

Traditional Line Crossing Technique VS. LINE ALERT® Panel

Scenario – New pipeline going under existing line

Traditional Line Crossing

Step 1: Excavator digs to approximate stop zone using locate stake marking & lead hand with tape measure. Lead hand enters ditch & manually exposes the line using shovel or obtains depth reading using probe. Final step uses a tape measure to estimate depth from surface to the line

Lead Hand is in the ditch during this process

Hoe is stopped during this process

Existing line encounters additional stress by being re-exposed or hit by probe

Step 2: Excavator digs the remaining allowable depth to the final stop zone. Lead hand enters ditch & manually exposes the line using shovel or obtains final depth reading using probe and confirms they are at the stop zone.

Lead Hand is in the ditch during this process

Hoe is stopped during this process

Existing line encounters additional stress by being re-exposed or hit by probe

Step 3: If the stop zone is reached, the vertical stop zone distance in front and the rear of the line is marked. Excavator creates a trench on either side of the vertical stop zones and lead hand sluffs off dirt into the troughs to expose the line by hand. **If the stop zone is not reached, repeat step 2.**

LINE ALERT Crossing

Step 1: Excavator digs to exact stop zone using LINE ALERT as guide.

Step 2: The lead hand will enter the ditch and the vertical stop zone distance in front and the rear of the line is marked. The excavator creates a trench on either side of the vertical stop zones and lead hand sluffs off dirt into the troughs to expose the line by hand.

SUMMARY OF EFFICIENCY AND CONSISTENCY Before Hand Exposure

Traditional Line Crossing

of Times Excavator has to stop and be idle: 2 – 3 times
of Times Labourer must enter ditch and dig: 2 – 3 times
of Times Existing Line is Stressed: 2 – 3 times

Consistency of Crossing:

Varies with labourer experience

Varies with ground type and soil conditions

Varies with vachole

Estimated Depth

LINE ALERT Crossing

of Times Excavator has to stop and be idle: ZERO times
of Times Labourer must enter ditch and dig: ZERO times
of Times Existing Line is Stressed: ZERO times

Consistency of Crossing:

Performs consistently and accurately regardless of experience, ground type, soil conditions or vachole

Accurate depth to one inch

LINE ALERT provides a CONSISTENT and CONTROLLED Excavation environment for line crossings, improving EFFICIENCY and SAFETY.