



U.S.D.A. FOREST SERVICE  
COLUMBIA RIVER GORGE NATIONAL SCENIC AREA  
902 WASCO AVENUE, SUITE 200  
HOOD RIVER, OR 97031

Telephone: 541-308-1700  
Fax: 541-386-1916

## Columbia River Gorge National Scenic Area PROJECT REVIEW APPLICATION

DATE OF APPLICATION: November 7, 2014

<b>APPLICANTS</b>	<b>PROPERTY OWNERS</b>
DOE/Bonneville Power Administration	Scott A. Hall
<b>MAILING ADDRESS</b>	<b>MAILING ADDRESS</b>
PO Box 3621 TERR-3 Portland, OR 97208	9650 Highway 14 Goldendale, WA 98620-4649
<b>APPLICANT'S SIGNATURE AND DATE</b>	<b>PROPERTY OWNER'S SIGNATURE AND DATE</b>
	
PHONE: 503-230-5577	PHONE:
E-MAIL: clmeyer@bpa.gov	E-MAIL:
<b>LOCATION OF PROPERTY</b> (Township, Range, Section, Quarter Section and Tax Lot)	<b>PROPERTY ADDRESS</b> (If Applicable)
Township 2, Range 15	Ritzschker Road, Goldendale, WA
PARCEL SIZE (ACRES): 71.58	COUNTY, STATE: Klickitat, WA
EXISTING LAND USE: Existing Radio Transmission Site and Grazing	

**PROJECT DESCRIPTION:** Describe your proposed project, including details (plans, elevations, and/or photos) on structures to be built, location and types of utilities and infrastructure, drainfields, accessory buildings, ground leveling, and filling, or any other relevant activity or mitigation measures proposed. Use additional sheets as necessary:

BPA plans to replace the existing leased Haystack Butte Radio Station site and building with a new BPA owned site and building approximately 150' from the current location. BPA proposes to

- acquire a 8300 square foot parcel located North of the existing site;
- build a new 600 square foot radio/equipment station building constructed of concrete masonry units (CMU) with a wood framed roof with a roof covering of painted metal (muted green or brown);
- install a propane tank to provide fuel for back-up generator;
- install an electrical service;
- construct a 80 foot tall communications tower;
- relocate/replace an existing shared access road that currently is located within the proposed project area with a new shared access road.

The proposed radio/equipment station building would house batteries, communication racks, a generator and a HVAC system. To relocate the existing shared access road some fill material would be imported to the site and used as road bedding/base. Formal landscaping is not proposed due to the lack of water, wind conditions and the absence of existing vegetation other than dry land grasses on the site. All construction would occur within BPA owned parcels or easements acquired as part of this project.

Once the new site is acquired and the physical improvements are completed, new digital radios will be installed in the new building and new microwave antennas will be installed on the new tower to provide digital communication path's from Haystack Radio Site to Big Eddy and Rock Creek Substations. The analog equipment from the existing building will be retired. It is the intent of BPA to remove the existing replaced building and tower when all of the equipment has been retired. If requested and property approved, the existing facility could be turned over to the tribal land owners for their use.

Building, road and tower construction is proposed to commence summer 2015. Radio installation would follow in 2016.

**See Exhibits A, B, C and D**

**APPLICATION CHECKLIST:** The following is required to complete your application

Application form completed and signed by applicant and property owner  
Completed Site Plan  
Key viewing areas checklist (attached)  
Names and addresses of adjacent property owners within 200 feet of parcel  
Any additional information as required:

**KEY VIEWING AREAS:** Key viewing areas are important public viewpoints and areas that afford opportunities to view the Gorge scenery. Key viewing areas are listed below. Please check those sites which can be seen from your property.

Historic Columbia River Highway  
Sandy River  
Portland Women's Forum State Park  
Crown Point  
Rooster Rock State Park  
Multnomah Falls  
Larch Mountain  
**Highway I-84, including rest stops**  
Bonneville Dam Visitor Centers  
Sherrard Point on Larch Mountain  
Rowena Plateau/Nature Conservancy Viewpoint  
Larch Mountain Road  
Wyeth Bench Road  
County Road 1230 (Old WA St. Route 14)  
Washington State Route 14  
**Washington State Route 142**  
Washington State Route 141  
Cook-Underwood Road  
**Dog Mountain Trail**  
Beacon Rock  
Cape Horn  
**Columbia River**  
Pacific Crest Trail  
Oregon Highway 35

**See Exhibit E**

**PROJECT SITE PLAN:** A plan drawn in black ink at a scale of about 1 inch equal to 200 feet (1:2400) or at a scale providing greater detail must be included with the application.

If the parcel is very large, you may show the project on the portion of the parcel affected by the proposed use. Be sure, however, to show enough of the parcel or some adjacent features, such as roads, so that the reviewers can orient themselves on your map. A small vicinity map showing the subject parcel and surrounding parcels may help.

At a minimum, you must show the following features:

Applicant(s) name

Location and width of existing and proposed roads, driveways, and trails

Scale and north arrow

Location and size of existing and proposed structures

Boundaries of parcel with dimensions and size

Location of existing and proposed services including wells or other water supplies, structures, power and telephone poles and lines and outdoor lighting.

