

Visual Contrast Rating Worksheet Presentation

Wyoming BLM
High Desert District
April 16, 2009

Visual Contrast Rating Worksheets

- ❖ Wyoming State Protocol Appendix C is the guidance used for determining visual effects of an undertaking on the integrity of a historic setting.
 - ✓ Applies to historic properties that are eligible for inclusion on the National Register of Historic Places and retain sufficient integrity to convey significance
 - ✓ Setting must be an important aspect of integrity
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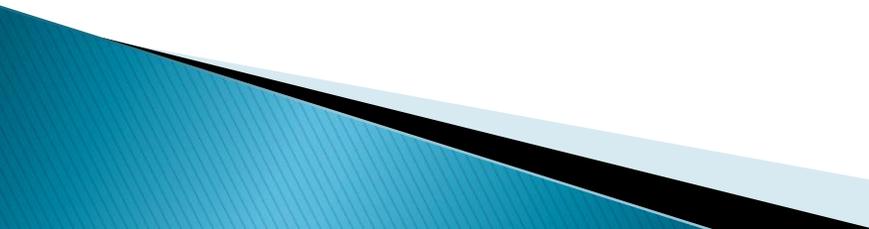


Visual Contrast Rating

A systematic process we use to identify, describe and analyze potential visual impacts of proposed projects and activities.



Visual Contrast Rating

- ▶ The Visual Contrast Rating Worksheet is completed from the historic property and Key Observation Points toward the proposed undertaking
 - ▶ Helps identify where and how the greatest visual contrasts may occur in a project and how these can be mitigated
 - ▶ Assists Bureau personnel to identify and resolve visual impacts to historic properties
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Basic Philosophy

The degree to which an undertaking adversely affects the setting of a historic property is directly related to the amount of visual contrast between it and the existing landscape character



Visual Contrast Rating

The amount of contrast is measured by separating the landscape into major features:

land/water, vegetation, structures

then predicting the magnitude of contrast in each of the landscape character elements:

FORM – LINE – COLOR - TEXTURE



Analytical Format

Major Features				
Landscape Character Elements		Land/Water	Vegetation	Structures
	Form			
	Line			
	Color			
	Texture			

Analytical Format

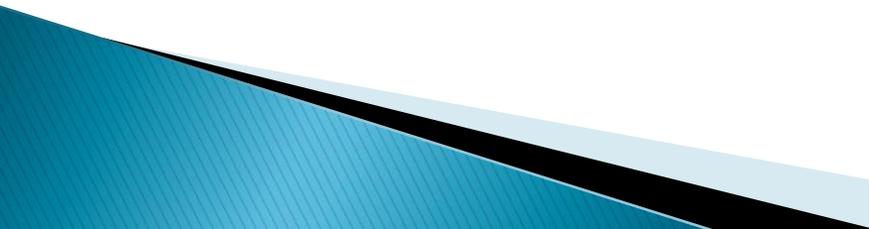
- ▶ Quickly reveals elements & features that cause the greatest visual impact
 - ▶ A guide to reduce the visual impact of a proposed project or activity
 - ▶ Provides basis for project design that reflects and responds to the setting
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Visual Contrast Rating

- ▶ Not a pass – fail exercise
- ▶ Every attempt is made to reduce visual impacts by using the Best Management Practices



Steps - Contrast Rating Process

1. Obtain a complete project description
 2. Identify Historic Property – determine eligibility and if setting is an important aspect of integrity
 3. Assess project visibility - Select Key Observation Points (KOPs)
 4. Prepare visual representation/simulation, if necessary. Obtain backsight/setting analysis from the BLM
 5. Complete Visual Contrast Rating Worksheet
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Step 1 – Obtain Detailed Project Description

- ▶ Understand project design
- ▶ Permanent versus temporary facilities
- ▶ Proposal must be comprehensive
 - Materials?
 - Scale?
 - Colors/Reflectivity?
 - Lights?
 - Movement/Atmospheric effects?
 - Temporary structures/seasonal use?

