



# Are you considering LED lights for your facility?

If you are considering upgrading your sports lighting to LED, you are not alone. The most significant advantage of LED lighting versus your current lighting is the reduced operating cost and improved lifespan. With the advancement of LED technology and its reduced energy consumption, LED is here to stay.

### Do you need to consult a structural engineer for an LED lighting project?

Depending on the original design criteria of your supporting poles and the size and quantity of the new LED fixtures, your poles may not be strong enough to support the new loading.

#### What's the present-day design criteria for lighting pole structures?

ASCE 72-21, *Design of Steel Lighting System Support Pole Structures* is the standard that provides design parameters applicable to lighting pole structures. The standard covers proper specification and/or development of the various loads and load combinations to be applied to lighting support poles as well as safe load resistance requirements. Your poles should be evaluated by a structural engineer for the proposed loading.

#### Will your existing light support platforms or cross arms support the new LED fixtures?

Lighting fixtures are attached to the pole via platforms or cross arms. A structural engineer should also evaluate these components for the new loading.

## What information about your poles will a structural engineer need for analysis?

If you don't have the original documentation, and many organizations don't, you will need to perform a field survey or mapping of your poles. This information should include the height, member information including thicknesses and diameters, cross arms or platform, base plate connection details, and anchorage details. The engineer then can utilize this data to perform the analysis.

# What is the present condition of your light support poles...have they been properly maintained?

Even if your poles and light supports are structurally acceptable, your structures may not be capable of supporting the new loading from a condition standpoint. Condition assessments of your structures should include the following:

- Weld inspections of critical base welds by a certified weld inspector and nondestructive weld examination technician
- Inspection of the foundation and anchor bolts
- Aerial inspections via climbing or drone

**SAFE** can assist you every step of the way with this process allowing your organization to reap the benefits of a new LED lighting system. Call us today at 570-359-3293 or *sales@rts-safe.com*.