Significant terrain features or landforms

Location and depth of all proposed grading and ditching

Groupings and species of trees or other vegetation on the parcel

Location and species of vegetation that would be removed or planted

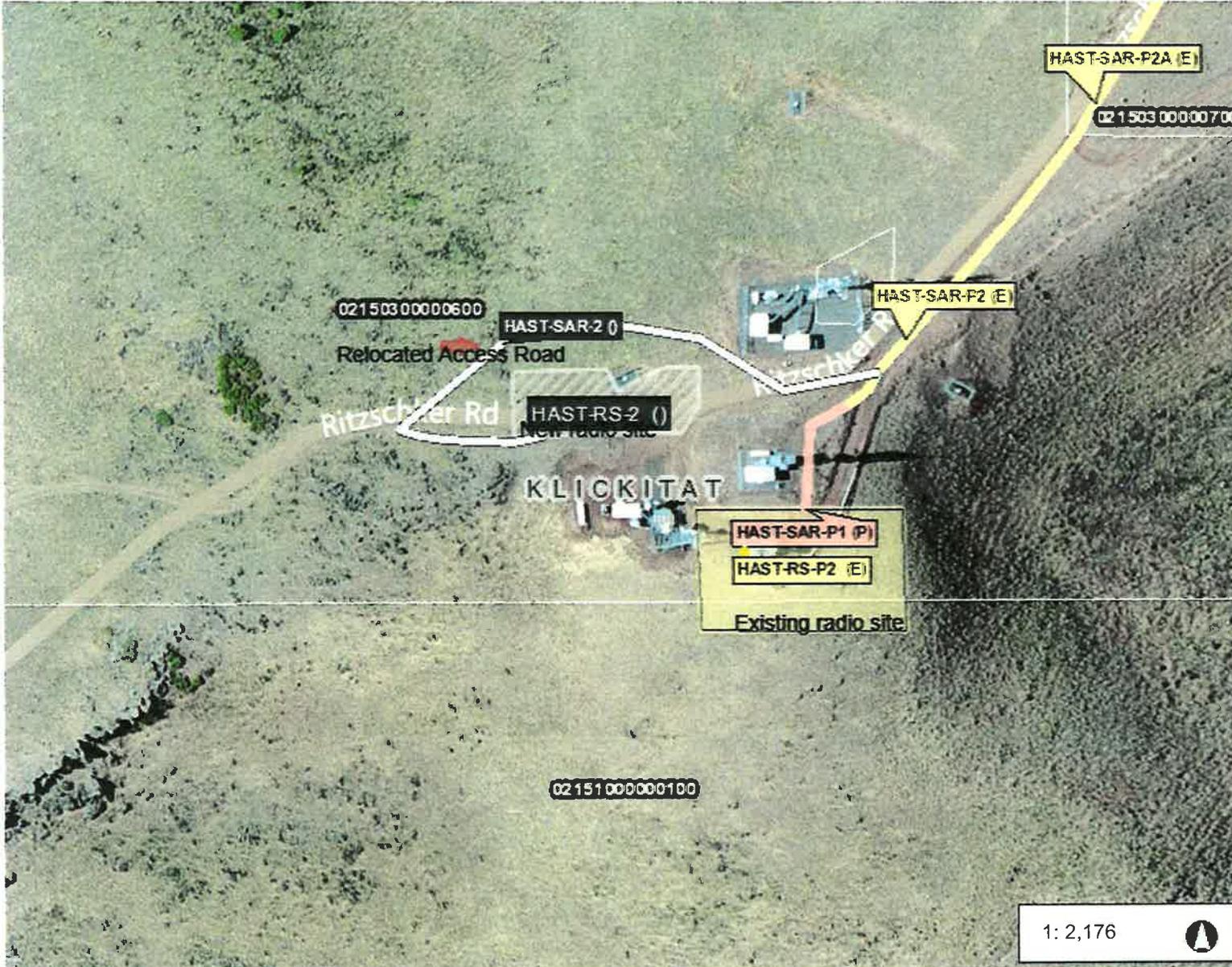
Water courses and bodies of water

**See Exhibit C**

**ADJACENT PROPERTY OWNERS AND EXISTING LAND USE  
ON ADJACENT PARCELS WITHIN 200 FEET OF PROJECT PROPERTY:**

Township, Range, Section, Tax Lot	Name and Address	Existing Land Use
T2, R15, Sec 3 02150300000400	Scott A Hall 9650 Highway 14 Goldendale, WA 98620-4649	Dry land grass/grazing/agriculture
T2, R15, Sec 3 02150300000700	PUD of Klickitat County 1313 S Columbus Avenue Goldendale, WA 98620-9578	Electrical substation/facility
T2, R15, Sec 2 02151000000100	Indian Lands Yakama Nation PO Box 151 Toppenish, WA	Existing BPA Haystack Butte radio communications site, Tribal Land
T2, R15, Sec 2 02150200000300	Scott A Hall 9650 Highway 14 Goldendale, WA 98620-4649	Dry land grass/grazing/agriculture
T2, R15, Sec 11 02151100000200	Scott A Hall 9650 Highway 14 Goldendale, WA 98620-4649	Dry land grass/grazing/agriculture
T2, R15 Sec 3 0215110300000500	Scott A Hall 9650 Highway 14 Goldendale, WA 98620-4649	Dry land grass/Grazing/agriculture
T2, R15, Sec 2 02150200000100	Indian Lands Yakama Nation PO Box 151 Toppenish, WA	Tribal Land
<b>See Exhibit F</b>		





**Legend**

- All Substations
  - BPA Substation
  - BPA Maintenance HQ
  - Non-BPA Substation
- BPA Transmission Towers
- BPA Transmission Lines
- BPA Outgrant Point
- BPA Outgrant Line
- BPA Outgrant Area
- Land Acquisition Status - BPA
  - Acquisition Not Complete
  - Fee
  - Easement
  - Permit
  - Other, Lease, Neither
- Inactive BPA Tract Point
- Land Acquisition Status - BPA
  - Acquisition Not Complete
  - Fee
  - Easement
  - Permit
  - Other, Lease, Neither
- Inactive BPA Tract Line
- Land Acquisition Status - BPA
  - Acquisition Not Complete
  - Fee
  - Easement
  - Permit

1: 2,176

0.1 0 0.03 0.1 Miles

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
eGIS.BPA.Gov

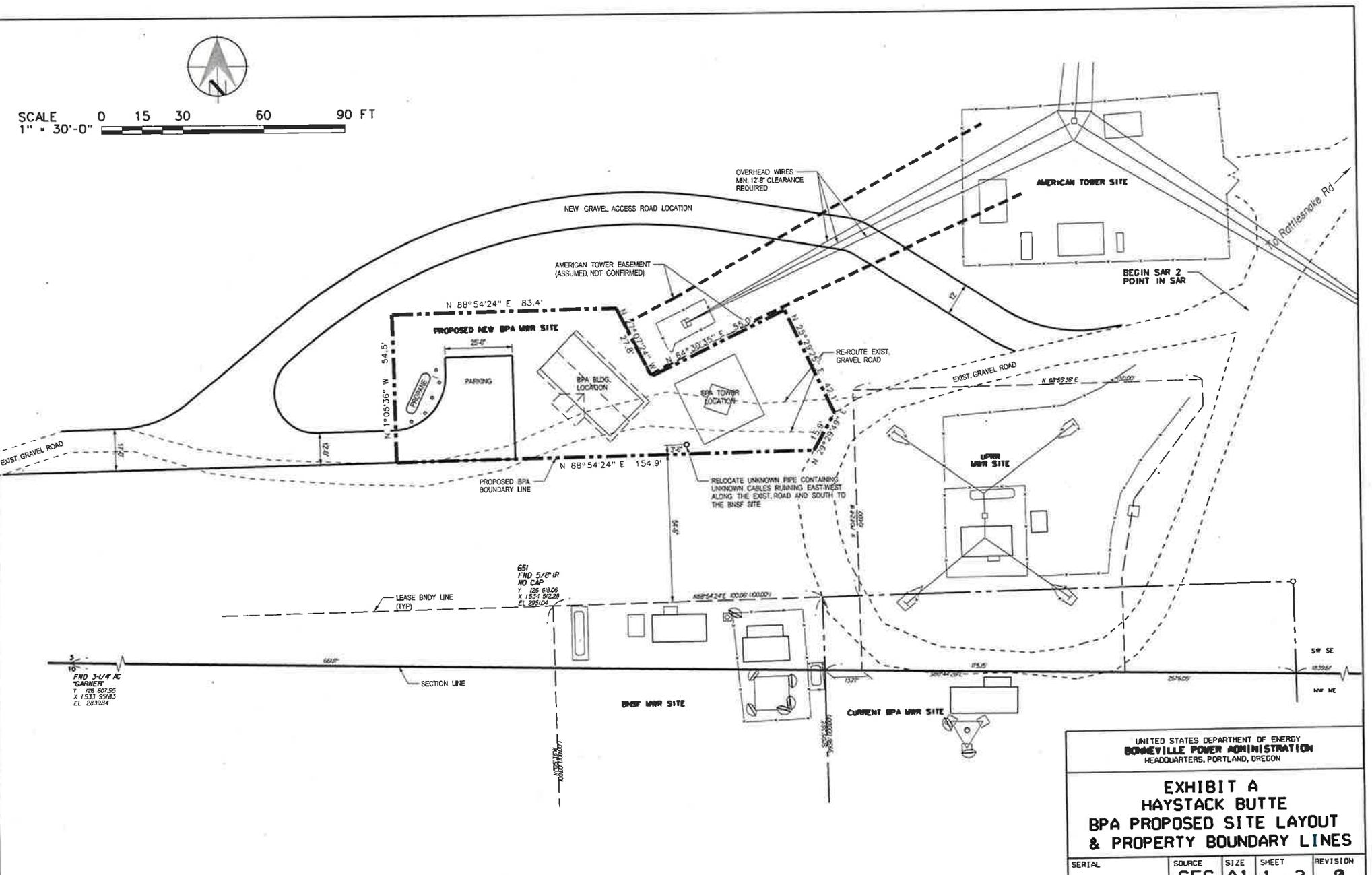
Map scale varies across map. Scale bars on printed maps are approximate and are not intended to be used for precise measurement. It is recommended that you use the measurement tools in eGIS Live Map for more precise measurements. This map is a user generated static output from BPA's Enterprise GIS System and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

**Notes**

**EXHIBIT B**



SCALE 0 15 30 60 90 FT  
1" = 30'-0"

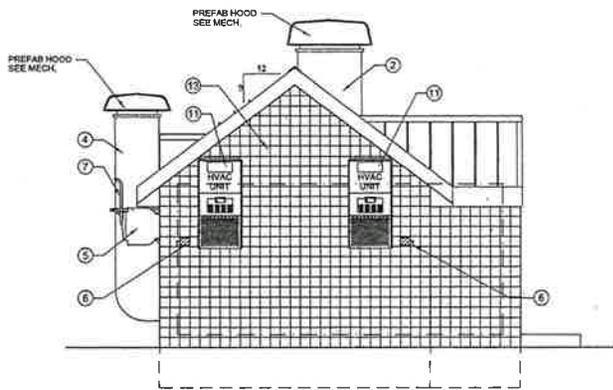


FWD 34/4 AC  
GARNEY  
Y 126 607.55  
X 1531 951.83  
EL 2638.24

651  
FWD 5/8" IR  
NO CAP  
Y 126 618.06  
X 1531 952.29  
EL 2651.04

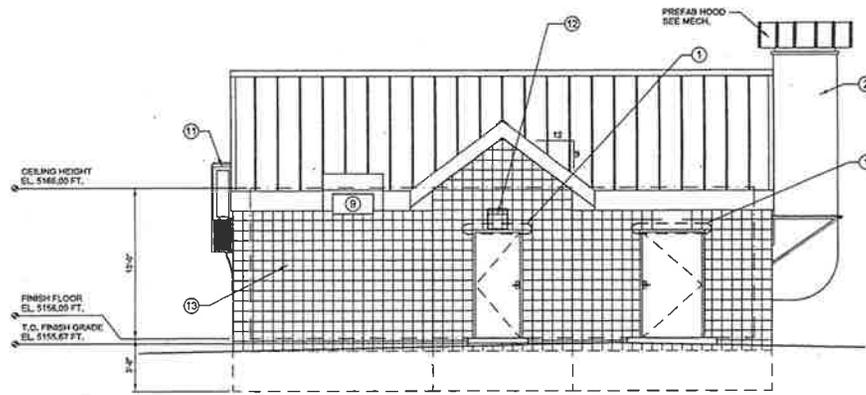
UNITED STATES DEPARTMENT OF ENERGY BONNEVILLE POWER ADMINISTRATION HEADQUARTERS, PORTLAND, OREGON				
<b>EXHIBIT A HAYSTACK BUTTE BPA PROPOSED SITE LAYOUT &amp; PROPERTY BOUNDARY LINES</b>				
SERIAL	SOURCE	SIZE	SHEET	REVISION
	SFC	A1	1 OF 2	0

