

**APPENDIX J**  
**VISUAL CONTRAST RATING WORKSHEETS**

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# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 01	<b>Latitude / Longitude</b> 21.6478 , -157.9290	<b>Location</b> Laie Hawaii Temple
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Clear and clean prominent water in fountain structure Flat and gently sloping landform in the foreground Rolling to rugged landform partially visible in the background	Jagged domed and flat vegetation in the foreground Rolling vegetation in the background	Bold and rectangular buildings and staircases
<b>LINE</b>	Horizontal smooth (reflecting pool) and vertical geometric (fountain) water Horizontal landform - foreground Curving mountains - background	Flat lawn and shrubs. Regular to round shrubs and trees. Angular and irregular palm trees.	Simple vertical columns and flag pole, horizontal fountains
<b>COLOR</b>	Cool blues reflection light to dark greens	light to dark greens grays browns reds	whites, grays, tans
<b>TEXTURE</b>	smooth and glossy (reflecting pool) medium directional (fountain) gradational landform	smooth to rough	smooth

## Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**  Yes  No **IF YES, FIGURE NUMBER:** \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓					✓
<b>LINE</b>			✓				✓					✓
<b>COLOR</b>			✓				✓					✓
<b>TEXTURE</b>			✓				✓					✓

**OVERALL LEVEL OF CONTRAST:** None

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Moderate	<b>Viewer Use</b> High	<b>OVERALL Response</b> High
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### ADDITIONAL COMMENTS

The Project is 1.7 miles from the Viewpoint 01. Project would be partially to fully screened by vegetation. It is possible that portions of some turbines would be visible through the vegetation; if so, they likely would not be noticed by the casual observer.

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

Updated Jan 2016

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 02	<b>Latitude / Longitude</b> 21.63920000000, -157.9200000000	<b>Location</b> Polynesian Cultural Center
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat	Rounded and irregular, columnar	Flat, blocky parking lot, regular square building
<b>LINE</b>	Horizontal	Angular and smooth	Horizontal parking lot and curbs and vertical light poles and fencing
<b>COLOR</b>	NA (no landform color evident)	light to dark greens browns tans	dark to light grays, tans, whites, blues
<b>TEXTURE</b>	Smooth	Smooth to rough	smooth

## Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**  Yes  No **IF YES, FIGURE NUMBER:** \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
			FORM			✓				✓			
	LINE			✓				✓				✓	
	COLOR			✓				✓				✓	
	TEXTURE			✓				✓				✓	

**OVERALL LEVEL OF CONTRAST:** none

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Moderate	<b>Use Volume</b> High	<b>OVERALL Response</b> Moderate
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**ADDITIONAL COMMENTS**  
Enclosed landscape. Project is 2.5 miles from Viewpoint 02. Views northwest toward Project appear to be effectively screened by trees in and adjacent to the parking lot. There is a slight possibility some turbine blades could be seen through the trees; if so, they would not likely be noticeable.

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 5 2014

Updated Jan 2016



## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 03	<b>Latitude / Longitude</b> 21.6062, -157.9040	<b>Location</b> LDS Church, Hauula
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent flat ocean Flat beach Rugged mountains, rolling to flat land	Rounded and irregular	Flat and curving road Boxy building
<b>LINE</b>	Horizontal ocean Flat beach Rugged sloping mountains in middle ground Rolling to flat hills in background	Bold and rugged to parallel	Horizontal and curving conductor lines Bold building Vertical utility poles, fencing
<b>COLOR</b>	Cool to medium blues Tans, browns	Light to dark greens Browns Tans Reds	Browns, blacks, grays, tans, yellow
<b>TEXTURE</b>	Smooth water Stippled beach and landform - foreground Medium middle ground Striated background	Medium and gradational	smooth and directional

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED FOR KOP?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: None

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Moderate	<b>Use Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Project is 4.8 miles from Church. Attributes are based on view from the highway, rather than from the church itself. It is possible that the tips of turbine blades might be visible above the low ground across the bay. The existing Kahuku turbines are not evident, however, suggesting the Project turbines might also be screened.

