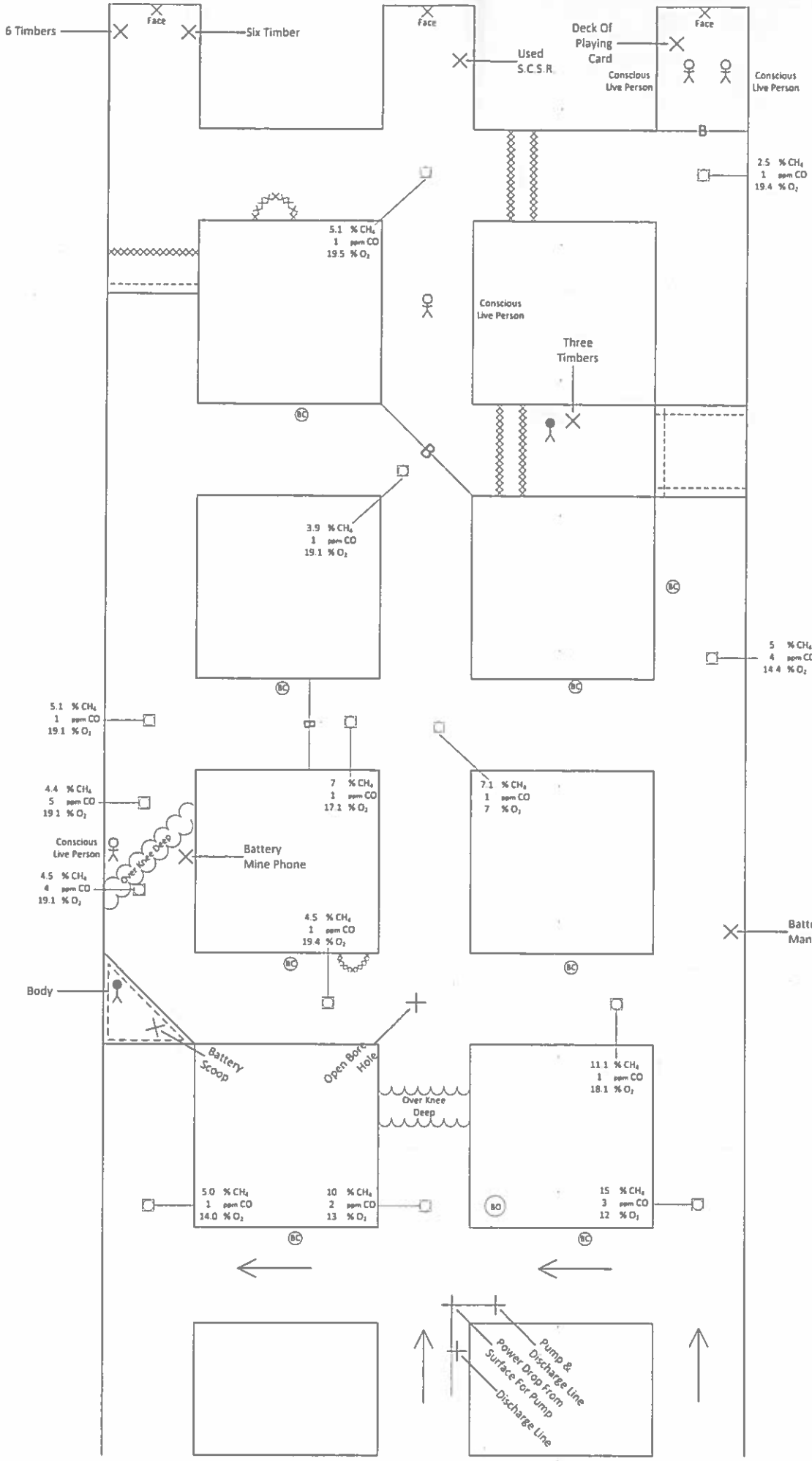
The exhaust fan is outby in the #1 entry. The fan is running and is ventilating the F.A.B. by pulling air up through the #2 & #3 outby entries across the F.A.B. All the power inby this area has been disconnected locked and tagged out and is being guarded. The mine is walking height. All of the regulatory agencies have been notified and have their personnel here. There are additional mine rescue teams here to serve as your back up. This is not a very big mines please help us find our missing miners. GOOD LUCK & BE CAREFUL!

MINE RESCUE

WRITTEN INSTRUCTIONS

- **ACCOUNT FOR ALL MISSING PERSONS**
- **BRING SURVIVORS TO THE FRESH AIR BASE**
- **THE EXHAUSTING FAN CANNOT BE STOPPED, STALLED OR REVERSED.**
- **THE POWER CAN BE RESTORED TO THE PUMP BY REQUESTING TO DO SO FROM THE COMMAND CENTER.**
- **ONCE THE PUMP IS ENERGIZED IT CANNOT BE DE-ENERGIZED.**
- **THIS IS A COPY OF THE LATEST MINE MAPS THAT WE HAVE, OUR MINE ENGINEER IS WORKING ON GETTING EVERY THING UP TO DATE.**

2019 WKMI SAFETY DAYS Problem Map



2019 WKMI SAFETY DAYS

MINE RESCUE CONTEST

MAY 22, 2019

WORKING PROCEDURES:

When the team enters the Fresh Air Base, the Superintendent will introduce himself to the team captain. The Briefing Officer and/or Command Center Attendant will report directly to the command center. The team will then have 4 minutes to arrange their equipment, lay out their lifeline etc. If the team captain does not start the clock within 4 minutes the Superintendent will start the clock. The team does not have to unload and test stretchers. They must however check their gas detectors after the clock has started as well as their communications between the team and the command center. Teams must go over standard lifeline signals with the lifeline judges unless wireless communications are used. Time for the briefing officer and the command center attendant to get set up is included in the 4 minute time.

F.A.B.