**EXHIBIT C**



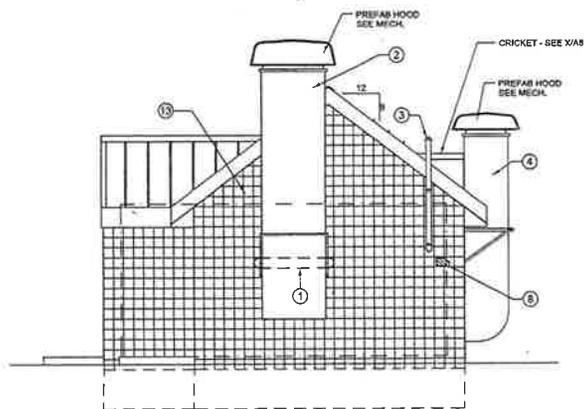
NORTH ELEVATION

SCALE 1/4" = 1'-0"



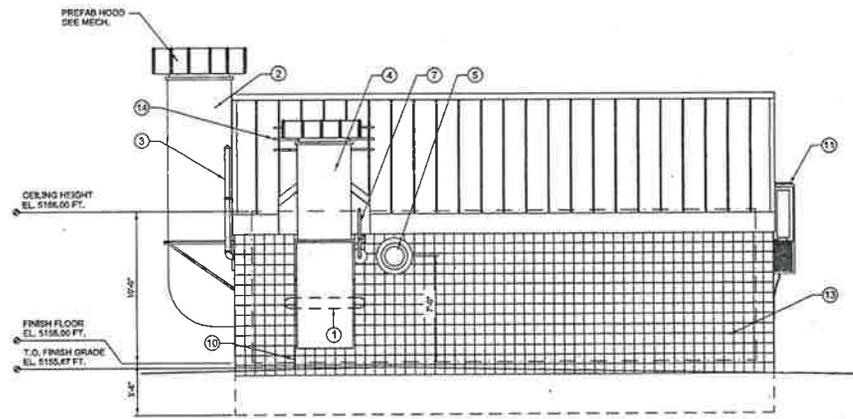
WEST ELEVATION

SCALE 1/4" = 1'-0"



SOUTH ELEVATION

SCALE 1/4" = 1'-0"



EAST ELEVATION

SCALE 1/4" = 1'-0"

100%  
CHECK PRINT  
DATE: 08-09-2013

DRAWING NUMBER	SHEET	TITLE
		REFERENCE DRAWINGS

NO.	BY	DATE	APPROVED
1	W.D.		
COMPUTER REVISION ONLY			
DESIGNER		FILE NAME: 309944-3-0_DGN	
DESIGN		UNITED STATES DEPARTMENT OF ENERGY	
DRAWN		BONNEVILLE POWER ADMINISTRATION	
		HEADQUARTERS, PORTLAND, OREGON	
CHIEF			
SUB			
REV			
DATE			
NO.	REVISION	DATE	BY
309944	RFA	D	3 OF 7

