Module 6.1.4.1
SPECIFIC ACTION PLAN
CIVIL ENGINEERING WORK

HEALTH AND SAFETY ACTION PLAN FOR REPAIR AND CONSTRUCTION PROJECTS AT THE JOHN H. CHAPMAN SPACE CENTRE

1. Excavation

Before starting work on a tunnel, excavation or trench, the contractor must wait until the Agency project manager has marked the location of all underground pipes, conduits and cables in the area where the work is to be done.

2. Working in the excavation

When working in the excavation, the contractor must take reasonable steps to detect rifts, falling rocks or any other safety hazard. Particular care must be taken during and after heavy rain.

The contractor must control traffic, keeping it at least 3 m away from the edge of the excavation, and ensure that materials are not stored within 1.2 m of the edge of the excavation.

If necessary, the contractor must install a pump and strainer (in good working condition and of sufficient capacity) to keep the excavation or trench reasonably dry.

Unless excavating in solid rock, or if there are no workers in the excavation, or if there is no risk of a cave-in because the sides are sloped at an angle of 45° or less starting 1.2 m from the bottom or 60° or less starting from the bottom (of the excavation), the contractor must provide and install shoring which extends 300 mm outside the excavation.

The installation and removal of the shoring and bracing must be done or supervised by a qualified person.

For trenches, the contractor must provide and install a ladder every 15 m. The ladders must sit on the bottom of the trench and extend 1 m above ground level.

3. Public safety

Where an excavation or trench is more than 1.5 m deep or constitutes a hazard to workers or the public, the contractor must install a highly visible barrier (at least 900 mm high) around it.

4. Fill work and vibrating plates

Fill in layers.

When using a vibrating plate, the contractor must ensure that the operators are wearing hearing protection.

Vibrating plates must be fitted with a device to reduce the vibrations.

The contractor must rotate staff so that no one employee works for too long on the vibrating plate.

5. Employee training and information

All workers assigned to work in trenches or excavations must be able to recognize the warning signs of a collapse:

Abnormal cracks around the excavation walls

Excessive water seepage, causing wall erosion

Cracked or bent shoring.