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

Updated Jan 2016

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 2014



### Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 04	<b>Latitude / Longitude</b> 21.6757, -157.9580	<b>Location</b> Kahuku Residential Community
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### Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to hilly in middleground	Flat and rolling Angular and rugged	Rectangular boxy homes Vertical poles and fences Diagonal and curving conductor lines. A few turbines in the Kahuku wind farm are visible among structures and trees.
<b>LINE</b>	Horizontal to undulating	Horizontal and vertical rugged and jagged	Bold, geometric Vertical converging and diverging
<b>COLOR</b>	Browns	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, pinks, tans. Grays and blacks. Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

### Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**  Yes  No **IF YES, FIGURE NUMBER:** \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional vertical elements from new wind turbines in much of the view.
<b>LINE</b>	same as above	Same as above	Same as above
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

### Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
			FORM			✓				✓			
	LINE			✓				✓				✓	
	COLOR			✓				✓				✓	
	TEXTURE			✓				✓					✓

**OVERALL LEVEL OF CONTRAST:** Weak

### Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Long	<b>User Volume</b> High	<b>OVERALL Response</b> High
<b>ADDITIONAL COMMENTS</b> The Project turbines would be visible, with the closest about 0.5 mile away. The contrast would be weak because the existing view is highly modified and includes numerous vertical elements.			

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 5, 2014

Updated Jan 2016

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## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 05	<b>Latitude / Longitude</b> 21.6756, - 157.958	<b>Location</b> Kahuku Sugar Mill Site
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to hilly in middleground	Flat and rolling Angular and rugged	Rectangular buildings, curving roads Vertical poles and signs Diagonal and curving conductor lines. Few turbines
<b>LINE</b>	Horizontal to undulating	Horizontal and vertical and wispy rounded, rugged and jagged	Bold, geometric Vertical Curving lines
<b>COLOR</b>	Browns	light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans dark grays and blacks oranges reds Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional turbines
<b>LINE</b>	same as above	Same as above	Additional vertical elements with Project wind turbines
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓								✓	
<b>LINE</b>			✓								✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Low	<b>DURATION OF VIEW</b> Brief	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Low-Moderate
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### ADDITIONAL COMMENTS

Project is 0.6 mile from the Project nearest turbine. Weak contrast within a modified landscape. Viewers are employees and customers of commercial uses at the site.

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

Updated Jan 2016

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 5, 2014



## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 06 (SIM)	<b>Latitude / Longitude</b> 21.6756, - 157.958	<b>Location</b> Kahuku Community Center
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to rolling in middleground and background	Flat and rolling Angular and rugged	Rectangular buildings Vertical light poles, utility poles and fencing Diagonal and curving conductor lines. Few turbines Sports field light standards create strong vertical form.
<b>LINE</b>	Horizontal to undulating	Horizontal rounded, rugged and jagged	Bold, geometric horizontal and vertical Curving lines
<b>COLOR</b>	Browns	light greens to dark greens Yellows, grays, browns	Browns, greens, tans, beiges light grays, browns Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**  Yes  No **IF YES, FIGURE NUMBER:** 4.16-5

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional wind turbines
<b>LINE</b>	same as above	Same as above	Same as above, with additional vertical wind turbines
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓		✓	✓		
<b>LINE</b>			✓				✓		✓	✓		
<b>COLOR</b>			✓				✓			✓		
<b>TEXTURE</b>			✓				✓					✓

**OVERALL LEVEL OF CONTRAST:** Weak

## Section E: Viewer Response

Viewer Sensitivity	DURATION OF VIEW	User Volume	OVERALL Response
Moderate (active recreation)	Brief/intermittent	Moderate	Moderate
<b>ADDITIONAL COMMENTS</b>			
Closest turbine would be 0.6 mile from Viewpoint 06. Scenic quality is moderate. Moderate contrast, based on existing visual context.			

