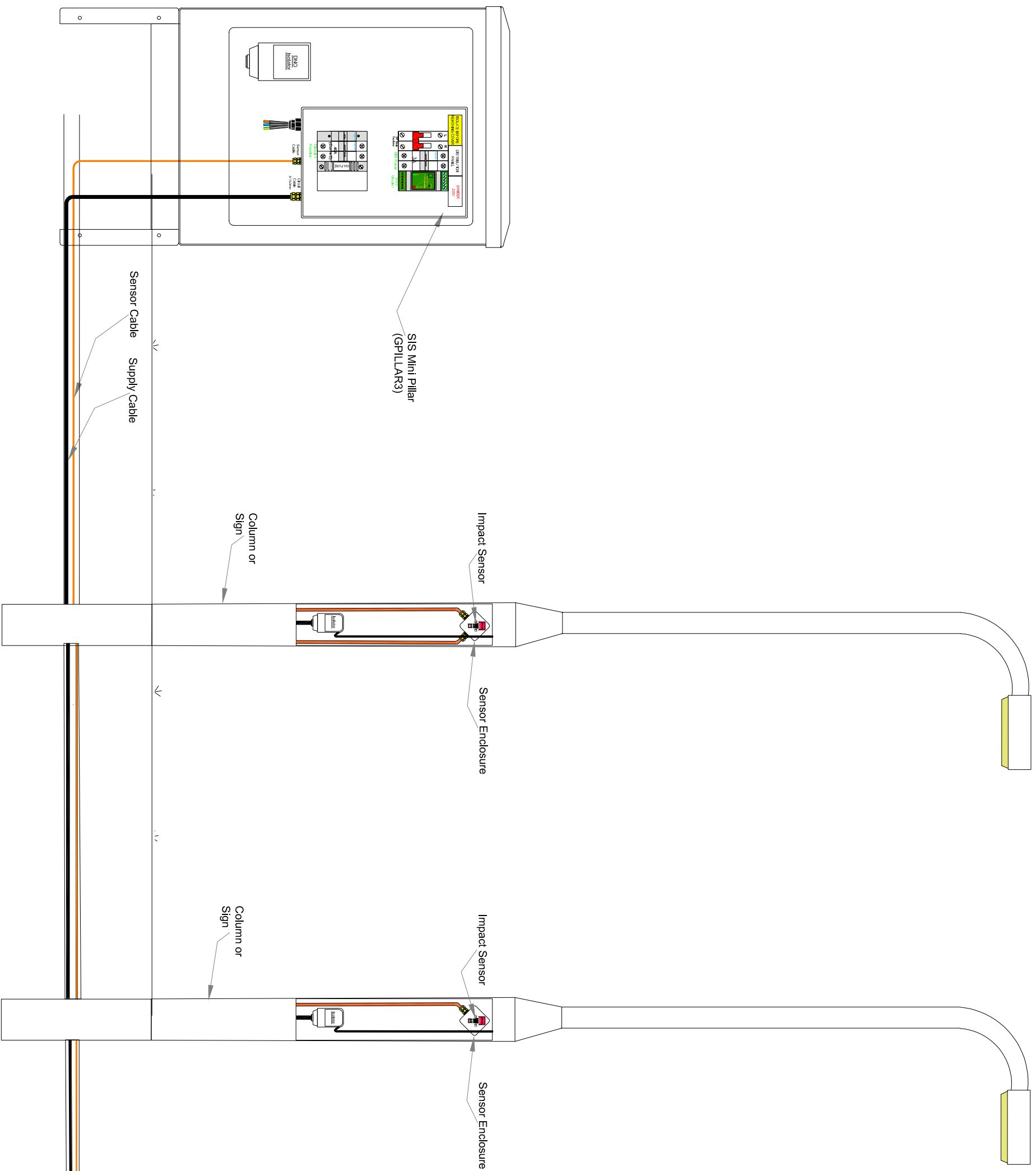


SPECIFICATION

1. SIS Electrical Isolation system to provide compliance with BS EN 12767
2. The system will comprise an impact sensor located within the passively safe equipment, a monitoring unit and sensor cable. The monitoring equipment will be located in a local feeder pillar.
3. Monitoring units should have a failsafe testable (Watchdog) mode that will switch off the passively safe equipment should the unit develop a fault.
4. To provide optimum safety to maintenance operatives the disconnection system will operate at ELV for the sensor circuits. Systems utilising mains voltages for sensor circuits shall not be permitted.
5. There will not be two 230v supplies within an item of passive equipment. Unless both supplies are isolated there is a risk that an operative may not be aware of a second live 230v and therefore be exposed to a potential electric shock.
6. Sensors to be cabled in 2.5mm² core Orange PVC sheathed SWA cable as used for traffic signal detector loop feeder.
7. All outgoing circuits to be protected by double pole circuit breakers, the cable design to reflect this with regard to disconnection times.
8. Where calculations require a BS88 fuse, this will be placed in line with the double pole circuit breaker. The circuit breaker is to be up rated to provide discrimination.
9. The isolation will be so designed that on impact both live and neutral circuit conductors are disconnected, together with any sensor voltages.
10. Disconnection must be achieved in under 0.4 seconds in accordance with BS EN 12767.
11. The isolation system must give a positive visual indication of trip activation by using an LED or similar.
12. It must not be possible to re-energise a circuit that has been tripped, tripped circuits will require manual intervention to reset.
13. The sensor is to be a mechanical device operated by inertia of greater than 10G. Upon trip activation the power to the sensor is to be removed.
14. The impact sensors should be separate from any supply cutout to prevent LV and EHV voltages being confused. This will also enable safe system testing.
15. Impact sensors are to be mounted securely and vertically within/on the column or sign.



TITLE

Mini Pillar (GPILLAR3) Sample Layout

REVISION	DATE
000	26/09/24
SCALE	DRAWING NUMBER
NTS	PACS/2024/007