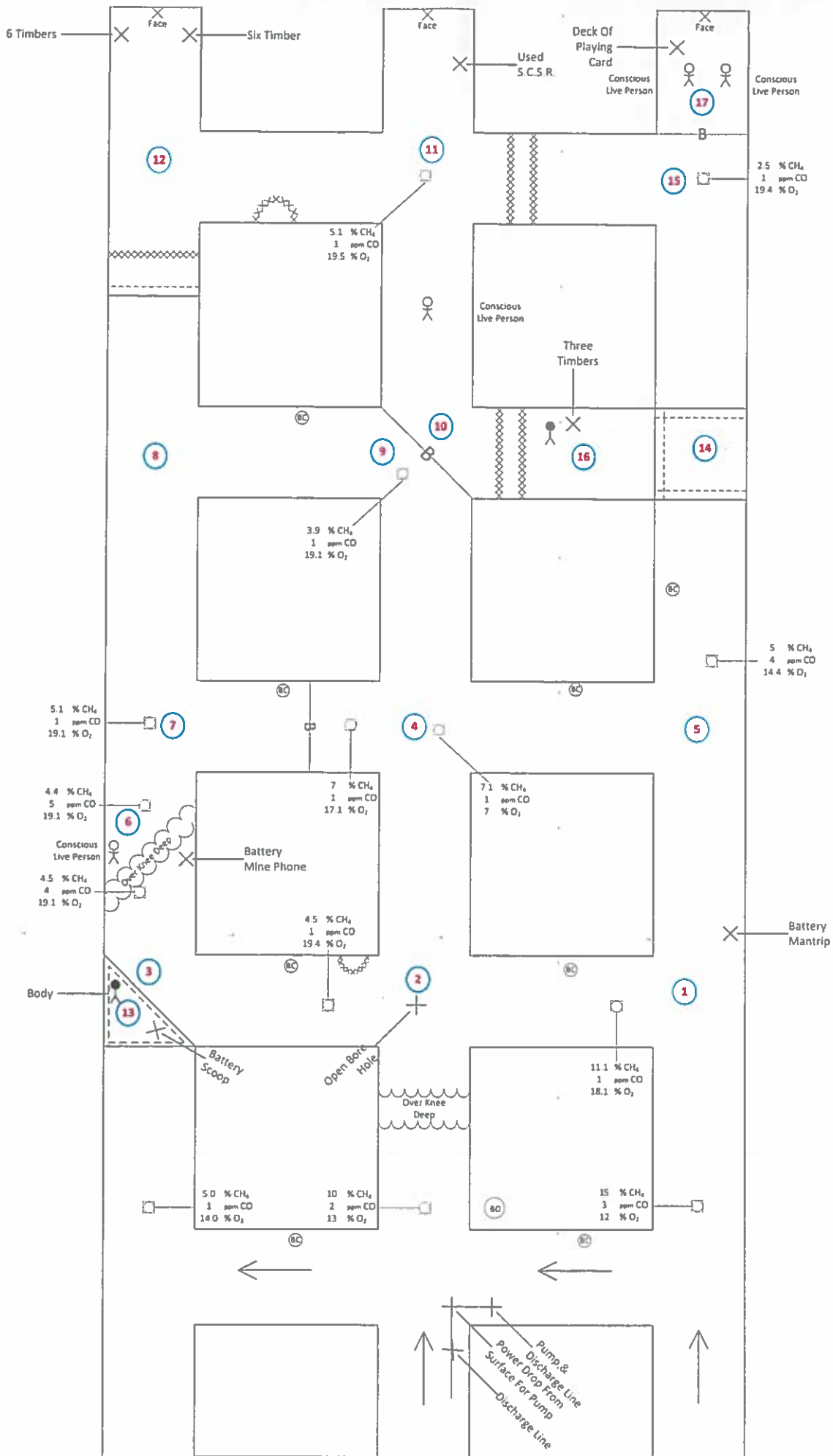
The team is located at the underground F.A.B. The team should make all three entrances prior to the team advancing inby.

In the #1 entry, the team will find an explosive & irrespirable atmosphere extending to an area of unsafe roof across the entry, A R&R the Captains D&I and a GT are required at this location.

In the #2 entry, the team will find an explosive and irrespirable atmosphere which extends to an area of water over knee deep, The Captains D&I and a GT are required at this location.

In the #3 entry, the team will find an irrespirable atmosphere extending into the inby intersection, A GT is required in this area.

2019 WKMI SAFETY DAYS
Team Stop Map



TEAM STOP #1

At team stop #1(#3 entry), an apparatus check must be made with all team members underground. Straight up the #3 entry the team will find a battery mantrip, a GT is required in this area, To the left the team will find an explosive & irrespirable atmosphere which extends to an open bore hole in the intersection of the #2 entry. The team will also find a BC on the inby rib, A GT is required in this area.

TEAM STOP #2

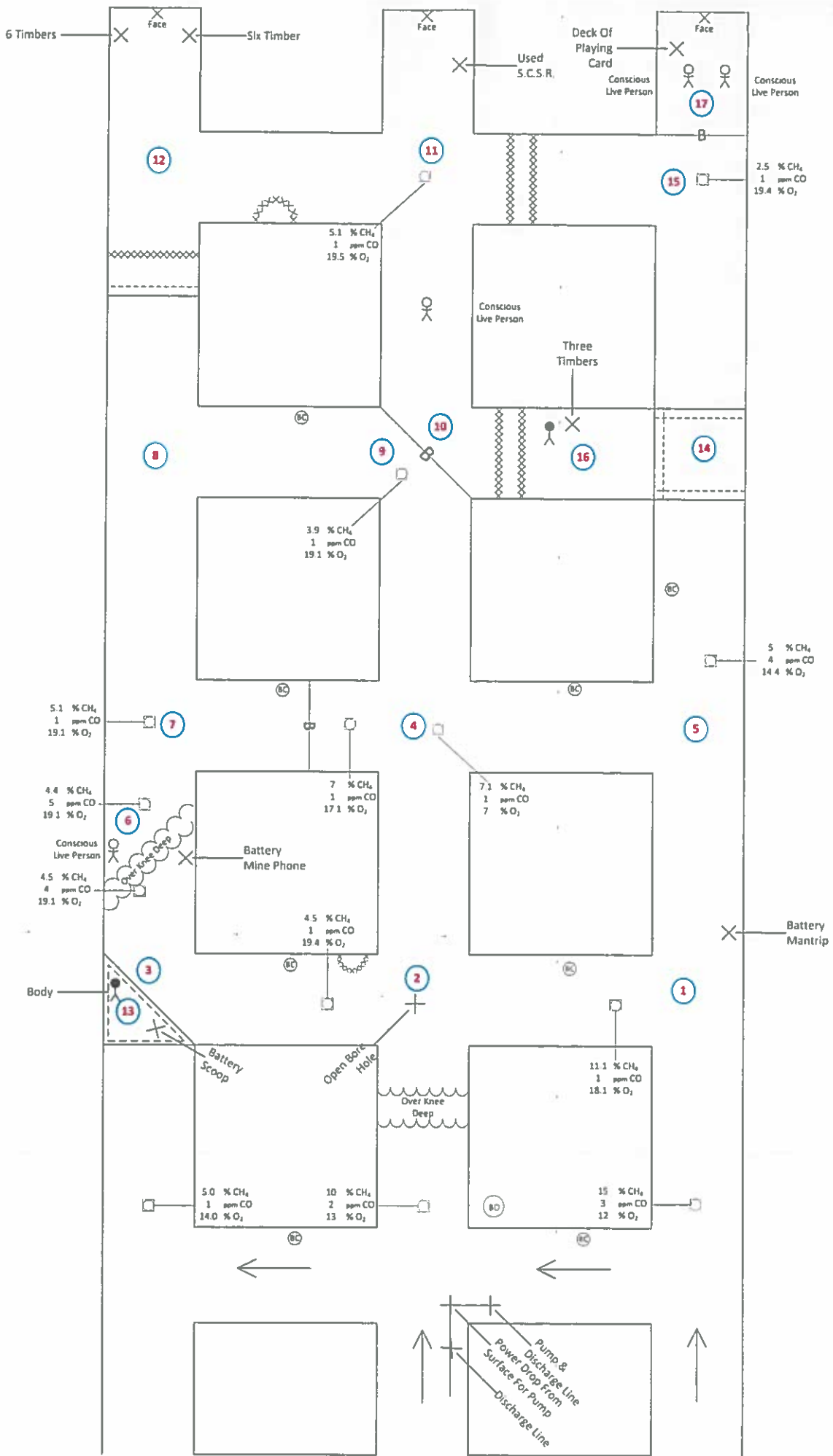
The team should travel to the #2 entry, in the intersection of the #2 entry the team will find an open bore hole, a GT is required at the bore hole, Inby the team will find an open entry, A GT is required in this area, To the left on the inby rib the team will find an area of roof caved, a zig zag R&R is required at this location, Then the team will find an irrespirable atmosphere extending across a BC on the inby rib and into the intersection of the #3 entry, A GT is required in this area. Outby the team will find back side of water over knee deep, the captains D&I and a GT are required at this location.

TEAM STOP #3

The team will travel into the intersection of the #3 entry, where the team will find a diagonal unsafe roof extending from the outby corner of the pillar block inby to the solid rib, A diagonal R&R and a GT are required at this location, The team should find a battery scoop in the unsafe roof, The team should also see a body in the unsafe roof, Inby the team will find a irrespirable atmosphere extending into a diagonal area of water over knee deep, and a battery mine phone on the right rib, The Captains D&I and a GT are required at this location. The patient behind the water will say "HELP" one time. The team will have visual & verbal contact with the patient on the other side of the water over knee deep.