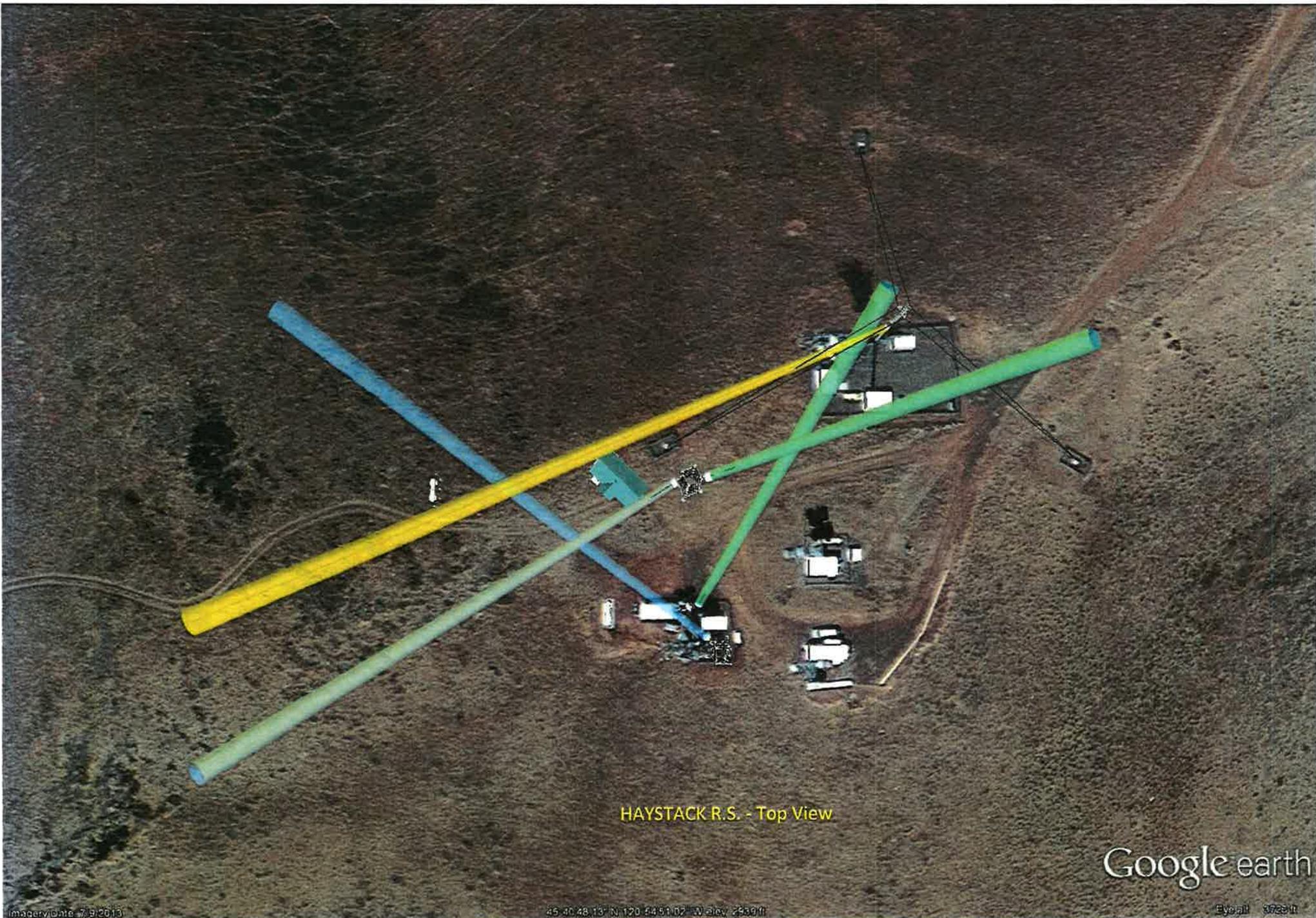
A3

**EXHIBIT D**









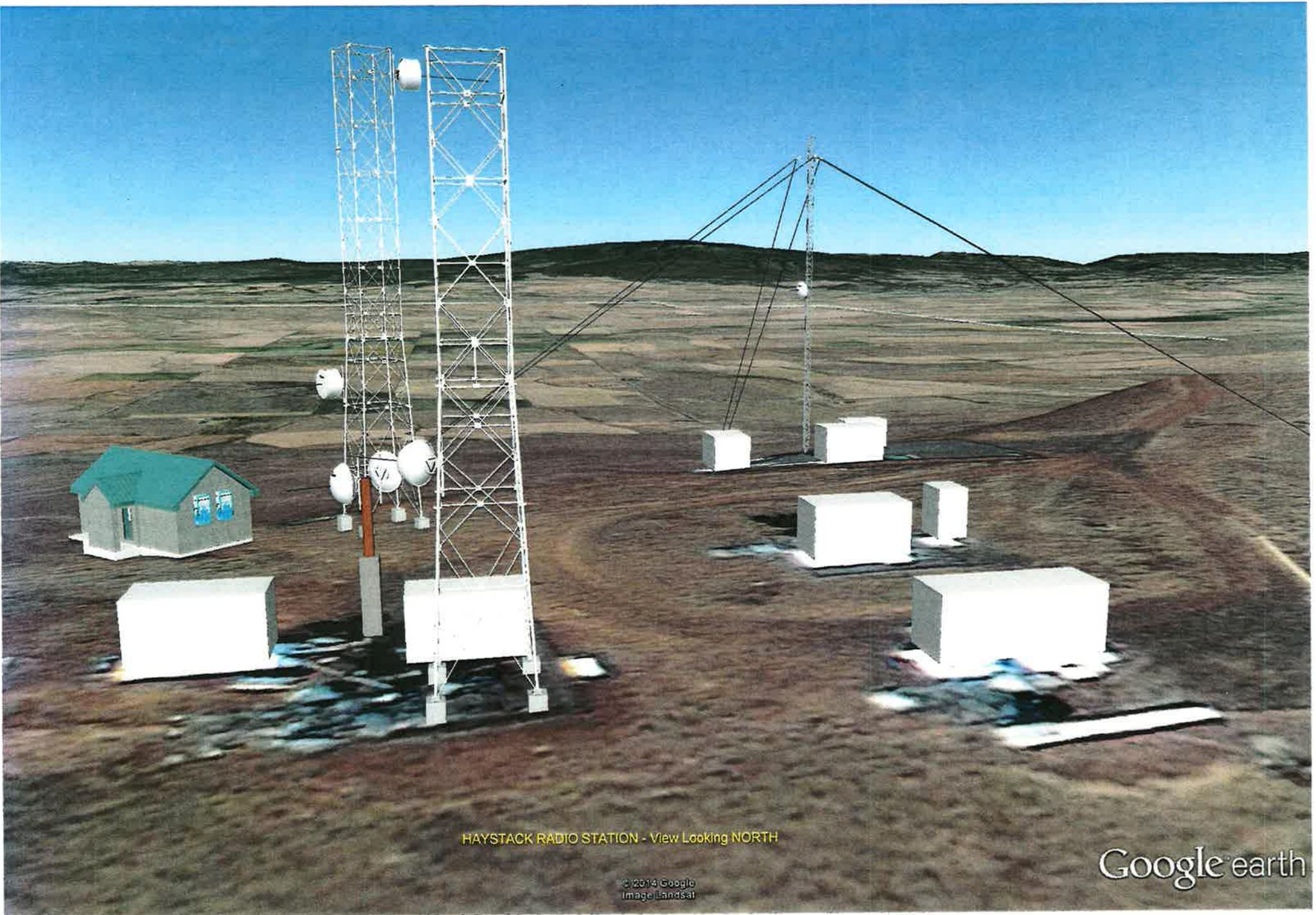
HAYSTACK R.S. - Top View

Google earth

Imagery Date 7/9/2013

45 40 48.13' N 120 44 51.02' W elev 2360 ft

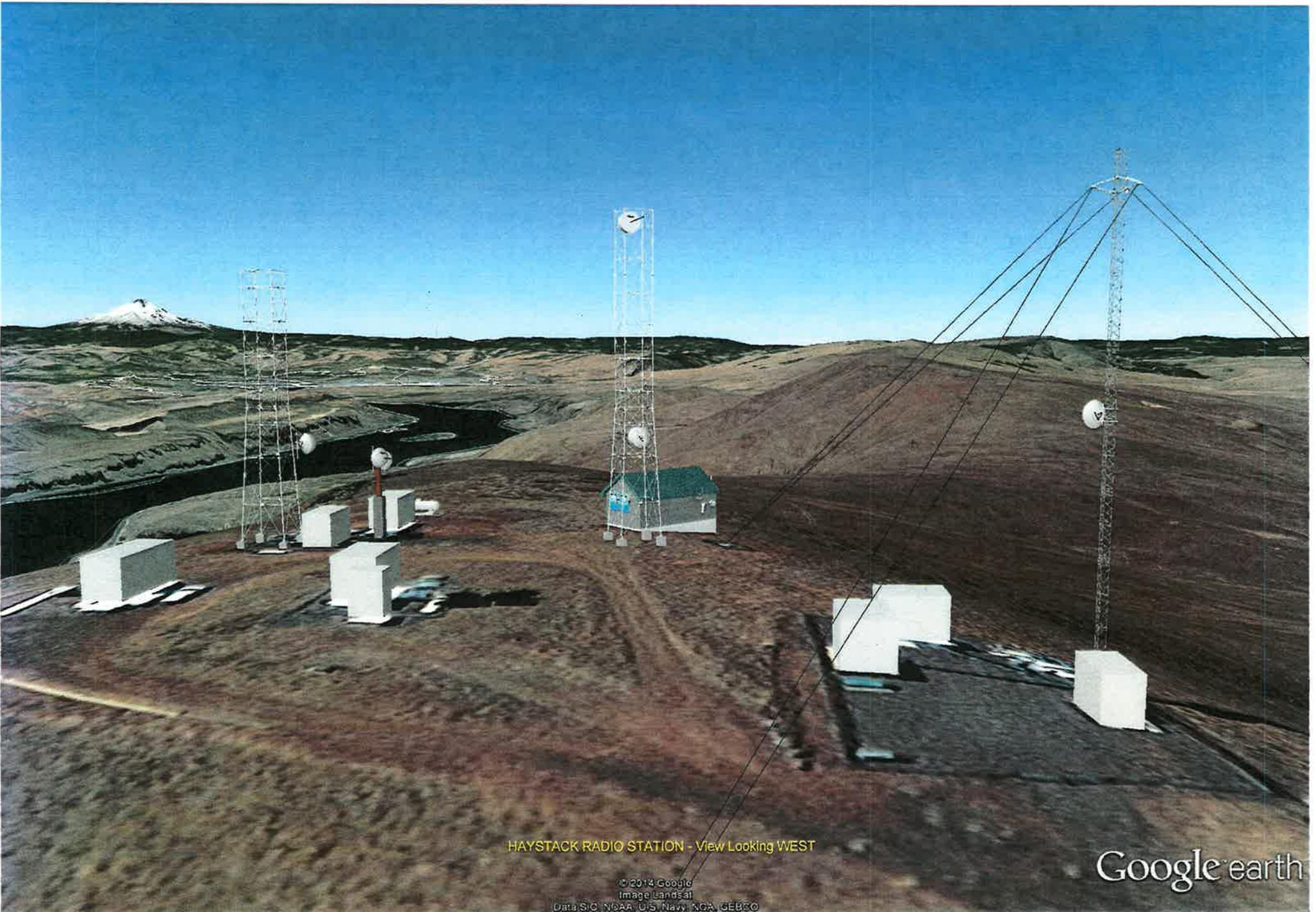
Eye alt 3723 ft



HAYSTACK RADIO STATION - View Looking NORTH

© 2014 Google  
Image Landsat

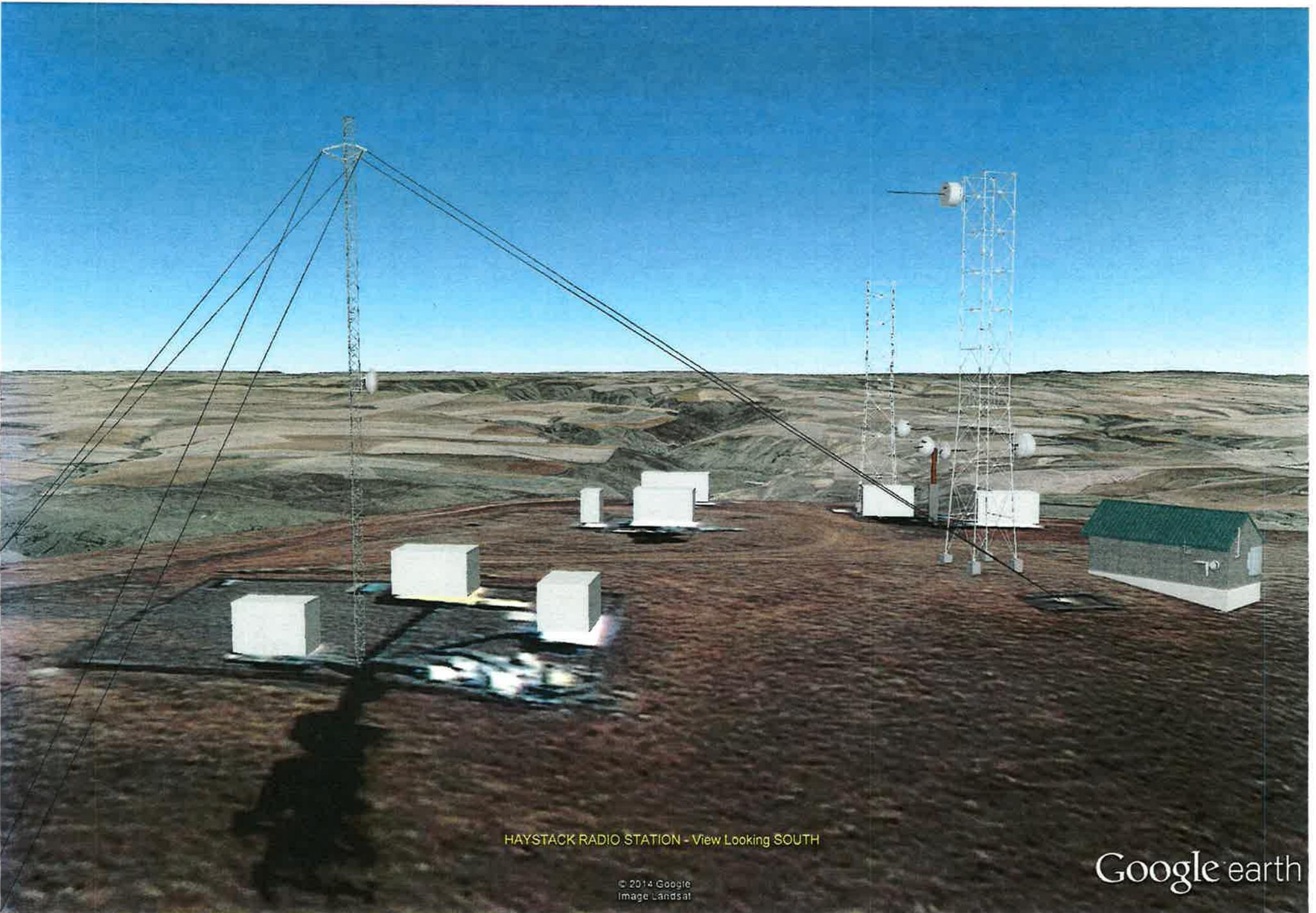
Google earth



HAYSTACK RADIO STATION - View Looking WEST

© 2014 Google  
Image Landsat  
Data SIO, NDAA, US Navy, NGA, GEBCO

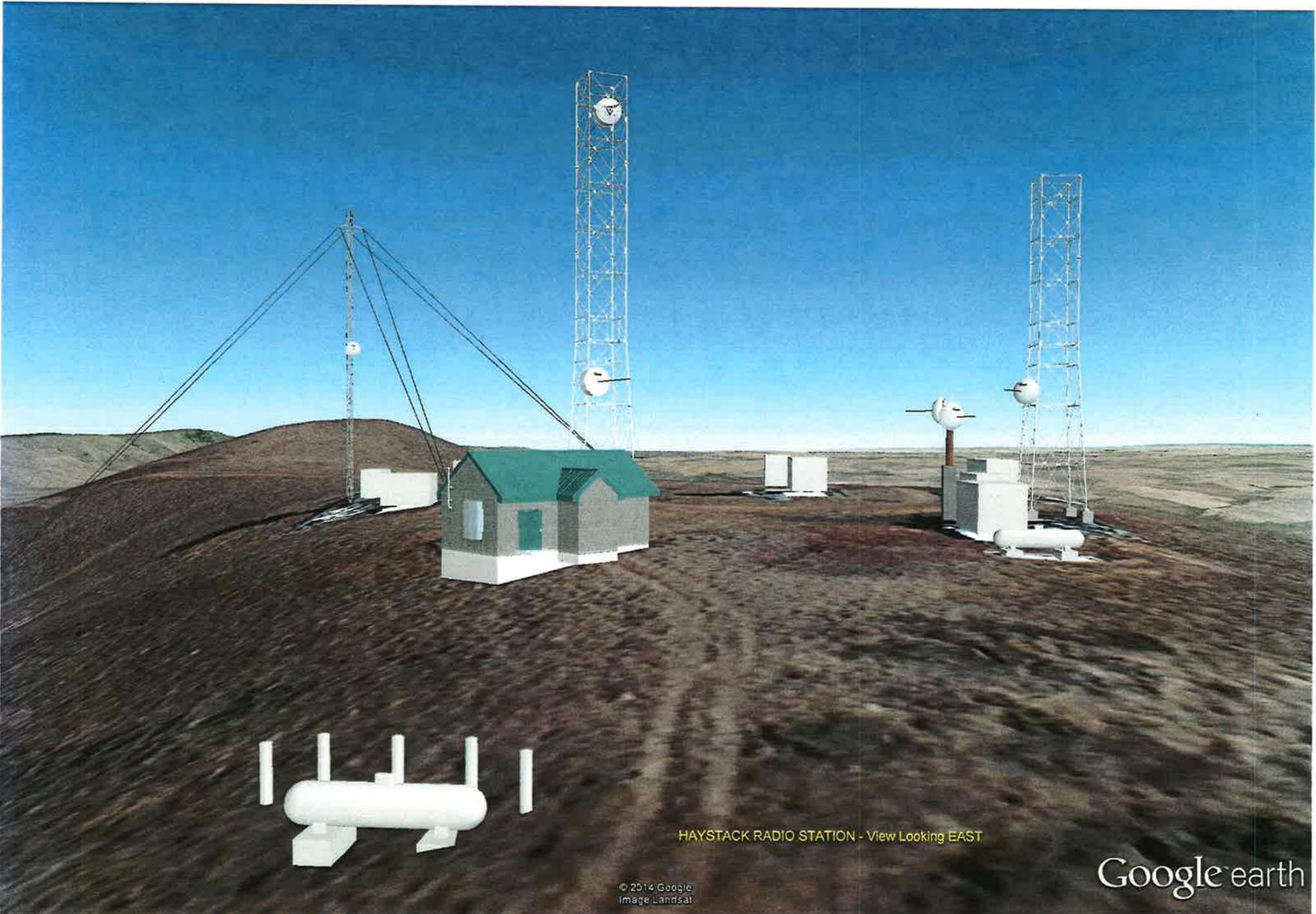
Google earth



HAYSTACK RADIO STATION - View Looking SOUTH

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Image Landsat

Google earth



HAYSTACK RADIO STATION - View Looking EAST

© 2014 Google  
Image Landsat

Google earth



HAYSTACK RADION STATION - View Looking From BIGGS JUNCTION, Oregon

Google earth

Image Landsat  
© 2014 Google  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO



HAYSTACK RADIO STATION - View Looking From WISHRAM, Washington

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Image Landsat

Google earth

## Haystack Visibility Study

The BPA Haystack radio station is located on the north rim of the Columbia gorge directly north of confluence of the Deschutes and Columbia rivers. Located just beyond the east end of the Columbia gorge scenic, the site is not visible from most of the locations and trails listed below. The location of the proposed new BPA tower is 45 40 48 N, 120 54 50.7 W. The documentation provided confirms whether views are available and if they are, documented with photography.

### Specific Points Investigated:

Site Name	Latitude / Longitude	Line of Sight
Crown Point	45 32 22.5 N, 122 14 40 W	No
Multnomah Falls	45 34 33.2 N, 122 6 54.5 W	No
Beacon Rock	45 37 36.5 N, 122 1 12.4 W	No
Panorama Point Park	45 41 14.3 N, 121 29 59 W	No (See Plot)
Dog Mountain Peak	45 43 12.7 N, 121 42 18.3 W	Yes – 38.4 miles No View due to distance (See Plot)
Rowena Plateau Viewpoint	45 41 17 N, 121 18 17.3 W	No (See Plot)
Portland Women’s Forum	45 32 5 N, 122 15 38.25 W	No
Larch Mountain	45 31 51.4 N, 122 5 22.8 W	No (See Plot)
