Section 2.4.53 of the Public Works Code sets regulations for excavation sites and requires adequate protection of excavations. Open excavations shall be covered with steel plates ramped to the elevation of the contiguous streets, pavement or other public right of way.
1. WHY ARE STEEL PLATES REQUIRED?
A. Steel plate bridging over open trenches is required to provide safe and adequate passage for vehicles, bicyclists and pedestrians during excavation of the sidewalk, roadway or other portions of the public right of way. Steel plate bridging also will protect the open trench from unwanted debris and other objects.

B. Steel plates are required after excavation when trenches are not ready for backfilling operations or must remain open for further work before restoration can commence.

2. WHAT ARE THE GUIDELINES AND RESTRICTIONS?
A. Temporary steel plating and steel bridging shall be coated with a non-slip and rust inhibitive product. Examples of non-slip steel plating are surfaces with waffle-patterns or right angle undulations. Non-slip products shall have a friction factor of 0.35 or greater as measured by the California Department of Transportation Test 342.

B. Plating shall be installed with no edges or corners sticking up and shall be installed, secured and maintained in a way that will prevent the plate from bouncing, shifting and moving vertically or horizontally. Plates shall be secured against shifting by tack welding, wedges, adjustable cleats, shims, fasteners or other appropriate devices.

C. Typically, all plates should be removed at least one day prior to the start of the holiday moratorium and any special events or circumstances, as required by Public Works. The trench shall be properly restored per the Excavation Code.

D. Plates shall be flush or transitioned with the sidewalk, roadway and other portions of the public right of way. Whenever the grade difference between the existing pavement and the excavated area is greater than 3/4 inch, longitudinal and transverse transitions with a maximum slope of 1:18 shall be provided. Transitions shall be installed with hot-patched asphalt concrete.

E. The type of steel plate to be used should take into account traffic speed, traffic volume and composition, duration and dimension of the proposed excavation, and weather conditions. Typical steel plate bridging used within the City are A-36 grade steel, designed for HS20-44 loads, which extend a minimum of 12 inches beyond the edges of the trench and have a plate thickness of 1 inch.

F. Utility owners and contractors are responsible for maintaining plates and ensuring a safe and adequate path of travel for all vehicles, bicyclists, and pedestrians. Trenches shall be adequately shored to support the bridging and traffic loads. Proper permits must be obtained prior to excavating and working in the public right of way.

3. WHAT ARE THE VIOLATIONS?
A. Utility owners and contractors who excavate without a valid permit may be assessed a penalty not to exceed $10,000 per day, per violation, commencing with the first day of the violation.

B. Utility owners and contractors who violate permit conditions may be assessed a penalty of $500 per day.

C. If utility owners and contractors fail to correct inadequately maintained steel plates, the City will correct the situation at the contractor’s expense.