<b>EVALUATOR(S)</b> Jennifer D'Avanzo Chris Lawson	<b>DATE</b> Picture Taken - May 1, 2013 Evaluated - May 5, 2014	Updated Jan 2016	<b>PAGE 1 / 1</b>
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# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 07	<b>Latitude / Longitude</b> 21.6756, - 157.958	<b>Location</b> Malaekahana State Recreation Area
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to rolling in middleground and rugged background	Flat and rounded to rolling rugged	Distant geometric buildings and turbine blades Vertical poles and fences Curving conductor lines and roads
<b>LINE</b>	Horizontal to undulating	Horizontal rounded, rugged and jagged	Bold bands and curving conductors Vertical poles
<b>COLOR</b>	Browns	light greens to dark greens Yellows, grays, browns, tans	Browns, greens, tans, beiges light grays, browns Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: 4.16-5

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Additional triangular turbine blades
<b>LINE</b>	same as above	Same as above	Additional irregular turbine blades
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>				✓				✓		✓		
<b>LINE</b>				✓				✓		✓		
<b>COLOR</b>				✓				✓			✓	
<b>TEXTURE</b>				✓				✓				✓

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Views inside the park are completely screened by vegetation. Attributes for Viewpoint 07 are based on the view at the entrance of the Park so users would be driving by and not stopping.  
Scenic quality is moderate.  
Project is 1.0 mile from Viewpoint 07

EVALUATOR(S)  
Jennifer D'Avanzo  
Chris Lawson

DATE  
Updated Jan 2016

DATE  
Picture Taken - May 1, 2013  
Evaluated - May 5, 2014





# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 08	<b>Latitude / Longitude</b> 21.6937, - 157.98	<b>Location</b> Kamehameha Highway near Kahuku
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat to rolling in middleground. Rugged background.	Flat and rounded Rolling and rugged	Curving road, horizontal fences, rectangular building, prominent vertical poles and non directional blades from wind turbines. Curving conductors
<b>LINE</b>	Horizontal and rounded to undulating	Horizontal and rounded Vertical, angular and wispy Rugged	Geometric, vertical. Turbines, horizontal, curving conductors.
<b>COLOR</b>	Browns, tans and light greens	light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns, grays, blacks, tans, greens, reds, yellows
<b>TEXTURE</b>	Smooth to medium	Smooth to coarse	Smooth to medium

## Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**  Yes  No **IF YES, FIGURE NUMBER:** \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional vertical turbines
<b>LINE</b>	same as above	Same as above	Same as above, with additional turbines
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

		FEATURES											
		LAND/WATER				VEGETATION				STRUCTURES			
DEGREE OF CONTRAST	ELEMENTS	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
			FORM			✓				✓		✓	
	LINE			✓				✓		✓			
	COLOR			✓				✓				✓	
	TEXTURE			✓				✓					✓

**OVERALL LEVEL OF CONTRAST:** Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> High	<b>OVERALL Response</b> Moderate
<b>ADDITIONAL COMMENTS</b> Existing Scenic Quality is low. Lower parts of Project turbines would be blocked from view. Highway viewpoint is 0.4 mile from closest turbine.			

**EVALUATOR(S)**  
Jennifer D'Avanzo  
Chris Lawson

**DATE**  
Updated Jan 2016

**DATE**  
Picture Taken - May 1, 2013  
Evaluated - May 5, 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 09	<b>Latitude / Longitude</b> 21.6763, -157.947	<b>Location</b> Kahuku High and Intermediate School
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to rugged and rolling background	Flat, vertical, and rounded Rugged background	Rectangular buildings, curving roads Vertical poles and signs Diagonal and curving conductor lines Lattice communication tower
<b>LINE</b>	Horizontal to undulating	Horizontal and vertical and wispy Rolling	Bold, geometric, and horizontal Vertical Curving lines
<b>COLOR</b>	Browns	Light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans Dark grays and blacks, oranges, reds Whites and red
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Upper parts of vertical and angular wind turbines added
<b>LINE</b>	same as above	same as above	Upper parts of vertical wind turbines
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short and Intermittent	<b>User Volume</b> High	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Scenic quality is low. Project is 0.5 mile from school. Upper parts of turbines would be visible but subordinate to other elements of modified landscape.

EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

DATE

Picture Taken - May 2, 2013  
Evaluated - May 5, 2014



## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 10	<b>Latitude / Longitude</b> 21.7022, -157.992	<b>Location</b> Turtle Bay Resort Golf Course
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Wetland/Water - curving Flat to rolling foreground to rugged background	Flat and rolling to vertical and rounded Angular and rugged	Vertical wind turbines Curving paths Rectangular buildings
<b>LINE</b>	Undulating to rugged	Horizontal Vertical, rounded, rugged and jagged	Bold vertical and irregular Curving Geometric
<b>COLOR</b>	Browns, oranges, sienna, and greens	Light greens to dark greens Yellows, grays, browns	Whites, greys, tans
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Potentially angular and vertical additional turbines
<b>LINE</b>	same as above	same as above	Potentially vertical and geometric additional turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Low-Moderate
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### ADDITIONAL COMMENTS

Project is 2.6 miles. There is an existing wind farm closer to viewer. Project turbines would be partially screened.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - April 23, 2013  
Evaluated - May 5, 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 11	<b>Latitude / Longitude</b> 21.5771, -157.882	<b>Location</b> Punaluu Beach Park
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent flat ocean Flat beach Rugged mountains, rolling to flat land	Irregular and rugged	Rectangular buildings Vertical poles
<b>LINE</b>	Horizontal ocean Flat beach Rugged mountains in middleground Rolling to flat hills in background	Vertical and curving	Geometric and vertical
<b>COLOR</b>	Cool to medium and dark blues with tans and whites Tans, browns	Light to dark greens, yellows Browns Tans	Tans, light grays, greens, browns
<b>TEXTURE</b>	Smooth water Stippled beach and landform - foreground Medium middleground and background	Medium and gradational	Smooth

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED ?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Likely same as above
<b>LINE</b>	same as above	same as above	Likely same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: none

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Moderate	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Project is 7.5 miles from Beach, may be visible from the highway but likely blocked or screened. Project would not be noticeable to the casual observer. Viewer would be looking at ocean mostly likely not toward project.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - May 1, 2013  
Evaluated - May 2014



### Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 12	<b>Latitude / Longitude</b> 21.5569, -157.853	<b>Location</b> Ahupua'a O'Kahana Valley State Park Beach
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### Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Flat clear water Rocky and flat to rugged landform	Rugged to vertical	Distant geometric buildings
<b>LINE</b>	Horizontal Rugged	Undulating and vertical Horizontal edge	Geometric
<b>COLOR</b>	Cool light blues to medium and dark blues Tans, blacks, browns, beiges, and whites	Light to dark greens, tans, browns, yellows	Whites
<b>TEXTURE</b>	Coarse to medium	Medium and rough	Scattered fine

### Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

### Section D: Contrast Rating

#### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: none

### Section E: Viewer Response

<b>SCENIC QUALITY</b> High	<b>DURATION OF VIEW</b> Moderate	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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#### ADDITIONAL COMMENTS

Project is 9.0 miles from beach. Project likely blocked or screened, not noticeable if partially visible.

#### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

#### DATE

Picture Taken - May 1,  
2013  
Evaluated - May 5, 2014



### Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 13	<b>Latitude / Longitude</b> 21.6839, -157.955	<b>Location</b> James Campbell National Wildlife Refuge
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### Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to rolling in middleground and rugged background	Flat and rolling Angular and rugged	Rectangular sign, scattered rectangular buildings Vertical utility and fence poles, wind turbines, and horizontal fences Diagonal and curving conductor lines
<b>LINE</b>	Horizontal to undulating	Horizontal Rounded, rugged, and jagged	Geometric and horizontal Bold vertical lines Curving lines
<b>COLOR</b>	Browns	Light greens to dark greens Yellows, grays, browns	Browns, greens, tans, beiges Light grays, browns Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and coarse

### Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: 4.16-6

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Same as above	Same as above	Same as above, with additional vertical and angular turbine blades
<b>LINE</b>	same as above	Same as above	Additional vertical and angular wind turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