Rooster Rock State Park	45 32 48.6 N, 122 14 11.3 W	No
Bonneville Dam North Visitor	45 38 58.7 N, 121 56 9.4 W	No
Bonneville Dam South Visitor	45 37 58 N, 121 57 20.7 W	No
Sherrard Point on Larch Mtn	45 31 59.8 N, 122 5 17.55 W	No (See Plot)
Highway 84 E/W 73 Rest Stop Memaloose State Park	45 41 42 N, 121 20 32 W	No
Highway 84 West 66 Rest Stop Kohberg Beach	45 42 14.5 N, 121 28 38.5 W	No
Cape Horn	45 35 14 N, 122 11 40.8 W	No

### Roads and Trails Investigated:

Site Name	Notes	Line of Sight
Historic Columbia Highway		No
Highway 84	Milepost 80.5 to 115	Yes - See description below
WSDOT Route 14		
Dog Mountain Trail	Grazing View only at Peak – 38 miles	Yes
Cook – Underwood Road	Loop road, Mtn to the east prevent views.	No
Columbia River	Same or slightly less than Hwy 84	See Highway 84
WSDOT Route 141	Mountains to the east prevent views. Goes north from	No

	Underwood / White Salmon	
WSDOT Route 142	Ring road from Lyle to Goldendale	Yes – Between Glenwood Hwy and Goldendale (See Various Plots)
Oregon Hwy 35	Road travel down the valley with hills to the east	No
Sandy River		No
Pacific Crest Trail	See Description Below	No (See Table Mtn Plot)
Old WSDOT Route 14 (Rd 1230)		
Wyeth Bench Road	Loop road off Hwy 84 near Government Cove to location 4 miles west of the cove.	No(See Plot)
Larch Mountain Road		No

**Pacific Crest Trail** – The trail from Timberline lodge travels on the west side of Mt Hood and then drops down into the valley. Beyond the Bridge of the Gods the trail moves west and stays mostly in ravines west of Table Mtn and thus does not provide any views to the east. The view from Table Mtn to Haystack is approximately 51 miles away and would provide practically no visibility.

**Highway 142 (Lyle to Goldendale loop)** – Highway 142 is a scenic byway that leaves Hwy 14 in Lyle and connects to Hwy 97 in Goldendale. The road travels mostly along the Klickitat River valley and then climbs onto the Goldendale plateau where views of Haystack are sporadic at first and then periodic from the Glendale Hwy into Goldendale, WA. The viewing distances range from X to X miles and do not provide a close view of the site.