Step 2 – Identify Historic Property

- Is the portion of the property contributing to its eligibility?
- Is setting an important aspect of the historic property's integrity?
- Viewshed Analysis



Step 3 – Assess Project Visibility

- Section/Line of sight analysis
- Site and area reconnaissance

Key Observation Point – A critical viewpoint or place from which we analyze the visual impact of a Proposed Project



Typical Project KOPs

- ▶ Important Vantage Points
 - ▶ Places from which a proposed project is seen by large numbers of viewers (representative) or critical viewers
 - ▶ Point where view of proposed project is most revealing (careful to avoid bias in analysis)
- 

KOP Considerations

- ▶ Distance
 - ▶ Angle of observation
 - ▶ Number of Viewers
 - ▶ Length of time project is in view
 - ▶ Relative project size
 - ▶ Season of use
 - ▶ Light conditions & other factors as appropriate
- 

Rock Quarry – low angle



Rock Quarry – high angle



Rock Quarry - foreground



Rock Quarry - Background



Tools for visual representation

- ▶ Take site photos and sketch in project
- ▶ Take photos of similar facility/project
- ▶ Line of sight/section view diagram
- ▶ Engineering drawings
- ▶ Wire frame or height/mass representations
- ▶ Photoshop or other photo-realistic tools

****First approach or tool may lead you to use another**



Penstock/pump station site



6/10/2005 14:16

Quick paintshop line drawing



6/10/2005 14:16

Built project



Color option/mitigation



Step 5 – Complete Contrast Rating

- ▶ See Bureau Manual Handbook H-8431-1 (Note the Illustrations and appendices)
 - Tips/techniques:
 - Use a team approach
 - If possible, take a recon trip first to familiarize yourself with directions, setting and light conditions at different times of day
 - GPS and photograph the locations you conduct the analysis from
 - Cover elements on worksheet – can use different format or record observations on tape recorder

Let's Walk Through an Example

- ▶ What is the first step in the process?