(Rule 41A The Team Is Tied To This Patient)

2019 WKMI SAFETY DAYS
Team Stop Map



TEAM STOP #4

The team should travel up the #2 entry the intersection of the second crosscut, In the intersection the team will find a irrespirable atmosphere, To the left the team will find an explosive and irrespirable atmosphere extending to a barricade (no response), The Captains D&I and a GT are required at this location, Traveling inby the #2 entry the team will find an open entry, a GT is required in this area, To the right the team will find an open cross cut with a BC on the inby rib, A GT is required in this area.

TEAM STOP #5

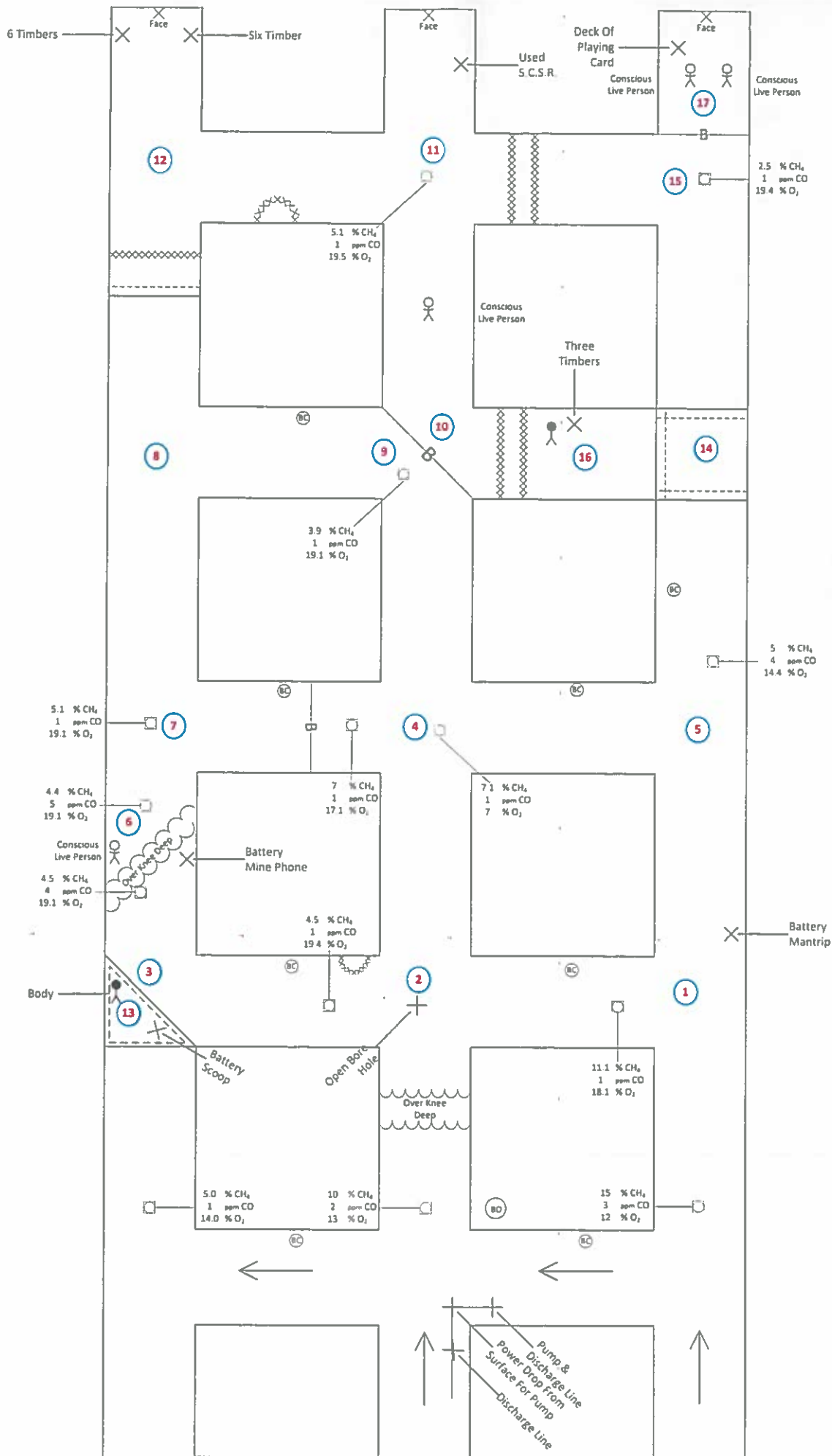
The team will find an open intersection, Inby the team will find an explosive and an irrespirable atmosphere extending inby across a BC on the left rib to an area of unsafe roof across the entry, A R&R the Captains D&I and a GT is required at this location, When the team ties in outby a GT is required in that area.

(At This Team Stop The Patient On The Other Side Of The Water Over Knee Deep In The #1 Entry Can Be Retrieved)

TEAM STOP #6 **& REMOVING THE PAITENT**

The team should return to the F.A.B. and get the pump and discharge line, Take it up the #3 entry to the #2 crosscut, Over to the #2 entry, Down the #2 entry to the #1 crosscut, Over to the #1 entry (make sure the cable does not get into the explosive atmosphere in the cross cut) Up the #1 entry and energize the pump and pump the water down, Then they must put some type of respiratory protection on the patient and bring them to the F.A.B. Inby the patient the team will find an irrespirable atmosphere extending to the next intersection.

2019 WKMI SAFETY DAYS Team Stop Map



TEAM STOP #7

At this stop the team will find an explosive and irrespirable atmosphere in the intersection, To the right the team will find a BC on the inby rib and the back side of a barricade, The Captains D&I and a GT are required at this location, Inby the team will find an open entry, A GT is required in this area.

TEAM STOP #8

The team will travel inby in the #1 entry. Inby the intersection the team will find an area of unsafe roof across the entry, A R&R, the Captains D&I and a GT are required at this location, To the right the team will find an open crosscut with a BC on the inby rib, a GT is required in this area.

TEAM STOP #9

The team will travel into the intersection of the #2 entry where they will encounter an irrespirable atmosphere that extends to a diagonal barricade (with a response), The Captains D&I and a GT are required at this location.

