

**Street Lighting  
Design Standards**



**Prepared by the City of Irving  
Transportation Department**

**Adopted: September 5, 2019**

# 1 General Requirements

## 1.1 Introduction

This manual represents a basic set of requirements of the Transportation Department for the City of Irving which shall be followed for the design of street lighting for both Private Development and Capital Improvement projects. The principles, standards and requirements provided for herein shall be considered the minimum requirements for the design of adequate public facilities within the City of Irving. In such cases where other Federal, State, or City ordinances or regulations are more restrictive in their requirements, the more restrictive shall govern.

### 1.1.1 Definitions

- City: The City of Irving, Texas.
- Design Engineer: A registered Texas Professional Engineer responsible for the design of the Project (the engineer of record), working for the City or other public agency, the City's engineering consultant, or a private Developer.
- Developer: A private developer or a private firm working for a public entity in a design-build type project.
- Director: The Director of the Transportation Department for the City of Irving (i.e. City Traffic Engineer).
- Plans: The engineering plans, reports, specifications and addendums issued by the Design Engineer for the construction of the Project.
- Project: A public infrastructure facility being constructed within public rights-of-way and/or easements

- **Traffic Engineer:** The City of Irving Transportation Department Director or his designee, a registered Texas Professional Engineer.

### **1.1.2 Authority**

Authority for the issuance of these Street Lighting Design Standards is derived from Section 35-16.1 of the Land Development Code of the City of Irving.

## **1.2 Design Standards**

**A proposed street lighting and conduit design shall be included in the Plans. The Traffic Engineer shall have the final approval of the proposed street light design.**

### **1.2.1 Fixture Type**

Unless otherwise directed by the Traffic Engineer, all new street lights shall be ONCOR approved KIM-style fixtures using 250 Watt high-pressure sodium bulbs (for subdivisions, 100 Watt), or LED equivalent. All fixtures shall be purchased by the Developer directly from ONCOR, and the Developer is responsible for all street light fixture costs as determined by ONCOR.

1. **KIM Style (Standard Fixture):** An ONCOR approved and maintained light assembly, the current City standard to be used, unless otherwise directed by the Traffic Engineer
2. **Philadelphia Light/Hanover Pole Style (Specialty Fixture):** An ONCOR approved and maintained light assembly (175 Watt metal halide bulbs, or LED equivalent) to be used primarily in the Las Colinas Urban Center and the La Villita Development, and along streets as directed by the Traffic Engineer. This fixture type shall be spaced as near as seventy-five feet (75') as possible, placed in pairs (i.e. not staggered) along both sides of the thoroughfare.
3. **Cobra Head Style (Existing Fixture):** An ONCOR approved and maintained light assembly historically used within the City. These lights are existing and should not be used for new construction unless otherwise directed by the Traffic Engineer.
4. **Housley Style (Existing Fixture):** A City maintained light assembly used in limited locations along Lake Carolyn Parkway in the Las Colinas Urban Center, as directed by the Traffic Engineer. This fixture type shall be spaced as near as seventy-five feet (75') as possible. These lights are existing and should not be used for new construction unless otherwise directed by the Traffic Engineer.

5. Carriage Style (Existing Fixture): An ONCOR approved and maintained light assembly historically used within the limits of the Las Colinas Association (see Walnut Hill Lane, Rochelle Boulevard). These lights are existing and should not be used for new construction unless otherwise directed by the Traffic Engineer.
6. Acorn Style (Existing Fixture): A City maintained light assembly used in limited locations within the Heritage District, along Main Street and Second Street. These lights are existing and should not be used for new construction unless otherwise directed by the Traffic Engineer.