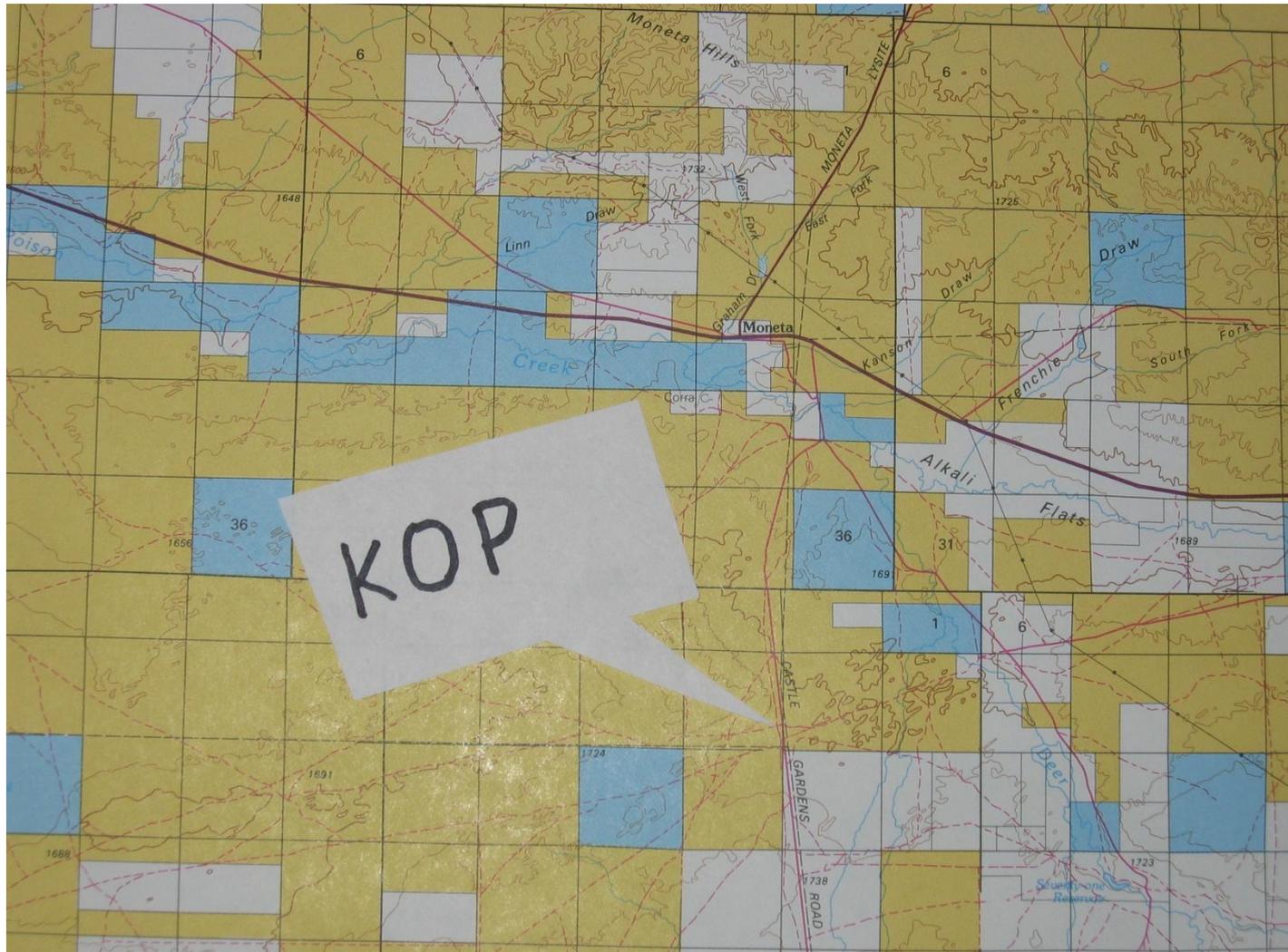
Know the project description

- ▶ What is the plan of development?
 - ▶ How large is the pipeline?
 - ▶ Is the pipeline a surface line or will it be buried?
 - ▶ How many structures will be on the location?
 - ▶ How will they be placed?
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Identify the Historic Property