### Section D: Contrast Rating

#### FEATURES

DEGREE OF CONTRAST	ELEMENTS	LAND/WATER				VEGETATION				STRUCTURES			
		STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
		FORM			✓				✓		✓		
LINE			✓				✓		✓				
COLOR			✓				✓				✓		
TEXTURE			✓				✓					✓	

OVERALL LEVEL OF CONTRAST: Moderate

### Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Moderate	<b>User Volume</b> Low	<b>OVERALL Response</b> Moderate
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#### ADDITIONAL COMMENTS

Distance from Project is 1 mile. Existing scenic quality is moderate. Project turbines would be co-dominant with the existing wind farm.

#### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

#### DATE

Picture Taken - May 2, 2013  
Evaluated - May 5 2014



## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 14	<b>Latitude / Longitude</b> 21.6027, -157-9050	<b>Location</b> North Windward Baptist Church
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Flat	Flat to rounded and angular	Rectangular building Vertical utility poles Curving conductors
<b>LINE</b>	Horizontal	Horizontal undulating and jagged	Angled rooflines, geometric, vertical, and partially curving
<b>COLOR</b>	Tans, browns	Light to dark greens and yellows Browns Tans	Browns, grays, tans, whites
<b>TEXTURE</b>	Smooth to medium	Smooth to medium to coarse	Smooth

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	Same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: None

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Moderate	<b>User Volume</b> Low	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Project is 5 miles from Church. Grounds are enclosed by vegetation and structures. No views of Project from Church or property

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - May 1, 2013  
Evaluated - May 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 15	<b>Latitude / Longitude</b> 21.6489, -157.914	<b>Location</b> Laie Point Coastal Residences
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Prominent flat ocean Flat beach Rugged hills	Irregular and rugged	Rectangular buildings in foreground and middleground Angular and irregular turbine blades are faintly visible
<b>LINE</b>	Horizontal undulating ocean Flat beach Rugged mountains in middleground Rolling to flat hills in background	Vertical and rugged	Geometric and vertical
<b>COLOR</b>	Cool to medium and dark blues with tans and whites Beiges, tans, browns	Light to dark green, yellows Browns Tans	Whites, tans, light grays, greens, browns
<b>TEXTURE</b>	Smooth water Stippled beach and landform - foreground Medium middleground and background	Medium and gradational	Smooth

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Same as above, with additional turbines
<b>LINE</b>	same as above	same as above	Same as above, with additional vertical and irregular turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓		✓			
<b>LINE</b>			✓				✓		✓			
<b>COLOR</b>			✓				✓			✓		
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Moderate

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Long	<b>User Volume</b> Low-Moderate	<b>OVERALL Response</b> High
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### ADDITIONAL COMMENTS

Project is 2.5 miles from Laie Point. Scenic quality is high. Lower parts of project turbines would probably be screened, and upper parts would appear similar to existing turbines. Project turbines would be more prominent.

EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

DATE

Picture Taken - May 1, 2013  
Evaluated - May 2014





# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 16	<b>Latitude / Longitude</b> 21.5569, -157.853	<b>Location</b> Swanzy Beach Park
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	Flat clear water Rocky and flat to rugged landform	Flat Vertical and rounded Rugged	Geometric buildings Curving path and wall
<b>LINE</b>	Horizontal Rugged	Horizontal Vertical Undulating	Geometric and curving
<b>COLOR</b>	Cool and light blues to medium and dark blues Tans, blacks, browns, beiges, and whites	Light to dark greens, tans, browns, yellows	Grays, blues, whites, browns
<b>TEXTURE</b>	Coarse and smooth to medium	Smooth, medium, and rough	Coarse to smooth

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	same as above
<b>LINE</b>	same as above	same as above	same as above
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: None