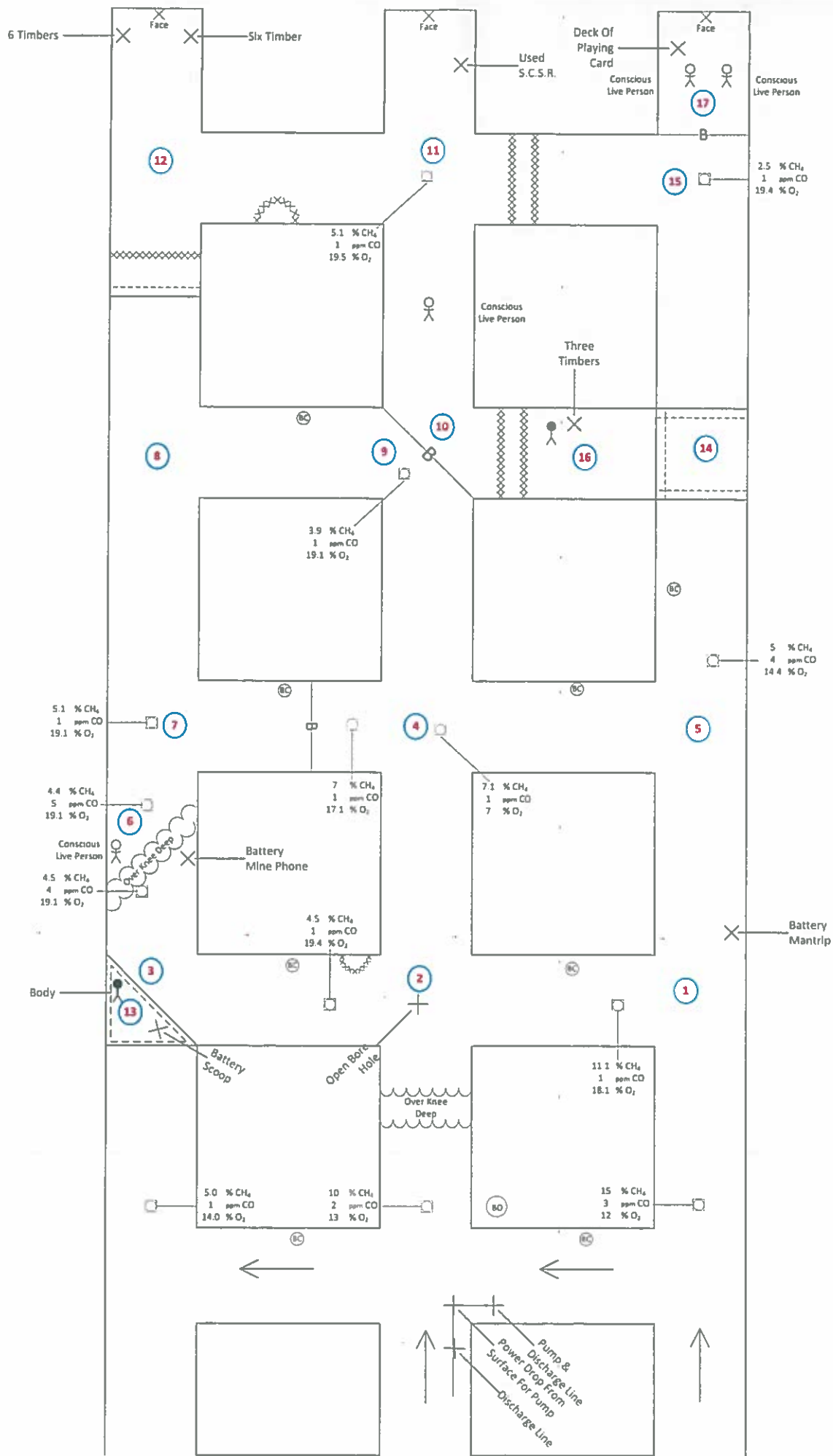
(At This Time The Team Will Have To Ventilate The Barricade See First Vent.)

TEAM STOP #10

(Behind The Barricade)

The team will need to air lock themselves into the barricade, (They Must Remove The Diagonal In The #2 Entry At The Second Crosscut Or They Will Stall The Fan) When the team enters the barricade a GT is required, If the Captain makes to the right first they will find a caved area across the entry, A R&R, the Captains D&I and a GT are required at this location, Inby the team will find a conscious live person, a GT is required in this area, the team should air lock back out because the fan is on and cannot be stopped stalled or reversed.

2019 WKMI SAFETY DAYS
Team Stop Map



TEAM STOP #11

When the team enters the intersection they will encounter an explosive atmosphere, To the right the team will find an caved area across the entry, a R&R, the Captains D&I are required at this location and a GT is required in this area, Inby the team will find a used S.C.S.R on the right rib and a face area, at the face area a R&R, captains D&I and a GT is required in this area. To the left the team will find an open crosscut, on the outby rib they will find a caved area a zig zag R&R and a GT required in this area.

TEAM STOP #12

Advancing over to the #1 entry, outby the team will find a caved area across the entry, a R&R, the Captains D&I and a GT are required at this area, Inby the team will find 6 timbers on the left rib and six timber on the right rib then a face area which requires a R&R, the Captains D&I, at this location, a GT is required in this area.

TEAM STOP #13

(The Body In The Unsafe)

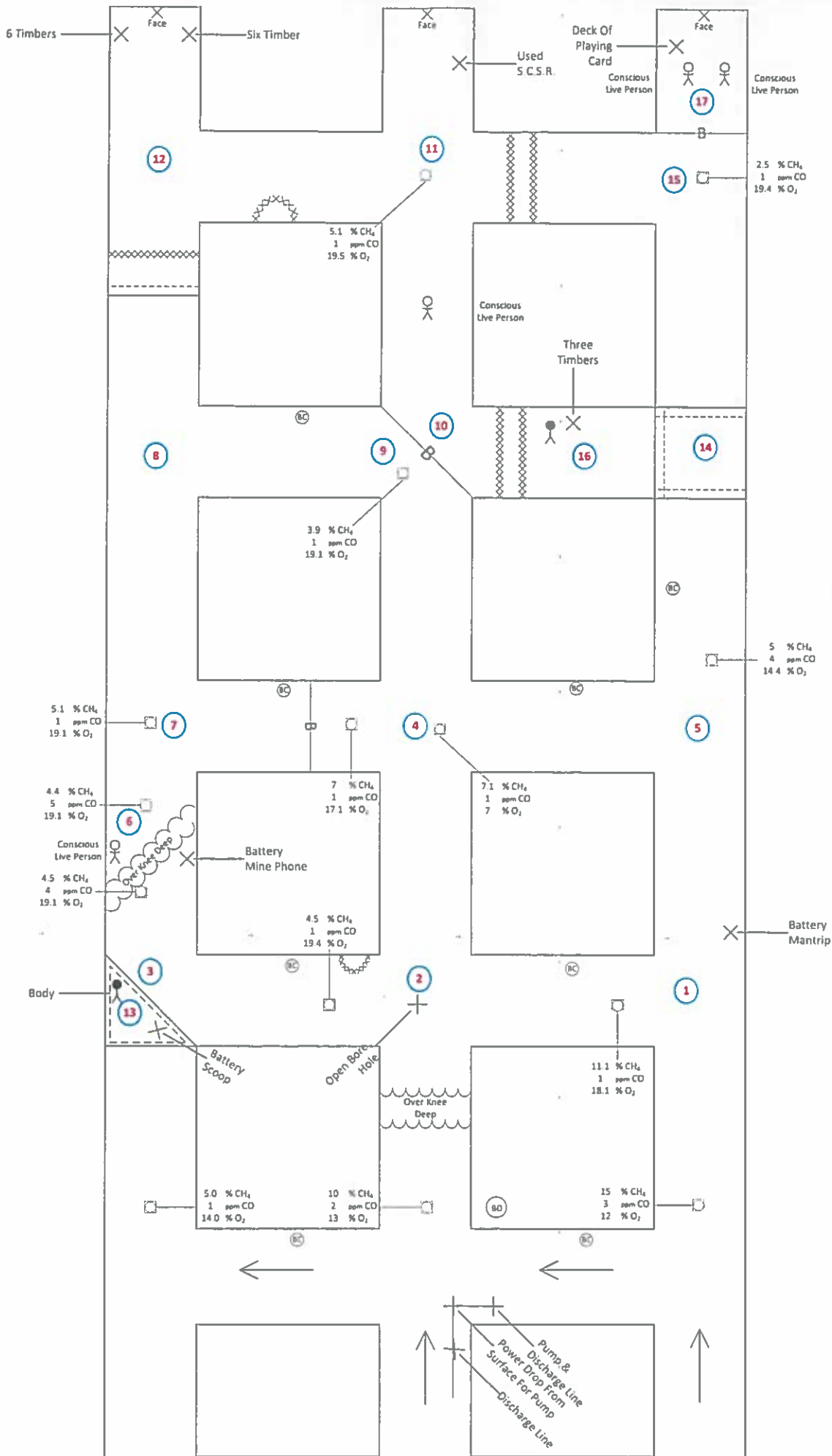
The team must timber into the body before stopping the clock, A D&I is required at the body.

