



# **LIGHTING PLAN**

## **FIELDWIDE - NIOBRARA**

## INTRODUCTION

This Lighting Plan (Plan) has been developed for ConocoPhillips Company's (Company) Niobrara oil and gas development project (Project) and its associated oil and gas sites (Sites). The Project is located East of the Denver metro area and encompasses parts of the City of Aurora (City).

This Plan is intended to facilitate compliance with:

- Colorado Oil and Gas Conservation Commission (COGCC) Rule 803. Lighting The Occupational Safety and Health Administration (OSHA) Standard 1926.56(b)
- The Occupational Safety and Health Administration (OSHA) OSH Act of 1970, Section 5
- The American National Standard (ANSI) A11.1-1965, R1970, Practice for Industrial Lighting
- The Illuminating Engineering Society of North America (IESNA) RP-7-17, Petroleum, Chemical and Petrochemical Industry Lighting Standards
- The Oil and Gas Operator Agreement between the Company and the City dated June 5, 2019

This Plan will be applied to all Sites within the jurisdictional boundaries of the City.

## PROJECT OVERVIEW

The Company's development of the Project necessitates work activities to be performed 24 hours a day during drilling and completion phases, requiring the use of temporary and transient lighting in order to conform with nationally recognized industry and federally mandated safety standards (referenced above). During night work activities, there may be circumstances when lighting required for safe operations may be **observed** from locations beyond the boundaries of the Site. However, light will not **shine** beyond the boundaries of the well site.

Construction Phase – No night work and no permanent lighting will be installed on the Site. Daylight operations only are performed during this phase of operation.

Drilling Phase and Completion Phase – Night work is anticipated due to the requirement for continuous operations. Lighting for safe night work will be provided by transient and temporary light plants and lights permanently affixed to equipment (pictures attached). All lighting capable of adjustment will be directed inward to the Site and downcast to prevent light shining beyond the boundary of the Site while at the same time providing a safe workplace that is free from recognizable hazards and complies with OSHA, ANSI and IESNA standards. A photometric plan is attached to the Site Plan and is representative of the anticipated placement of lighting required for safe night work during these phases of operation.

Production Phase — No night work is anticipated, and no permanent lighting will be installed on the Site.

[See Representative Photos on Next Page.]

**REPRESENTATIVE PHOTOS**



*Drilling Night Work*



*Well Completion Night Work*