Site Name	Latitude	Longitude	View of Site	Miles to Haystack
Wahkiacus	45 49 34.4 N	121 5 51.3 W	No	13.5 miles
Jct 142 Glenwood	45 51 27.2 N	120 59 54.3 W	Yes	12.9 miles
Jct 142 Harris Rd	45 51 26.8 N	120 59 18.9 W	Yes	12.8 miles
Hwy 142 MP 27	45 50 47.9 N	120 56 54.5 W	Yes	11.6 Miles
Jct Hwy 142 Knight Road	45 49 27.8 N	120 52 27.8 W	Yes	10.2 Miles
Goldendale	45 49 18.7 N	120 49 21 W	Limited	10.8 miles

**Highway 84** – This highway travels along the southern side of the Columbia River. Traveling east, the first view of the site is at Hwy 84, milepost 80.5 at a distance of 14.5 miles. The view is lost whenever the road turns south, such as The Dalles area. The best views of the site are located between Biggs Junction and Celilo Park ranging from 3 to 3.8 miles. It is difficult to see specific tower for views beyond five miles.

Site Name	Latitude	Longitude	View of Site	Miles to Haystack
Hwy 84 MP 80.5	45 38 47.8 N	121 12 36.6 W	Yes	14.5 miles Distant View
The Dalles 2 <sup>nd</sup> & Lincoln Street	45 36 11.8 N	121 11 11.9 W	Yes	14.2 miles Distant View
Hwy 84 MP 90	45 37 56.2 N	121 5 58.1 W	No	9.6 miles
Hwy 84 MP 93	45 38 52.3 N	121 2 5.2 W	Sporadic	6.2 miles
Hwy 84 Celilo Park	45 39 1.2 N	120 57 36 W	Yes	3 miles
Hwy 84 Deschutes River	45 38 7.7 N	120 54 44.3 W	Yes	3.1 miles
Hwy 84 Biggs Jct	45 40 19.1 N	120 50 6.0 W	Yes	3.9 miles
Hwy 84 John Day River	45 43 48.4 N	120 39 4 W	Distant View	13.2 Miles Distant View

**Highway 14** – This highway travels along the northern side of the Columbia River. Traveling east, the first very brief view of the site is through a saddle at the Jct of Hwys 14 & 197. Over the 12 miles of road where views might be possible, there are only about 3.5 miles of actual viewing locations the longest being a bit under two miles. As the road approaches the site, the nearer views are at a steep angle and would only be noticed if one were looking out the side window and up the hill. There are no views of the site after Hwy 14, milepost 97.5.

Site Name	Latitude	Longitude	View of Site	Miles to Haystack
Hwy 14, Hwy 197S	45 38 56.5 N	121 9 22 W	Yes	11.9 miles Brief Distant View
Hwy 14, MP 86	45 38 58.1 N	121 6 6.2 W	Yes	9.3 miles First Constant View
Hwy 14, MP 91.5	45 39 46.1 N	120 59 48.2 W	Yes	4.2 miles, Steep Viewing Angle
Hwy 14, MP 97	45 39 59.2 N	120 53 39.5 W	Yes - Closest	1.3 miles No View east of MP 97.5 mile

Haystack viewed from  
Jct. Hwy 14 & 197



Haystack viewed from  
Jct. Hwy 14 & 197



Haystack viewed from  
Hwy 34, milepost 97



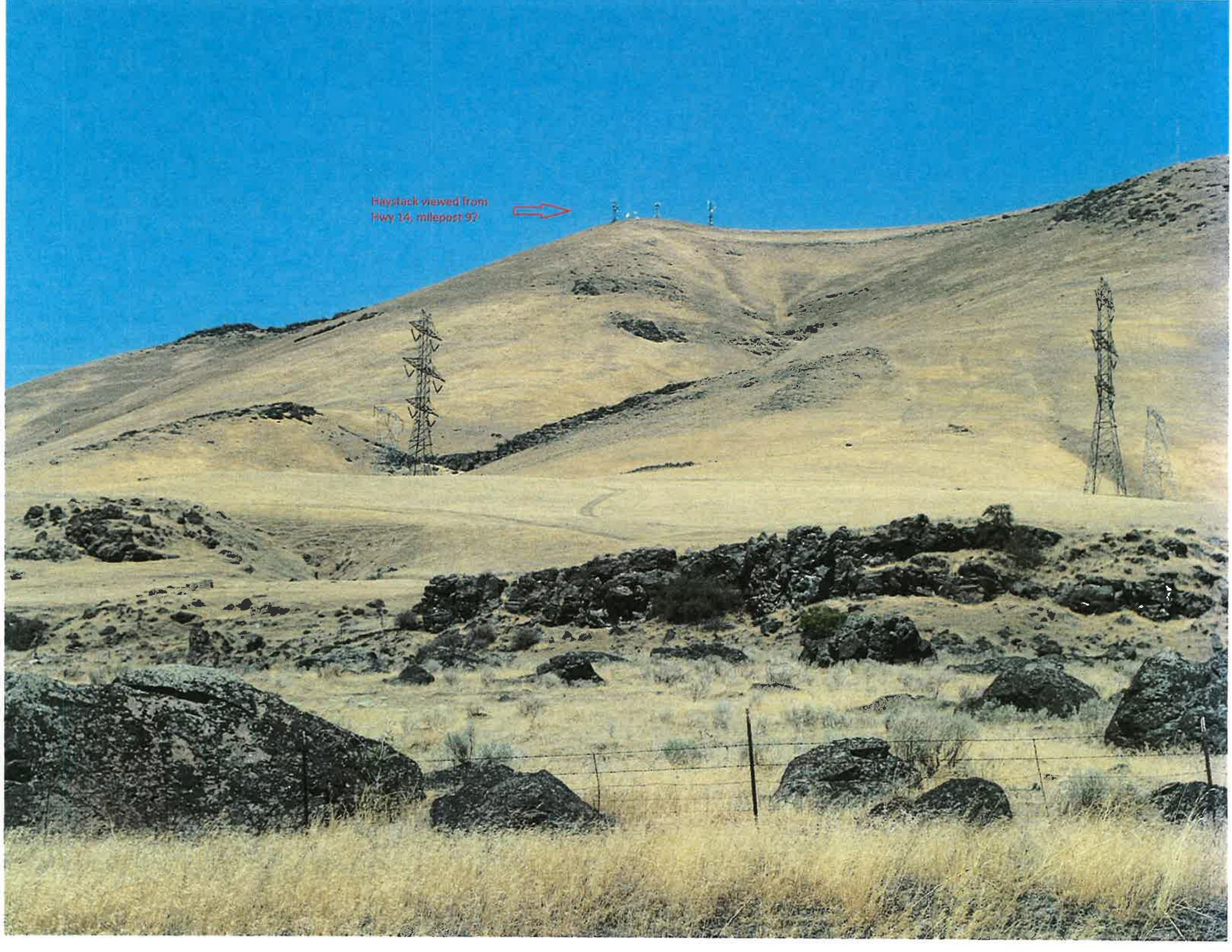
Haystack viewed from  
Hwy 34, milepost 85



Haystack viewed from  
Hwy 14, Milepost 86



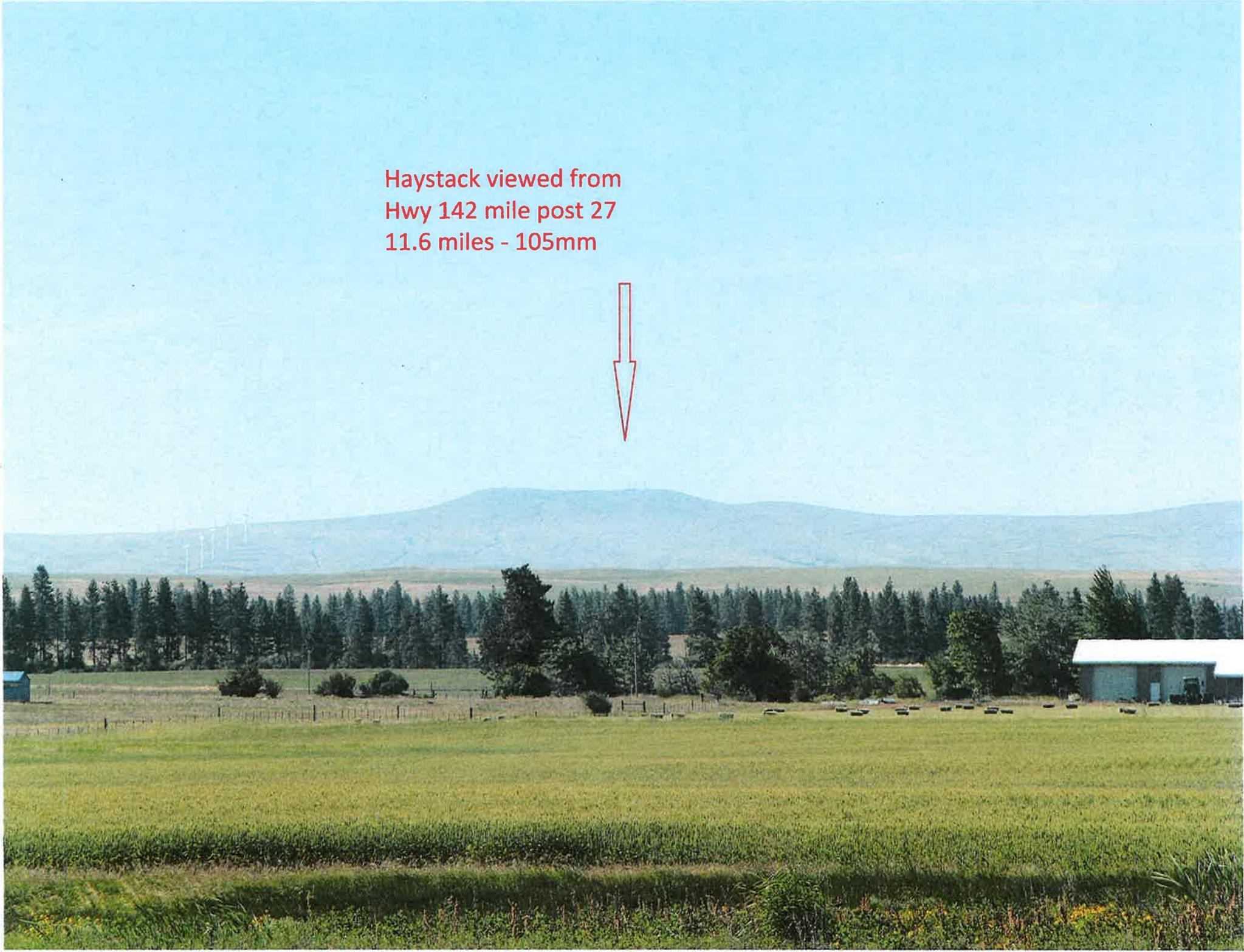
Haystack viewed from  
Hwy 14, milepost 92