(Rule #32)

TEAM STOP#14

The team will travel up the #3 entry to the area of unsafe roof, if they timber through the unsafe along the solid rib line once on the other side the Captain is required to do a R&R on that side, up the #3 entry the team will find an open entry, a GT is required in this area.

2019 WKMI SAFETY DAYS
Team Stop Map



TEAM STOP#15

In the intersection of the fourth crosscut, the team will find an irrespirable atmosphere in front of a barricade which has a response, "Have both patients read the same statement" the Captains D&I and a GT are required at this location, to the left the team will find an open crosscut with a caved area across the entry. At the caved area a R&R and the Captains D&I are required, a GT is required at this location.

(If The Team Hasn't Made The Area Between The #2 & #3 entries At The Third Crosscut They Will Have To Before The Can Ventilate This Barricade)

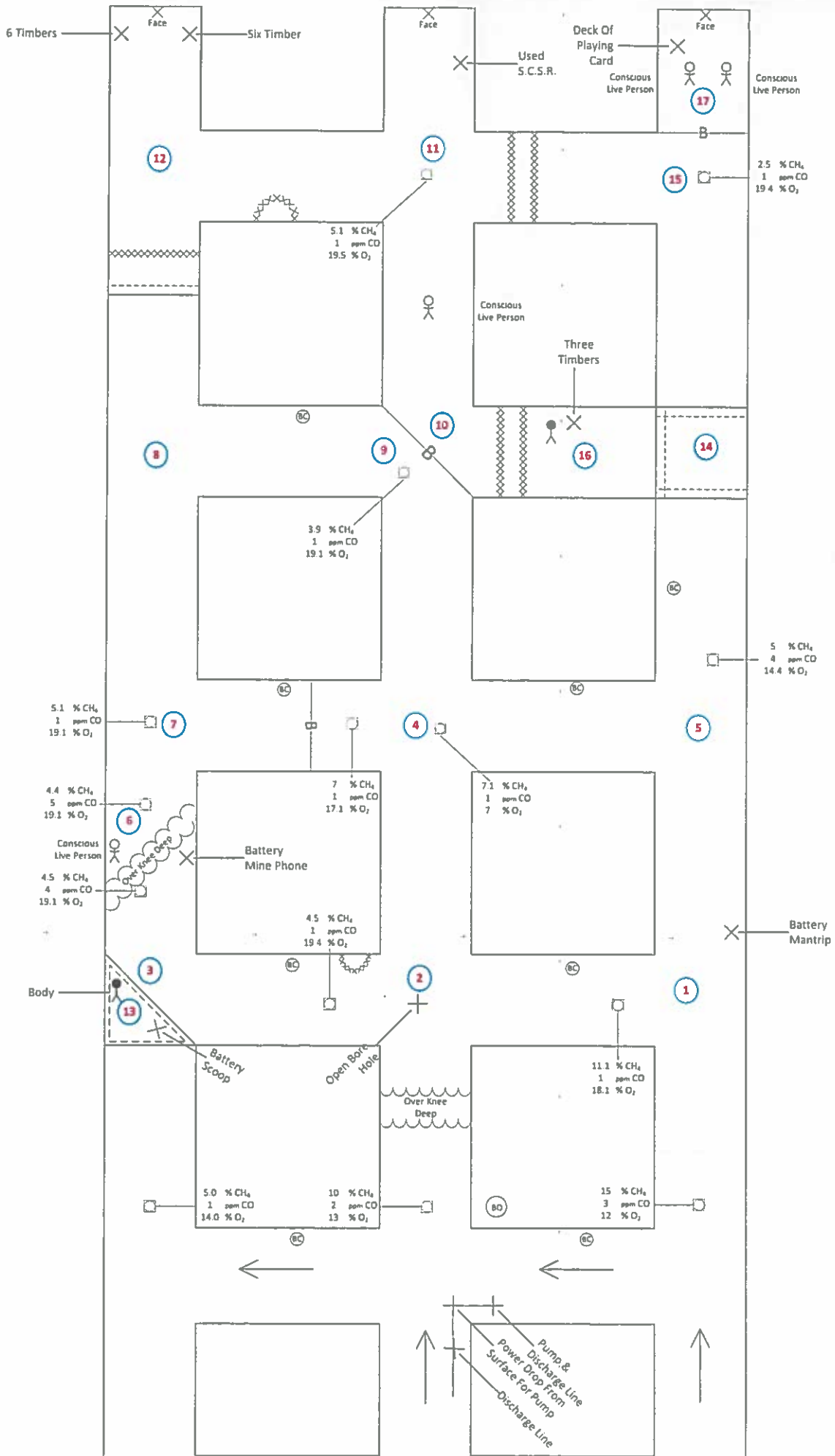
TEAM STOP #16

The team should timber into the crosscut between the #2 & #3 entries in the third crosscut, Once timbered through the Captain is required to do a R&R on that side, The team will find three timbers on the inby rib, then they will find a body, Just pass the body the team will find a caved area across the entry, A R&R the Captains D&I and a GT are required at this location.

TEAM STOP #17

The team will need to remove the diagonal in the 2nd crosscut or the one in the F.A.B. before air locking into the barricade. Then air lock into the barricade, inside the barricade the team will find two conscious live persons, on the left rib a deck of playing cards, and a face area, at the face area a R&R, the Captains D&I and a GT are required at this location.