### **1.2.2 Power Source**

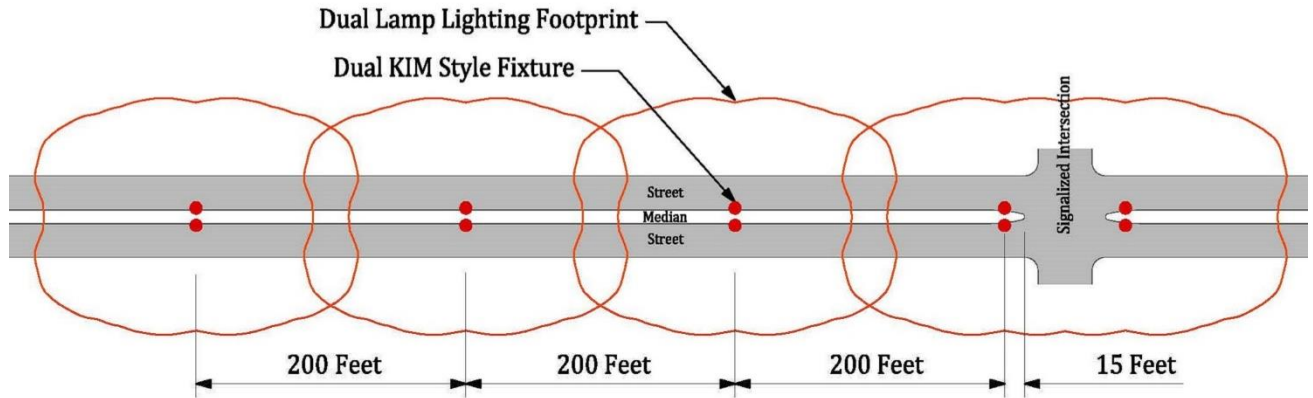
All proposed street lights shall be powered via underground cable inside PVC conduit. ONCOR requires that all pipe conduits shall be PVC schedule 40 pipe, and all fittings be PVC schedule 80. The proposed design shall be coordinated with and approved by the Traffic Engineer and ONCOR. The Developer is responsible for all street light installation costs as determined by ONCOR.

### **1.2.3 Spacing**

KIM-style street lights shall be spaced as near as two hundred feet (200') as possible. Closer spacing may be required for additional safety lighting at: horizontal & vertical curves, intersections, median openings, school crosswalks, bridge approaches, historically high accident locations and potential roadway hazards. Unless otherwise approved by the Traffic Engineer, no illumination fixtures for street lighting purposes shall be directly attached to the traffic signal poles. Per ONCOR requirements, no illumination fixtures for street lighting purposes shall be installed on bridges, or within TxDOT right-of-way.

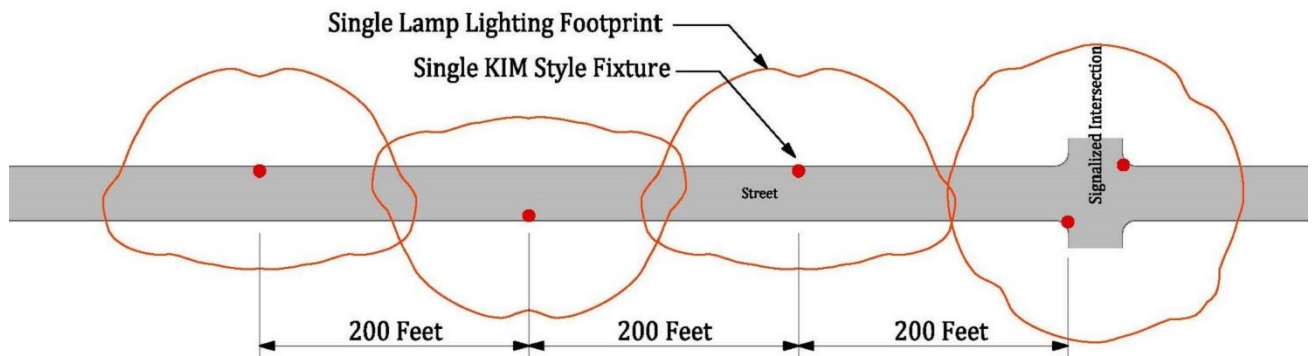
### 1.2.4 Divided Thoroughfares

The preferred location of KIM-style street lights in divided thoroughfares shall be centered in the median, using dual fixtures.



### 1.2.5 Undivided Thoroughfares

The preferred location of KIM-style street lights in undivided thoroughfares shall be in a staggered pattern along the parkway, using single fixtures.



### 1.2.6 Private Streets

The Developer is responsible for all installation costs for street lights along private streets. The private entity owning the private street (typically a homeowners or property owners association) is responsible for all future maintenance and recurring power costs. All such lighting shall be considered private and not the responsibility of the City.

**1.2.7 Lighting At Parallel Parking Bays**

Light fixtures shall be placed so as not to conflict with the opening and closing of vehicle doors parked in adjacent parallel parking bays.

**1.2.8 Final Approval**

The Design Engineer shall coordinate the proposed street light design with the Traffic Engineer for review/comment prior to final approval of the Plans.

**1.2.9 Final ONCOR Inspection**

Prior to acceptance of the project by the City, the Developer shall submit written verification of the inspection and acceptance by ONCOR of the street light system.