

Visual Simulations

KOP007 Mortenson Lake NWR

Afternoon

GE 3.0MW



Rail Tie Wind Project

Simulation Data

Photograph Information

Photo Name	200508_DSC_0650_MIN_Sim.JPG
Date of Photograph	09/25/19
Time of Photograph	4:10 PM
Latitude	41.207978°
Longitude	-105.785748°
Ground Elevation + Tripod Height	2218m
Photograph Settings	ISO 200 1/400sec. f/10

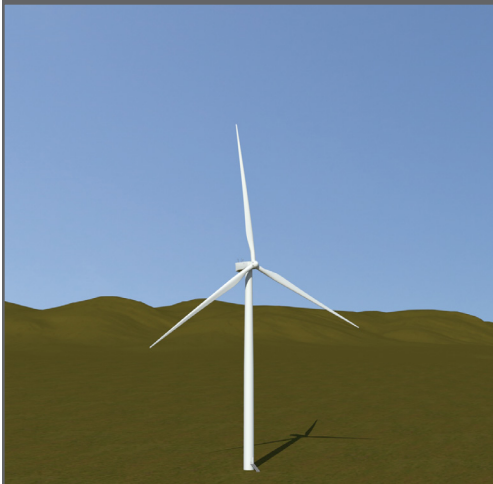
Camera Specifications

Camera Make and Model	Nikon D90
Sensor Size	Nikon APS-C (23.6x15.8mm)
Lens Make and Model	AF-S DX NIKKOR 35mm f/1.8G
Lens Focal Length	35mm prime
35mm Equivalent Focal Length	53.55mm

Sun and Weather Information

Sun Angle/Azimuth	239°
Sun Elevation	28°
Weather Conditions	Partly Cloudy

Wind Turbine Information



Number of Turbines	149
Make and Model	GE 3.0MW
Upper Blade Tip Height	152.5m
Lower Blade Tip Height	31m
Indicative Hub Height	89m
Rotor Diameter	127m

Vicinity Map



Viewing Instructions

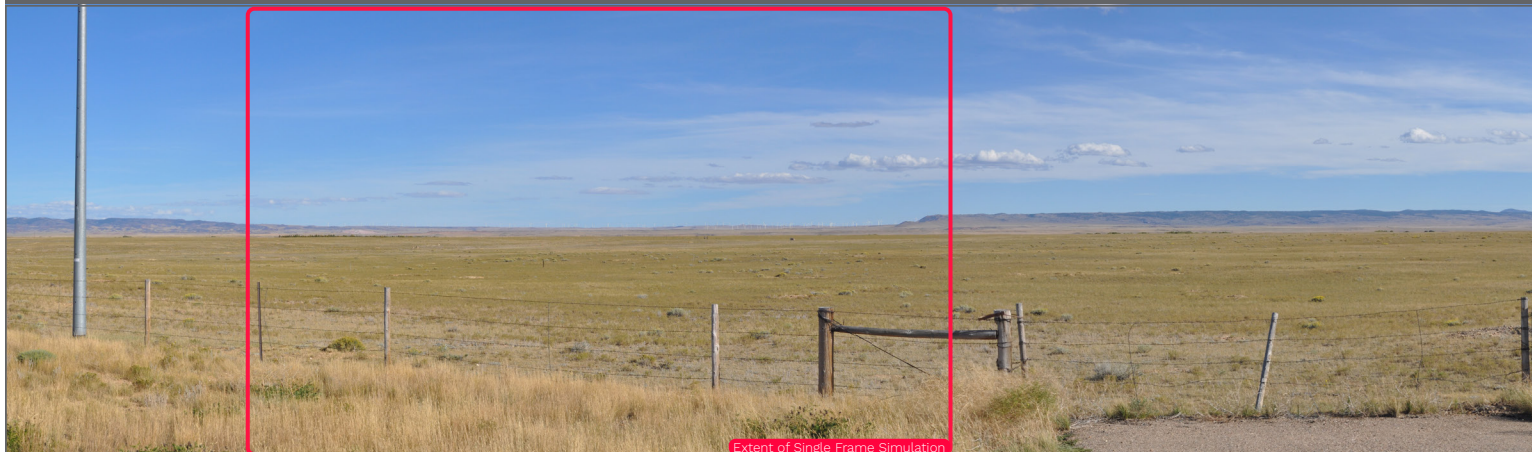
The single-frame simulation on the following page should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Panoramic Existing Condition



Panoramic Simulated Condition



Extent of Single Frame Simulation



KOP007 Mortenson Lake NWR

Afternoon, viewing Southeast

GE 3.0MW, Minimum Turbine Height Scenario

Visual Simulations

KOP007 Mortenson Lake NWR

Afternoon

Vestas V162-5.6MW



Rail Tie Wind Project

Simulation Data

Photograph Information

Photo Name	200109_DSC_0650_MAX_Sim.JPG
Date of Photograph	09/25/19
Time of Photograph	4:10 PM
Latitude	41.207978°
Longitude	-105.785748°
Ground Elevation + Tripod Height	2218m
Photograph Settings	ISO 200 1/400sec. f/10

Camera Specifications

Camera Make and Model	Nikon D90
Sensor Size	Nikon APS-C (23.6x15.8mm)
Lens Make and Model	AF-S DX NIKKOR 35mm f/1.8G
Lens Focal Length	35mm prime
35mm Equivalent Focal Length	53.55mm

Sun and Weather Information

Sun Angle/Azimuth	239°
Sun Elevation	28°
Weather Conditions	Partly Cloudy

Wind Turbine Information



Number of Turbines	87
Make and Model	Vestas V162-5.6MW
Upper Blade Tip Height	206m
Lower Blade Tip Height	44m
Indicative Hub Height	125m
Rotor Diameter	162m

Vicinity Map



Viewing Instructions

The single-frame simulation on the following page should be printed at 11 by 17 inches; full size with no scaling; and viewed at arm's length (24 inches).

If viewed on a computer monitor, the document should be scaled to 100 percent and viewed at arm's length (24 inches).

Panoramic Existing Condition



Panoramic Simulated Condition





KOP007 Mortenson Lake NWR

Afternoon, viewing Southeast

Vestas V162-5.6MW, Maximum Turbine Height Scenario