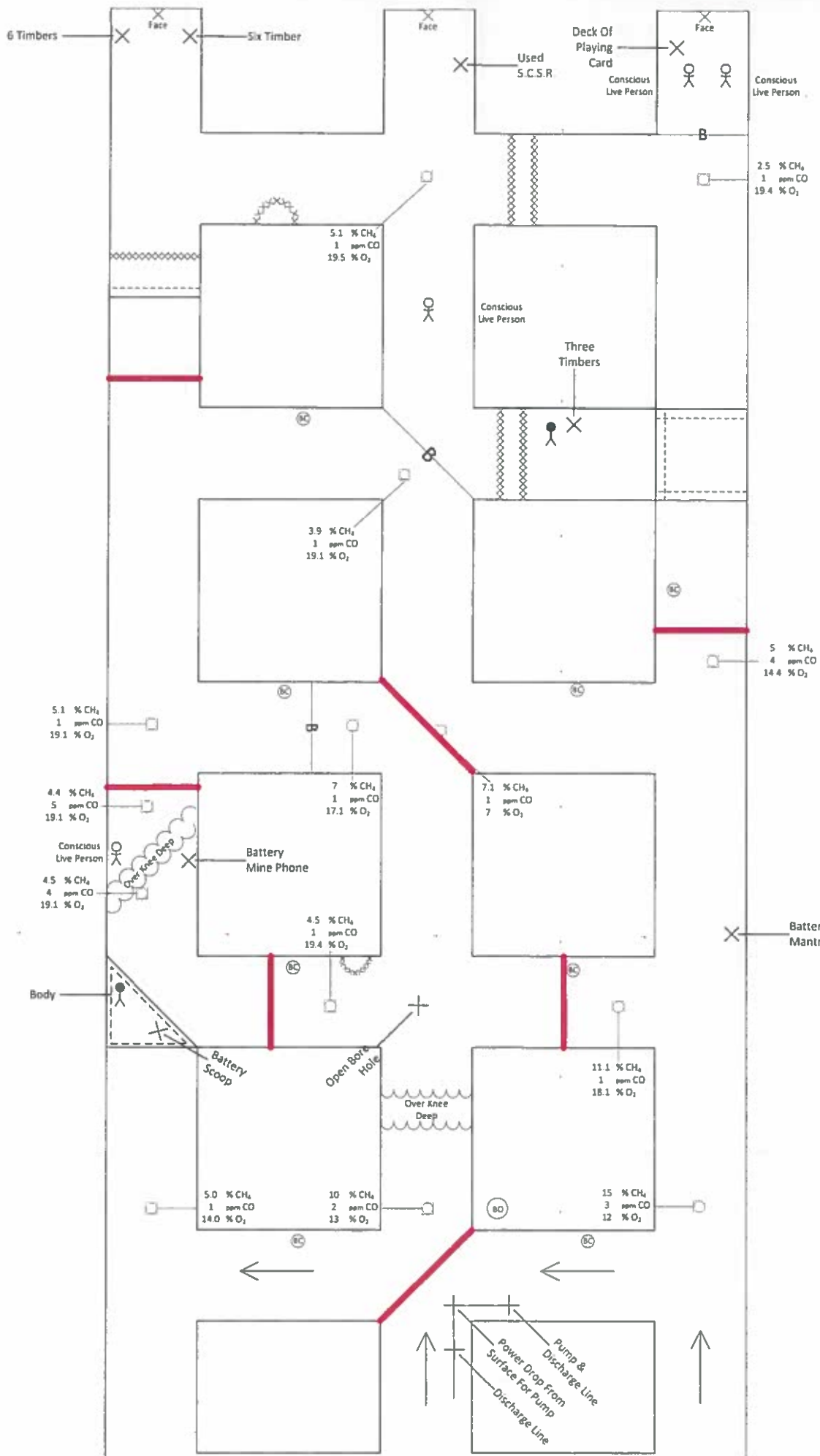
2019 WKMI SAFETY DAYS
Team Stop Map



FIRST VENTILATION

For the first vent, (Starting In The Fab In The #3 Entry) The team should bring the air up the #3 entry to the first crosscut, the team should build in the first crosscut between the #2 & #3 entries, to take the air up to the second crosscut. Then the team should build in by the second crosscut between the #2 & #3 crosscuts in the #3 entry, to take the air over to the #2 entry, Then the team should build a diagonal to turn the air up the #2 entry to the third crosscut at the barricade which will turn the air toward the #1 entry, In the #1 entry the team should build in by between the third and fourth crosscut in the #1 entry, Take the air down to the third crosscut, and build out by between the first and second crosscut in the #1 entry to turn the air over to the #2 entry, in the #2 entry the air get to a diagonal which will turn it back down the #2 entry sending it out by to the first crosscut, the team will need to build in the first crosscut in between the #1 & #2 entries, then the team will need to take the pump and pump the water between the F.A.B. and the first crosscut in the #2 entry, in the F.A.B. they will need to build a diagonal to isolate the pump cable coming up the #2 entry, to take the air over to the #1 entry, turn the fan on and take the air out the #1 entry.

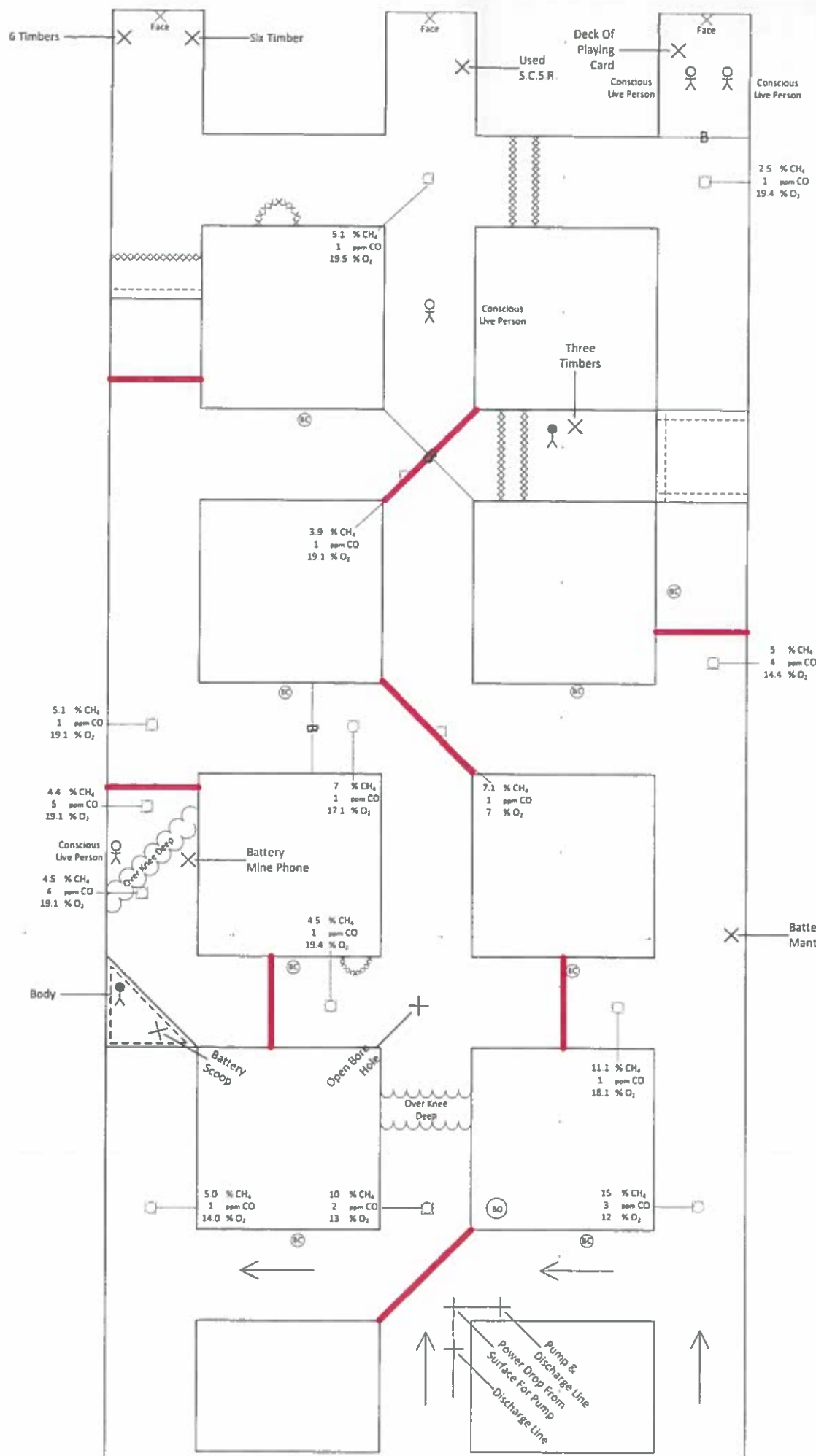
2019 WKMI SAFETY DAYS
First Vent Map



SECOND VENTILATION

For the first vent, (Starting In The Fab In The #3 Entry) The team should bring the air up the #3 entry to the first crosscut, the team should build in the first crosscut between the #2 & #3 entries, to take the air up to the second crosscut. then the team should build in by the second crosscut between the #2 & #3 crosscuts in the #3 entry, to take the air over to the #2 entry, Then the team should build a diagonal to turn the air up the #2 entry to the third crosscut at the barricade which will turn the air toward the #2 entry, to take the air through the caved area over to the #3 entry, take the air up the #3 entry to the barricade and across through the caved area into the #2 entry, then build between the #1 and #2 entries in the fourth cross cut to take the air down the #2 entry to the diagonal over to the #1 entry down the #1 entry to the second crosscut, the team should build out by in the #1 entry between the first and second crosscut to turn the air over to the #2 entry, take the air over to the diagonal and down the #2 entry to the first crosscut, the team should build between the #1 and #2 entries in the first crosscut and send the air out the #2 entry to a diagonal that will turn it over to the #1 entry and out.

