Design Fundamentals

Objective

Students will learn concepts, methods, and techniques to minimize adverse affects to visual resources from resource development projects on the public lands.

Design Fundamentals

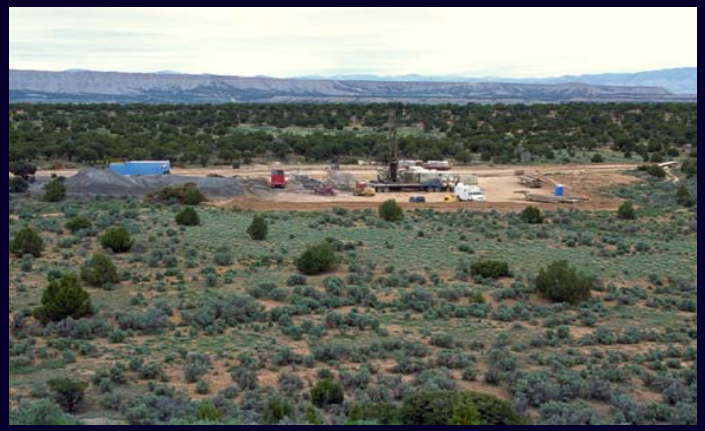
- Proper Siting & Location
- Reduction of Visibility
- Repetition of Landscape Character Elements
- Reduction of Unnecessary Surface Disturbance

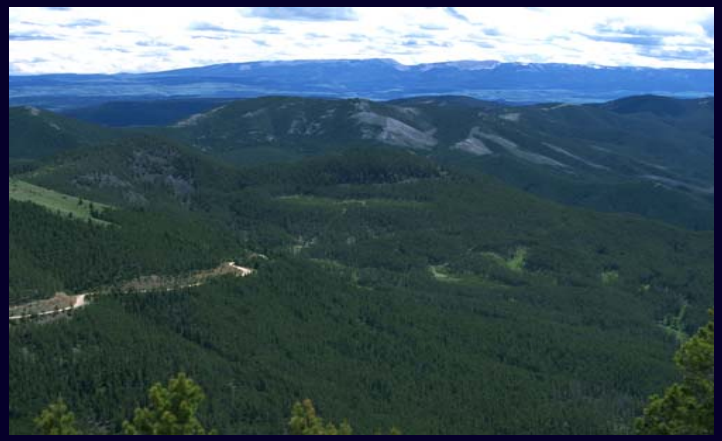
Proper Siting & Location

- The location is screened by topographic or vegetative features
- The optimum site enables the operator to minimize visual impacts and surface disturbance
- Locate project away from sensitive areas
- Locate project away from dominant landscape features
- Locate project away from points of convergence

Proper Siting & Location

Locating projects to minimize visual impacts





Proper Siting & Location

Water tank located in plain view

Proper Siting & Location

Better location for water tank

Proper Siting & Location

Gas well exposed on skyline

Proper Siting & Location

Gas well located below skyline

Proper Siting & Location

Proper Siting and Location

Reduction of Visibility

- Screen project with vegetation
- Bury projects underground
- Hide projects behind a hill or knoll

Reduction of Visibility

Screen project with vegetation

Reduction of Visibility

Water tank is screened from view

Reduction of Visibility

Bury projects underground

Reduction of Visibility

Taking advantage of vegetative screening

Reduction of Visibility

Hide projects behind a hill or knoll

Repetition of Landscape Character Elements

- Modifications don't contrast with **Forms** in the landscape
- Modifications follow **Lines** in the landscape
- Modifications repeat dominant **Colors** in the landscape
- Modification's texture is similar to **Texture** in the landscape

Repeating FORM

Remember: Forms that are bold, regular, vertical, or solid tend to be dominant in the landscape.

Repeating FORM

Openings repeat natural forms

Repeating FORM

Water tank form similar to vegetative form

Repeating FORM

Ski Area Development - Kemmerer

Repeating LINE

Road in Red Canyon

Repeating LINE

Roads fit lines in the landscape

NOT Repeating LINE

NOT Repeating LINE

NOT Repeating LINE

Straight line in a horizontal landscape

Repeating COLOR

- Color is a powerful design tool
- Color is increasingly effective in direct proportion to the distance the project is located from where it is viewed
- Color has not been used nearly as effectively as it should have been
- Past experience reveals that colors have often been lighter than they should be
- Use desert tan and greens with caution

Repeating COLOR

Standard Environmental Colors

Repeating Color

Not Repeating COLOR

Material site near Casper. The high degree of contrast draws attention to the disturbance.

Repeating COLOR

Water Tank at Arches National Park

Repeating COLOR

Effective use of color to minimize visual impacts for power line development

Repeating COLOR

Recreation Site Development

Repeating COLOR

Dark color matches dominant colors in landscape

Repeating COLOR

Repeating COLOR

Always use a color that is equal to or SLIGHTLY DARKER than the surrounding colors.

Color selected should match the dominant color in the landscape.

Repeating COLOR

Gas development near Parachute, CO

Repeating COLOR

Same scene, better color (Simulation)

Repeating COLOR

Visualize the impact with the proper color

Repeating COLOR

A structure very close to the highway

Repeating TEXTURE

Repeating "Texture" means matching the overall character of the surfaces of major features in the landscape.

Repeating TEXTURE

Building with natural materials often results in a texture that fits the surroundings better than building with man-made materials

Repeating TEXTURE

Repeating TEXTURE

Recreating texture through reclamation

Repeating TEXTURE

Reclamation to restore texture

Reduction of Unnecessary Disturbance

- Fit the project to the landscape
- Use smallest area necessary for project
- Minimize cuts and fills
- Promote early reclamation

Reduction of Unnecessary Disturbance

I-70 Corridor – Glenwood Springs, Colorado

Reduction of Unnecessary Disturbance

Use the smallest possible location

Reduce Unnecessary Disturbance

Use the minimum road necessary

Reduction of Unnecessary Disturbance

Reduction of Unnecessary Disturbance

It isn't always necessary to clear the ROW

Reduction of Unnecessary Disturbance

Avoid locations that require large cuts and fills.

Reduction of Unnecessary Disturbance

Don’t cast excess material down-slope

UNIT **6 –** Design Fundamentals