Haystack viewed from  
Hwy 142 mile post 27  
11.6 miles - 50 mm



Haystack viewed from  
Hwy 142 mile post 27  
11.6 miles - 105mm



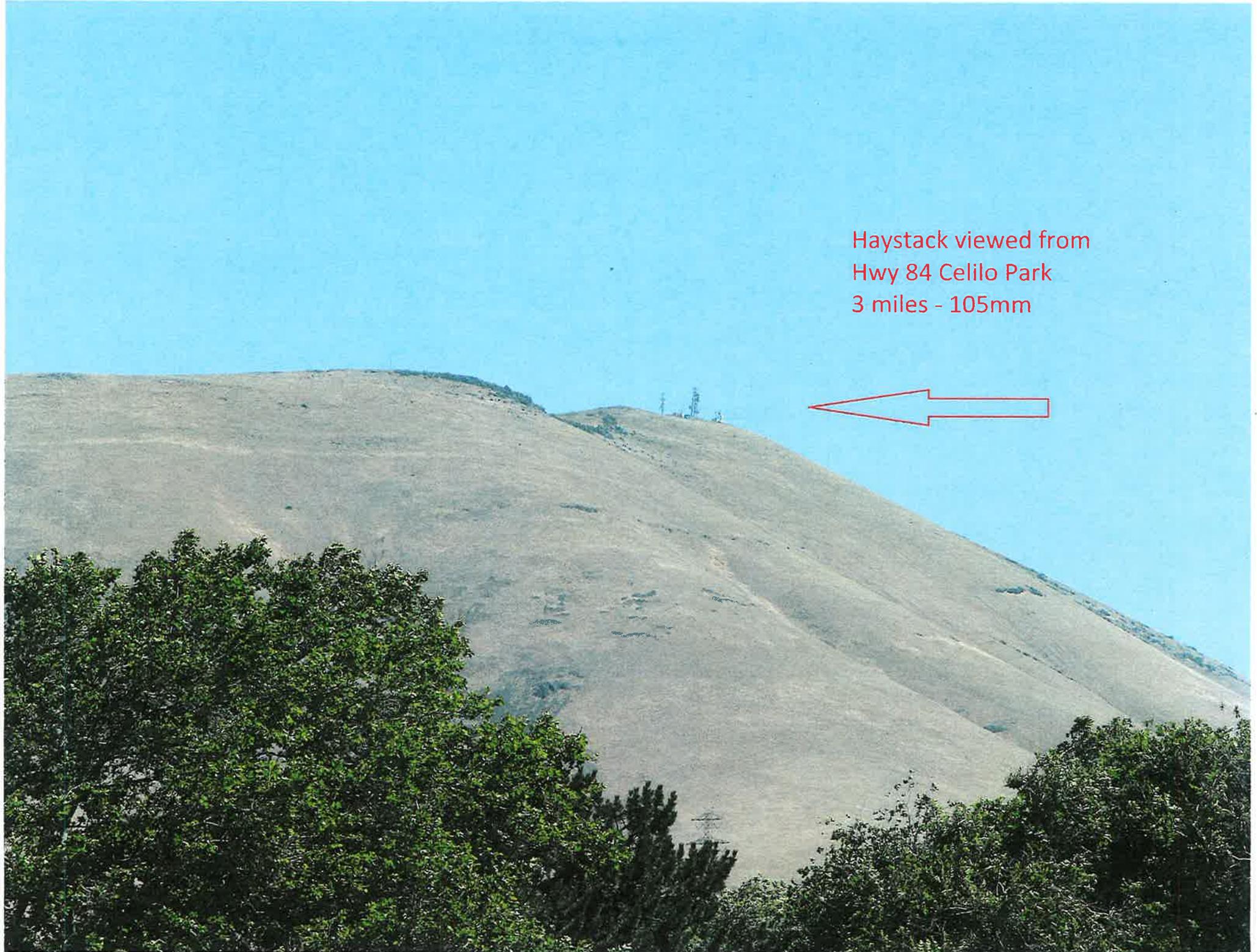
stack viewed from  
y 84 Biggs Jct  
miles - 105mm



Haystack from  
Hwy 84 Biggs Jct  
3.9 miles - 50 mm



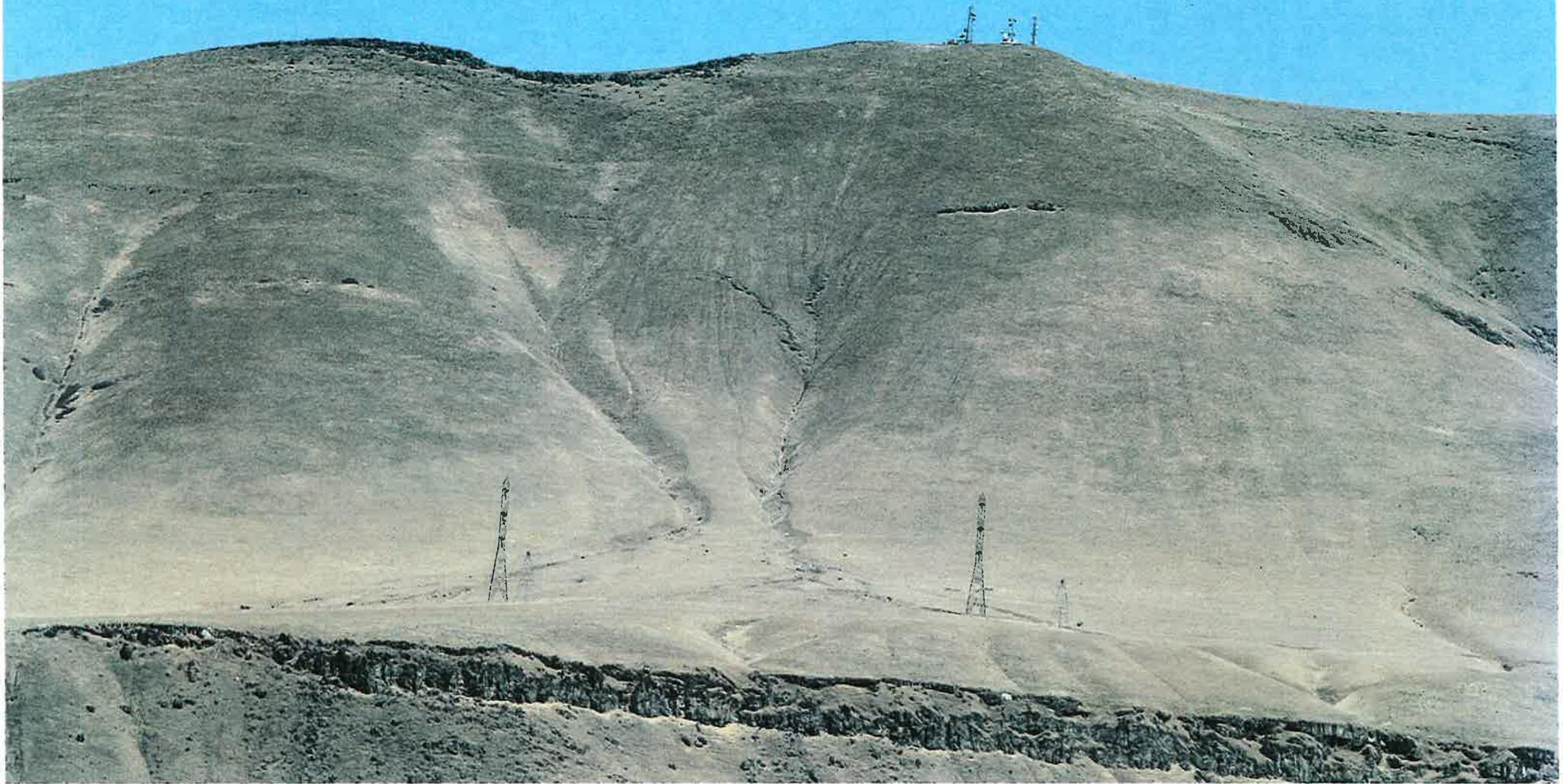
Haystack viewed from  
Hwy 84 Celilo Park  
3 miles - 105mm