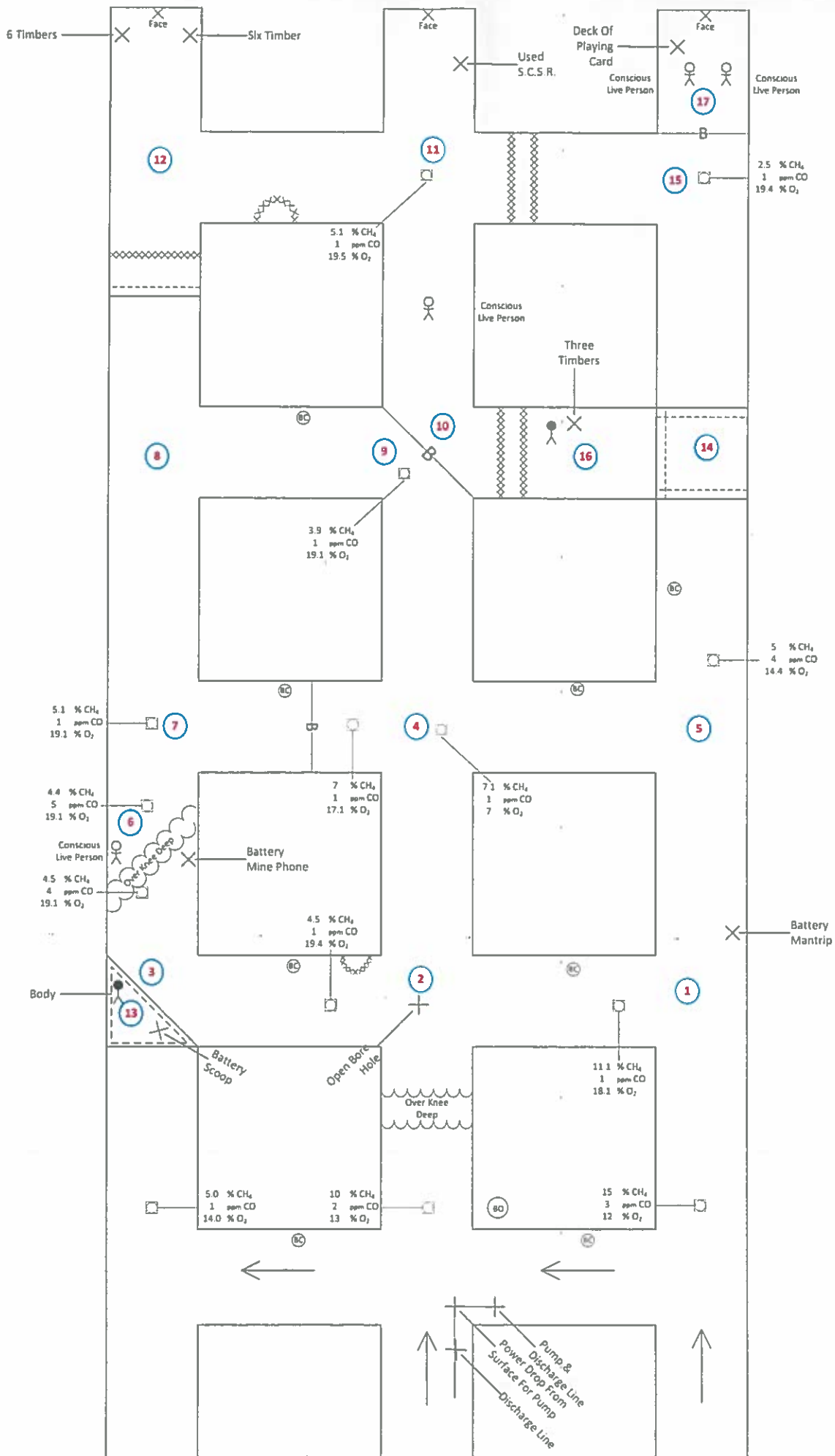
2019 WKMI SAFETY DAYS
Second Vent Map



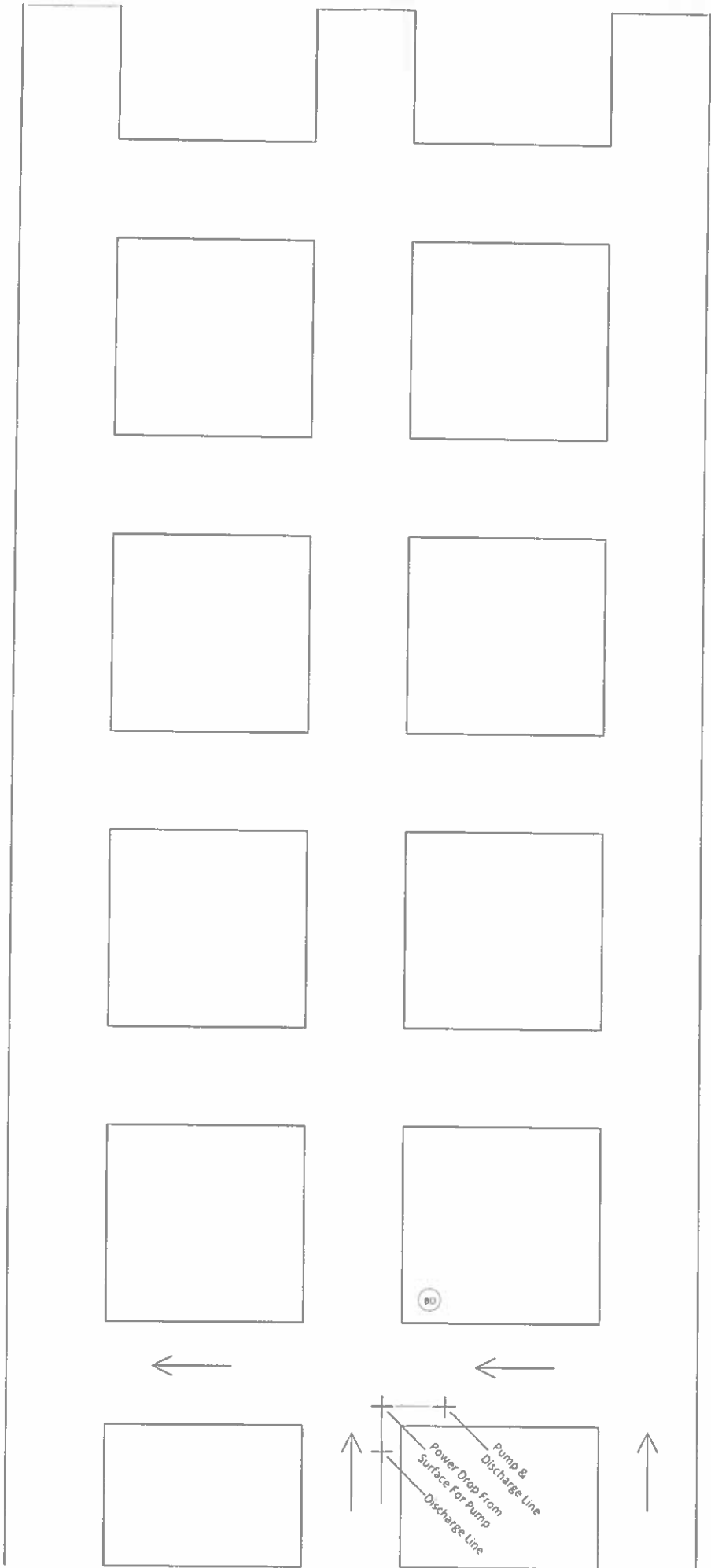
KEYS TO THE PROBLEM

1. At team stop #3, Have the patient to say HELP one time. The team will see & hear the live conscious person on the other side of the diagonal water over knee deep. When the team completes team stops #4 & #5 they will delay that patient if they don't pump the water and remove the patient to the F.A.B. **(Rule #41-C-2)**
2. When the team ventilates the diagonal barricade they must isolate the junction box in the F.A.B. It cannot be moved or de-energized once it has been energized. **(Rule 31-D)**
3. The team must timber to body in the triangle unsafe roof in the #1 entry at the first crosscut before stopping the clock. **(Rule 32)**
4. At team stop #15 at the last barricade the team will have it make the area between the #2 & #3 entry in the third crosscut. There they will find the last body and be able to use that area for ventilating the barricade.

