FiberPatrol®

Application note #1

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Installing FiberPatrol on a culvert security grid

This document provides an overview of the installation requirements for protecting a culvert security grid along a FiberPatrol protected perimeter. In order to properly calibrate FiberPatrol for the heavier construction of the security grid, the sensor cable that is attached to the grid is setup as an independent zone. In addition, an isolation loop is recommended between the fence zone and the security grid zone. Figure 1: shows the sensor cable layout on a barbed wire fence with a culvert security grid. The sensor cable on the fence leading up to the security grid is assigned to one zone, the sensor cable on the security grid is assigned as a second zone, and the sensor cable going away from the security grid is assigned as a third zone. Figure 2: provides a second example with the isolation loop on the security grid.

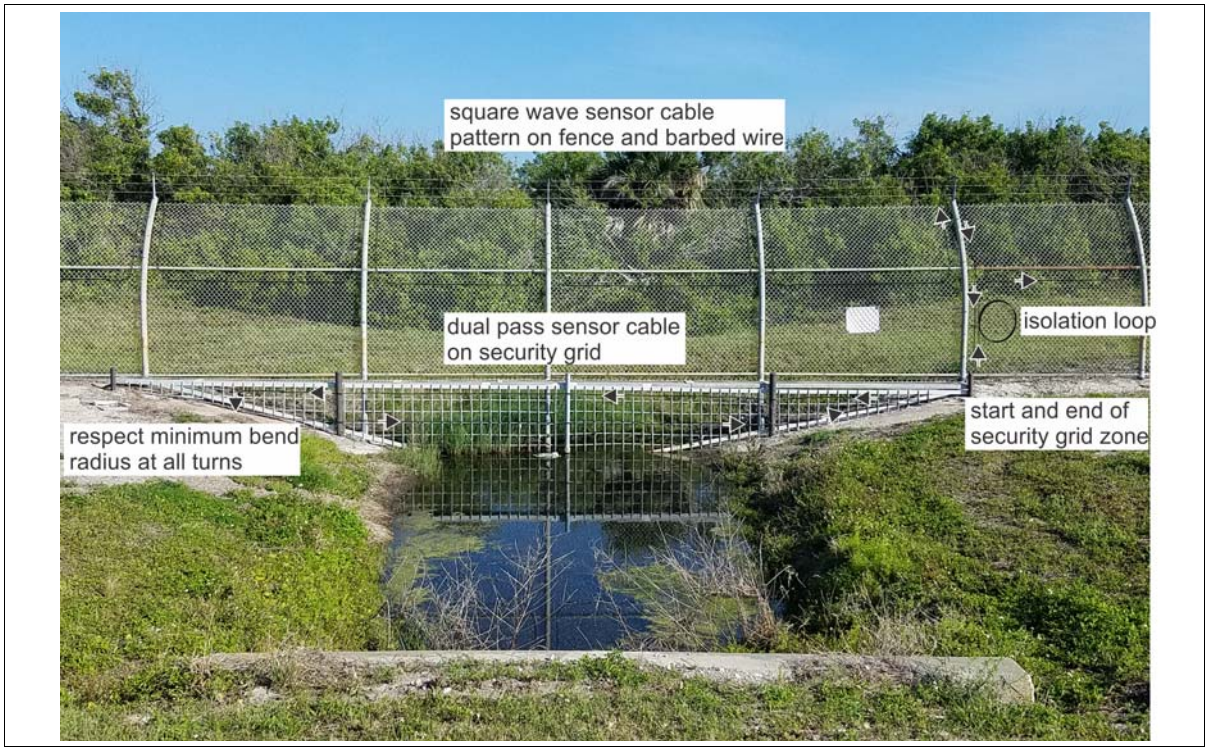

Figure 1: Sensor cable installation on a culvert security grid

- use at least 2 passes of sensor cable on the security grid
- keep the sensor cable straight and taut as it is attached to the grid
- do not violate the minimum bend radius at any cable turns
- keep the sensor cable above the water line, if possible

- attach the top cable pass to the vertical bars and attach the lower cable pass to the horizontal bars
- use isolation loop(s) at the software defined zone boundaries; if possible, use buried vaults to contain the isolation loop(s)
- assign the security grid sensor cable as an independent zone
- adjust the detection parameters of the security grid zone independently of the fence zones
- test the detection response of the security grid zone and the surrounding fence zone(s) thoroughly
- monitor the nuisance alarm rate of the security grid zone and adjust the detection parameters as required

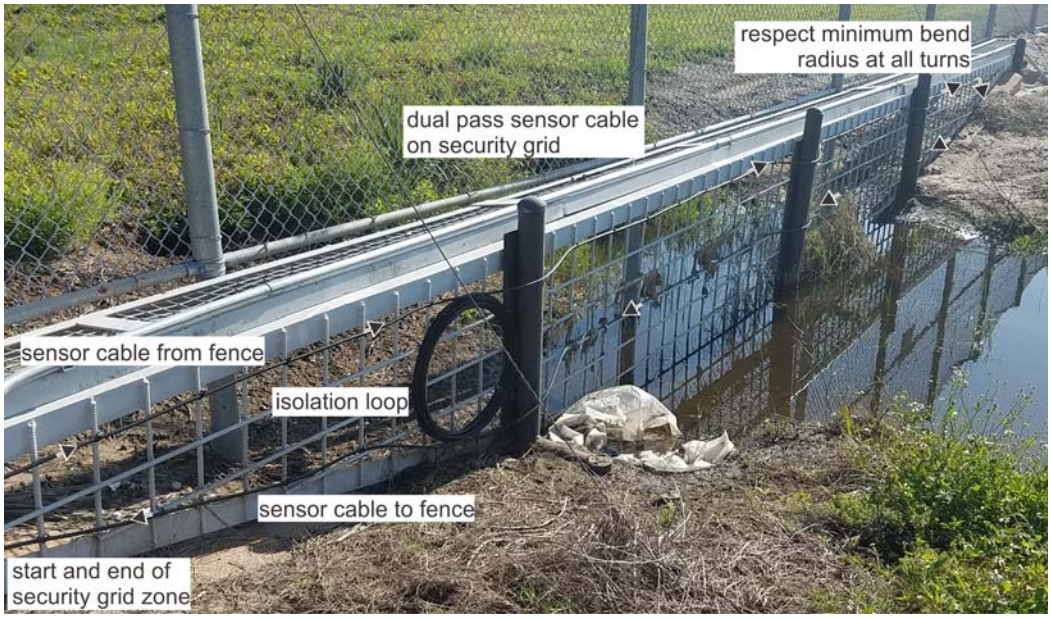

Figure 2: Sensor cable installation on a culvert security grid