## Section E: Viewer Response

<b>Viewer Sensitivity</b> High	<b>DURATION OF VIEW</b> Moderate	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Project is 9.5 miles from park. 5-6 Kahuku Wind Farm turbines can be detected if photos from site are enlarged; they are not evident when viewed normally, so not noticeable to casual observer.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - May 1,  
2013  
Evaluated - May 5, 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 17	<b>Latitude / Longitude</b> 21.6759, -157.954	<b>Location</b> Kahuku Community Hospital and Medical Center
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat and rolling in foreground and middleground Rugged background	Flat, irregular and rounded	Rectangular buildings and fences. Flat parking lots Vertical poles, turbines, and signs. Non-directional turbine blades Diagonal and curving conductor lines
<b>LINE</b>	Horizontal to undulating	Horizontal and vertical and wispy	Bold, geometric, and horizontal Vertical Curving lines
<b>COLOR</b>	Browns, siennas	Light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans Dark grays and blacks, oranges, reds Whites
<b>TEXTURE</b>	Smooth to medium	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional vertical and angular turbines
<b>LINE</b>	same as above	Same as above	Same as above, with additional vertical and angular wind turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Scenic quality is low due to many constructed features. Project is 0.5 mile from viewpoint. Project turbines would be partially screened or blocked. Weak contrast, based on view context.

EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

DATE

Picture Taken - May 2, 2013  
Evaluated - May 5, 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 18	<b>Latitude / Longitude</b> 21.6745, -157.952	<b>Location</b> Kahuku Elementary School
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat and rolling in foreground and middleground Rugged background	Flat, irregular and rounded	Rectangular buildings and fences. Curving road Vertical poles, turbines and signs. Non-directional turbine blades Diagonal and curving conductor lines
<b>LINE</b>	Horizontal to undulating	Horizontal and vertical and wispy	Bold, geometric, and horizontal Vertical Curving lines
<b>COLOR</b>	Browns, siennas	Light greens to dark greens Yellows, grays, browns	Browns, yellows, blues, greens, tans Dark grays and blacks, oranges, reds Whites
<b>TEXTURE</b>	Smooth to coarse	Smooth to rough	Smooth and medium

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	Same as above	Same as above, with additional angular and vertical turbines partially screened
<b>LINE</b>	same as above	Same as above	Same as above, with additional vertical and angular wind turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓				✓	
<b>LINE</b>			✓				✓				✓	
<b>COLOR</b>			✓				✓				✓	
<b>TEXTURE</b>			✓				✓				✓	

OVERALL LEVEL OF CONTRAST: Weak

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> High	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Existing scenic quality is low. Contrast is weak due to dominance of constructed features and partial screening/blocking of Project turbines.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - May 2, 2013  
Evaluated - May 5, 2014



## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 19	<b>Latitude / Longitude</b> 21.6832, -157.945	<b>Location</b> Kahuku Golf Course
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat and rolling foreground to vertical in middleground and rugged background	Flat and rolling Angular and rugged	Vertical poles, turbines, non-directional blades Vertical lattice communication tower
<b>LINE</b>	Horizontal to jagged to undulating	Horizontal and rounded Rugged and jagged	Bold vertical lines
<b>COLOR</b>	Browns, tans, and light greens	Light greens to dark greens Yellows, grays, browns	Whites, browns, grays, red
<b>TEXTURE</b>	Smooth and rough to medium	Smooth to rough	Smooth

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: 4.16-7

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Same as above, with increased number of irregular turbine blades
<b>LINE</b>	same as above	same as above	Same as above, with increased number vertical wind turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓		✓			
<b>LINE</b>			✓				✓		✓			
<b>COLOR</b>			✓				✓			✓		
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Moderate

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short-Moderate	<b>User Volume</b> Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Golf course is 1.0 mile from Project site. There is an existing wind farm in view to west, with turbines partially screened by vegetation but prominent. Project turbines would be co-dominant, moderate contrast.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - May 2, 2013  
Evaluated - May 5 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 20	<b>Latitude / Longitude</b> 21.6596, -157.933	<b>Location</b> Malaekahana Bike and Pedestrian Path
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat in foreground to rolling in middleground and rugged background	Flat and rounded Rolling and rugged Columnar	Linear, flat path, horizontal fences, vertical turbines, non-directional blades, highway Rectangular scattered buildings Vertical rows of utility poles
<b>LINE</b>	Horizontal and rounded to undulating	Horizontal and rounded Rugged	Vertical, horizontal, curving geometric
<b>COLOR</b>	Browns, tans, and light greens	Light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns, grays, reds
<b>TEXTURE</b>	Smooth to medium	Smooth to medium	Smooth paved surfaces and pastures, coarse vegetation