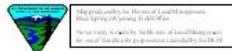
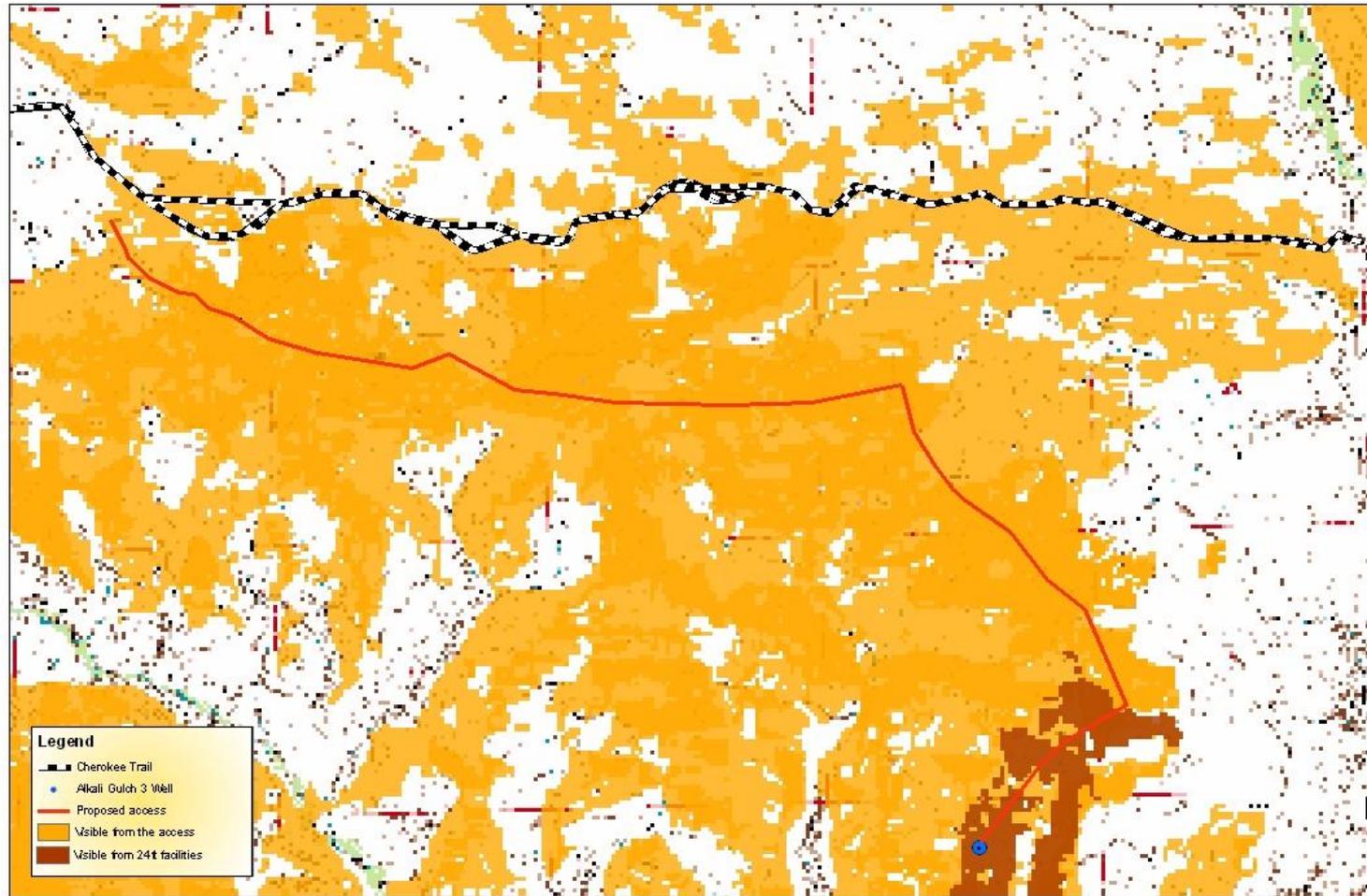


Select KOP(s)



Setting or Backsight Analysis

Alkali Gluch No. 3 Well and Access



Department of the Interior, Bureau of Land Management
Black Spring, CO January 15, 2006
This study is made by the BLM staff of Black Spring
The use of this study is for informational purposes only.



1:30,000

0 0.25 0.5 1 Miles

Backsight analysis for a 5'6" observer
looking out from 24ft facilities and a
ground level access for a distance of 5 miles.

UTM Nad 83
Zone 12
CJS 5/15/2006

Prepare Visual Simulation

- ▶ Photo of proposed project site



Simulation of Proposed Project



Complete Contrast Rating

▶ Section A of Form
8400-4

Form 8400-4 (September 1985)		UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT		Date: Feb 24, 2004
VISUAL CONTRAST RATING WORKSHEET				District: N/A
				Resource Area: Lander
				Activity: Oil & Gas
SECTION A. PROJECT INFORMATION				
1. Project Name: Well No 136	4. Location Township <u>29N</u>		5. Location Sketch	
2. Key Observation Point 29/91 Sec 21: SESE	Range <u>91W</u>			
3. VRM Class VRM Class IV	Section <u>21</u>			