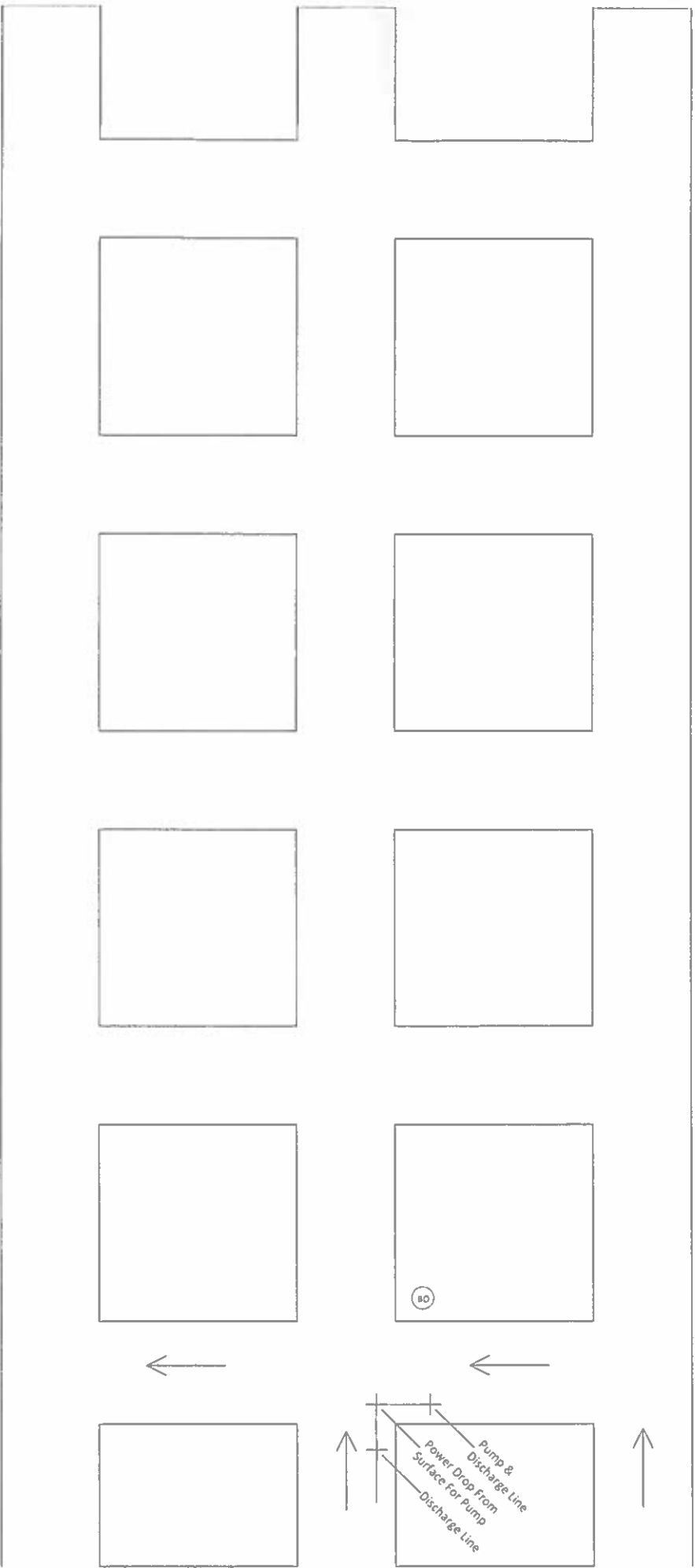
2019 WKMI SAFETY DAYS Team Stop Map



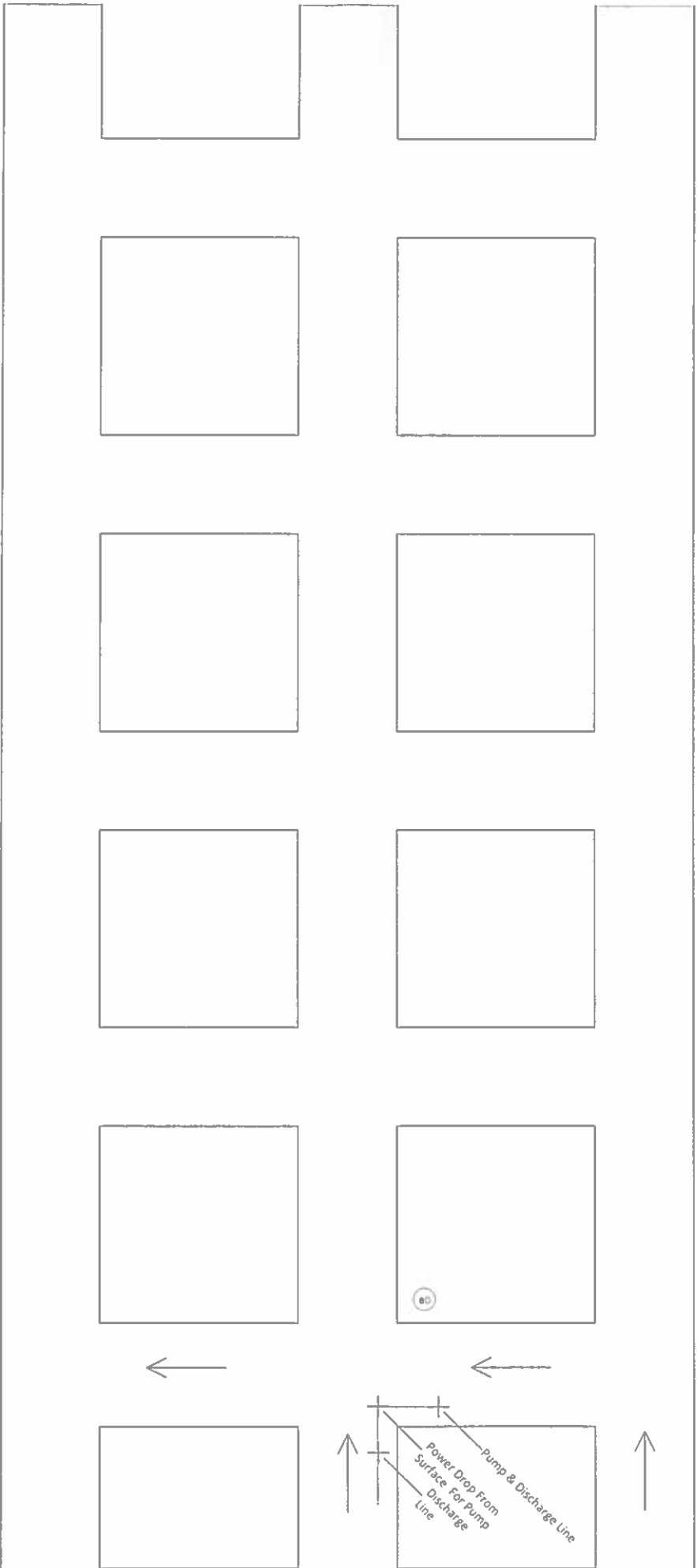
2019 WKMI SAFETY DAYS
Briefing Officer Map



2019 WKMI SAFETY DAYS
Team Map



2019 WKMI SAFETY DAYS
Command Center Map



PATIENT'S STATEMENT

HELP ME!

SAVE ME!!

HOLD ME!!!