## Section C: Proposed Activity Description

HAS PHOTO SIMULATION BEEN CREATED?  Yes  No IF YES, FIGURE NUMBER: 4.16-8

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Same as above, with increased number of turbines
<b>LINE</b>	same as above	same as above	Same as above, with increased number of vertical turbines
<b>COLOR</b>	same as above	same as above	Same as above, with more white from turbines
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓		✓			
<b>LINE</b>			✓				✓		✓			
<b>COLOR</b>			✓				✓			✓		
<b>TEXTURE</b>			✓				✓					✓

OVERALL LEVEL OF CONTRAST: Moderate

## Section E: Viewer Response

<b>VIEWER Sensitivity</b> High	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> Low-Moderate	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

Path viewpoint location is 1.2 miles from Project. Scenic quality in view toward Project is moderate, but low in view along highway corridor. Contrast with Project based only on simulation would be strong, but reduced to moderate in this context.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - April 22, 2014  
Evaluated - May 5 2014



# VISUAL CONTRAST RATING WORKSHEET

## Section A: Project Information

<b>Project Name</b> Na Pua Makani	<b>Viewpoint / Photo Point</b> 21	<b>Latitude / Longitude</b> 21.6937, -157.98	<b>Location</b> Kamehameha Highway near Turtle Bay
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## Section B: Characteristic Landscape Description

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	No water Flat to rolling in middleground. Rugged background	Flat and rounded Rolling and rugged	Curving road, horizontal fences, rectangular building, prominent vertical poles and non-directional blades from wind turbines. Curving conductors
<b>LINE</b>	Horizontal and rounded to undulating	Horizontal and rounded Vertical, angular, and wispy Rugged	Geometric, vertical turbines, horizontal, curving conductors
<b>COLOR</b>	Browns, tans, and light greens	Light greens to dark greens Yellows, grays, browns, tans, beiges	Whites, browns, grays, blacks, tans, greens, reds, yellows
<b>TEXTURE</b>	Smooth to medium	Smooth to coarse	Smooth to medium

## Section C: Proposed Activity Description

**HAS PHOTO SIMULATION BEEN CREATED?**     Yes     No    **IF YES, FIGURE NUMBER:** \_\_\_\_\_

	LAND / WATER	VEGETATION	STRUCTURES
<b>FORM</b>	same as above	same as above	Same as above, with additional vertical turbines partially blocked by ridge
<b>LINE</b>	same as above	same as above	Same as above, with additional turbines
<b>COLOR</b>	same as above	same as above	same as above
<b>TEXTURE</b>	same as above	same as above	same as above

## Section D: Contrast Rating

### FEATURES

DEGREE OF CONTRAST	LAND/WATER				VEGETATION				STRUCTURES			
	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE	STRONG	MODERATE	WEAK	NONE
<b>FORM</b>			✓				✓		✓			
<b>LINE</b>			✓				✓		✓			
<b>COLOR</b>			✓				✓			✓		
<b>TEXTURE</b>			✓				✓					✓

**OVERALL LEVEL OF CONTRAST:** Moderate

## Section E: Viewer Response

<b>Viewer Sensitivity</b> Moderate	<b>DURATION OF VIEW</b> Short	<b>User Volume</b> High	<b>OVERALL Response</b> Moderate
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### ADDITIONAL COMMENTS

From highway. 1.6 miles from the Project. Scenic quality is low due to constructed features, including an existing wind farm. Low ridge would partially block views of Project turbines.

### EVALUATOR(S)

Jennifer D'Avanzo  
Chris Lawson-updated Jan 2016

### DATE

Picture Taken - April 22, 2014  
Evaluated - May 5 2014