Section B of Contrast Rating Form

Characteristic Landscape Description

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION			
	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Gently rolling terrain, low hills	Low, continuous sagebrush cover, smooth, regular pattern	None noted in view toward the project from the KOP
LINE	Mostly horizontal undulating lines. A horizontal landscape	Weak horizontal lines created by changes in vegetative patterns	None noted in view toward the project from the KOP
COLOR	Light brown to buff where visible	Gray-green of sagebrush is dominant, mostly continuous	None noted in view toward the project from the KOP
TEX-TURE	Smooth, continuous	Medium to slightly coarse in immediate foreground to smooth/fine in middleground	None noted in view toward the project from the KOP

Section C of Contrast Rating Form

Proposed Activity Description

SECTION C. PROPOSED ACTIVITY DESCRIPTION			
	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat, leveled pad(s), curvilinear road(s), narrow, linear form	Veg removed from pad, road(s), reclaimed veg low, sparse	Cylindrical tanks, rectangular separator unit. A dominant visual element
LINE	Where seen, pad appears as a distinct horizontal line, same with roads	Sharper line(s) where veg removed	Structures have vertical alignment and are visible
COLOR	Light brown to buff-colored pad(s) & road surfaces.	Tan to light buff most of year, light green in spring.	Carlsbad Canyon contrasts with darker gray of sagebrush
TEXTURE	Smooth texture on pad(s) & road(s)	Smooth where re-established (grasses) Sage may re-establish in 20 years	Smooth texture of facilities a dominant feature of project

Section D of Contrast Rating form

SECTION D. CONTRAST RATING					SHORT TERM				LONG TERM							
ELEMENTS	1. Degree of Contrast	FEATURES														
		Land/Water Body				Vegetation				Structures				2. Does Project Design meet visual resource management objectives? Yes <u>X</u> No ____ (explain on reverse)		
		Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended. Yes <u>X</u> No ____ (explain on reverse)		
	Form			X				X				X			Evaluator's Names Date:	
	Line		X				X			X					Cimarron Chacon 7/16/04	
	Color			X				X		X					Allysia Angus	
Texture			X				X		X							

Consider mitigation measures as you identify contrast:

- What are strong elements in the project setting?
- What are strong elements in the project?
- What can you borrow from the setting?
- What can you change in the setting?
- What can you change in the project:
 - make it fit in setting (color, form, texture, scale...)
 - move it

Section D – Reverse Side of form

SECTION D. (Continued)

Comments from Item 2.

The line created by the clearing for the road and drill pad creates a contrast that will attract attention. The installation of storage tanks and the separator unit will introduce vertical-aligned forms that contrast with the characteristic landscape. The structures will have a smooth texture as opposed to the coarse texture of surrounding sagebrush. The facilities introduce vertical lines which will contrast with the predominately horizontal landscape. The color of the tanks as proposed will contrast with the darker color of the dominant sagebrush.

Contrast Rating form – Mitigating Measures

Additional Mitigating Measures (See item 3)

1. As per agreement with company representatives, relocate drill pad 250 feet northwest behind/between low stabilized sand dunes.
2. Relocate access road behind/between stabilized dunes
3. Use low profile tanks a maximum of 12 feet high rather than the standard 18 foot tanks
4. Paint facilities a color compatible with sagebrush, the dominant veg species in the area

Simulation of Project with Mitigation







Determination of Effect

No Contrast = No Effect

- ▶ If the proposed project elements will not be seen, there is no contrast between the undertaking and the setting.

Review of VRM Class Objectives

Weak Contrast = No Adverse Effect

- ▶ If proposed project elements can be seen but will not dominate the setting or attract the attention of the casual observer, then the proposed undertaking will result in a weak contrast rating.

Review of VRM Class Objectives

- ▶ Moderate or Strong Contrast = Adverse Effect
 - ▶ If the proposed project elements will easily be seen by the casual observer or if they dominate the setting, then the proposed undertaking will have a moderate or strong contrast rating.
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- ▶ If you have questions, talk with the BLM.