Haystack viewed from  
Hwy 84 Celilo Park  
3 miles - 50mm



Haystack viewed from  
Hwy 84 Deschutes River  
3.1 miles - 105 mm



Haystack viewed from  
Hwy 84 Deschutes River  
3.1 miles - 50mm



Haystack viewed from  
Hwy 84 John Day River  
13.2 miles - 105mm



Haystack viewed from  
Hwy 84 John Day River  
13.2 miles - 50mm



Haystack viewed from  
Hwy 84 mile post 93  
6.2 miles - 105mm



Bald Eagle



Haystack viewed from  
Hwy 84 mile post 93  
6.2 miles - 50mm



Haystack viewed from  
Hwy 142 Knight Road  
10.2 miles - 105mm



Haystack viewed from  
Hwy 142 Knight Road  
10.2 miles - 50mm



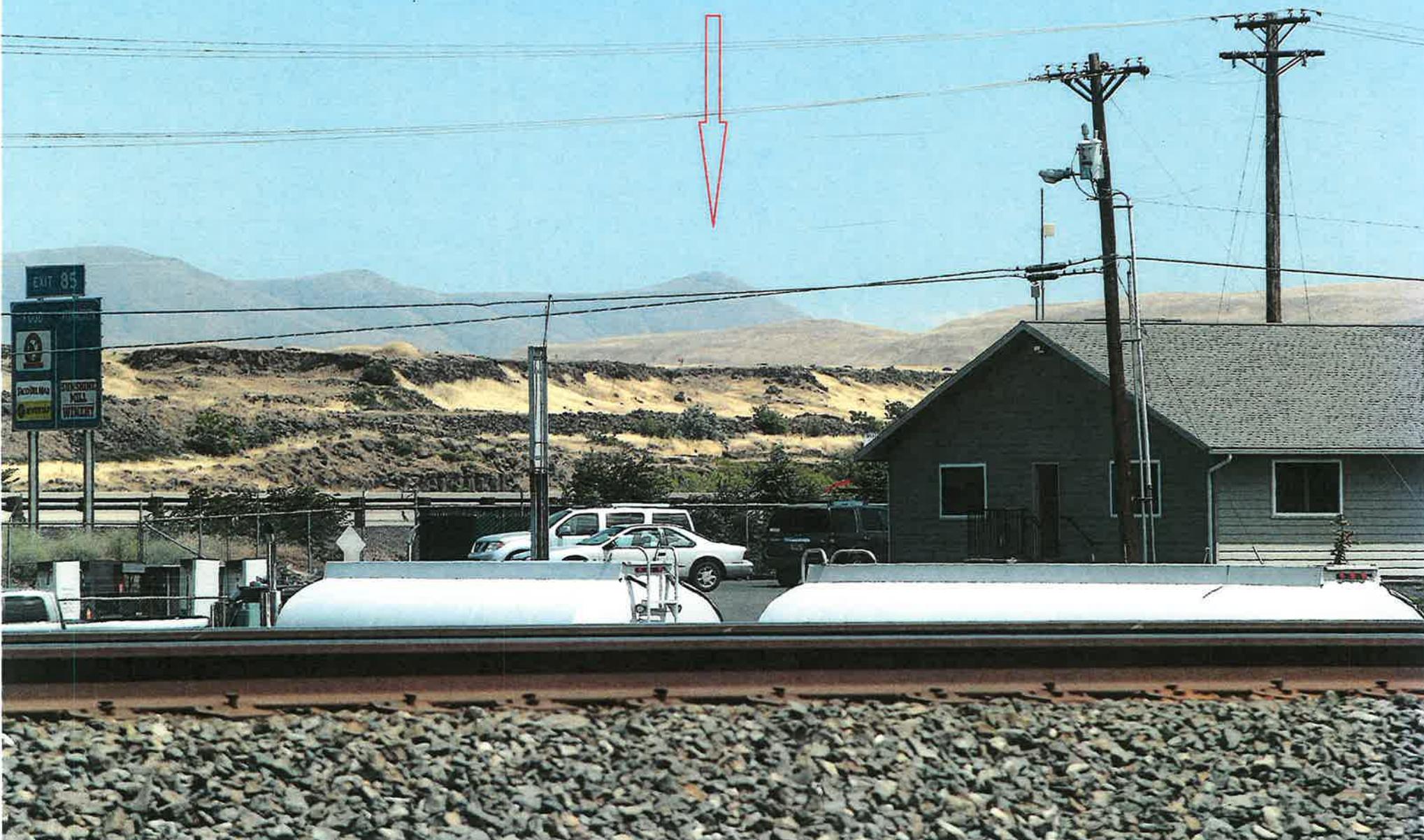
Haystack viewed from  
Hwy 142 Harris Road  
12.8 miles - 105mm



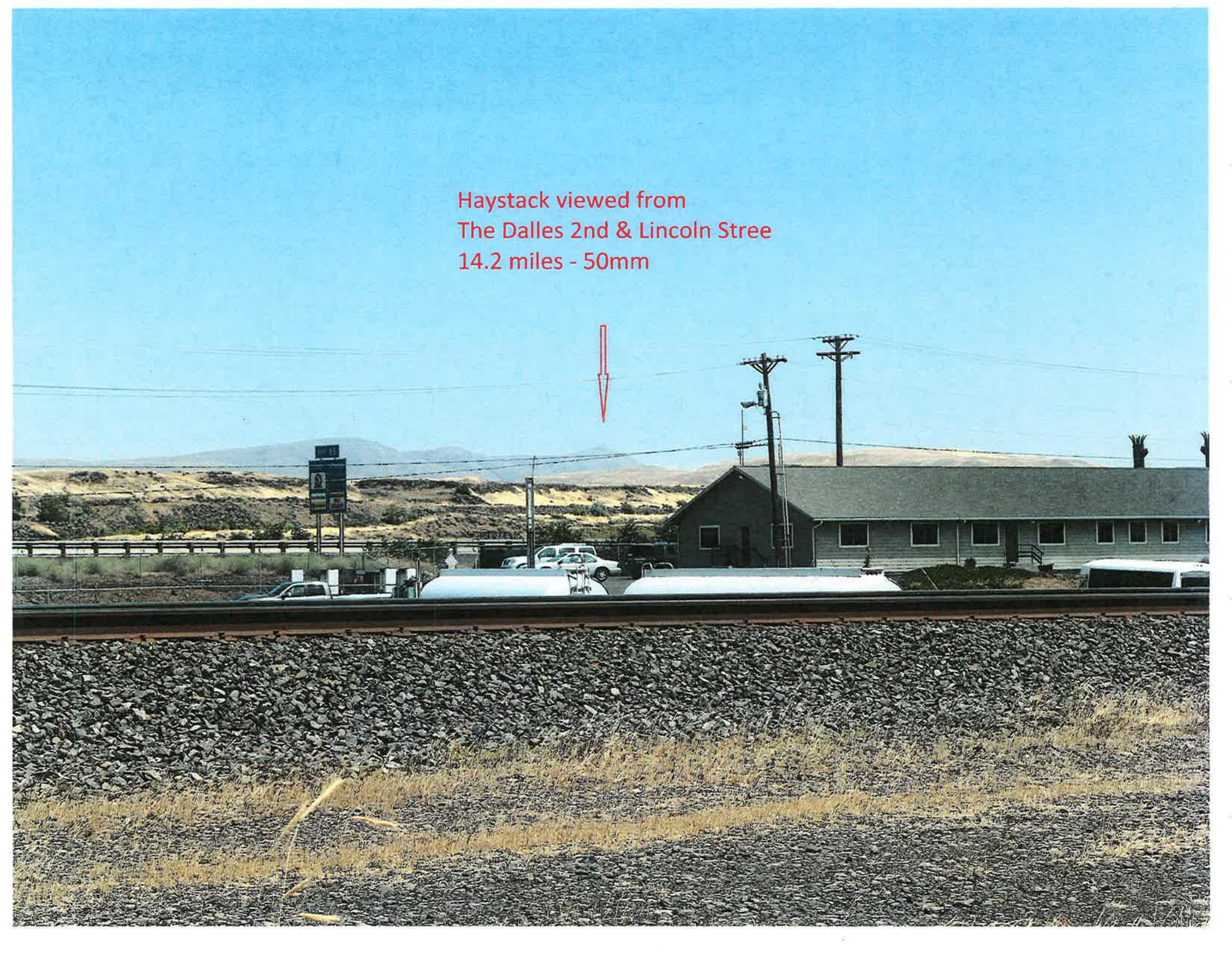
Haystack viewed from  
Hwy 142 Harris Road  
12.8 miles - 50mm

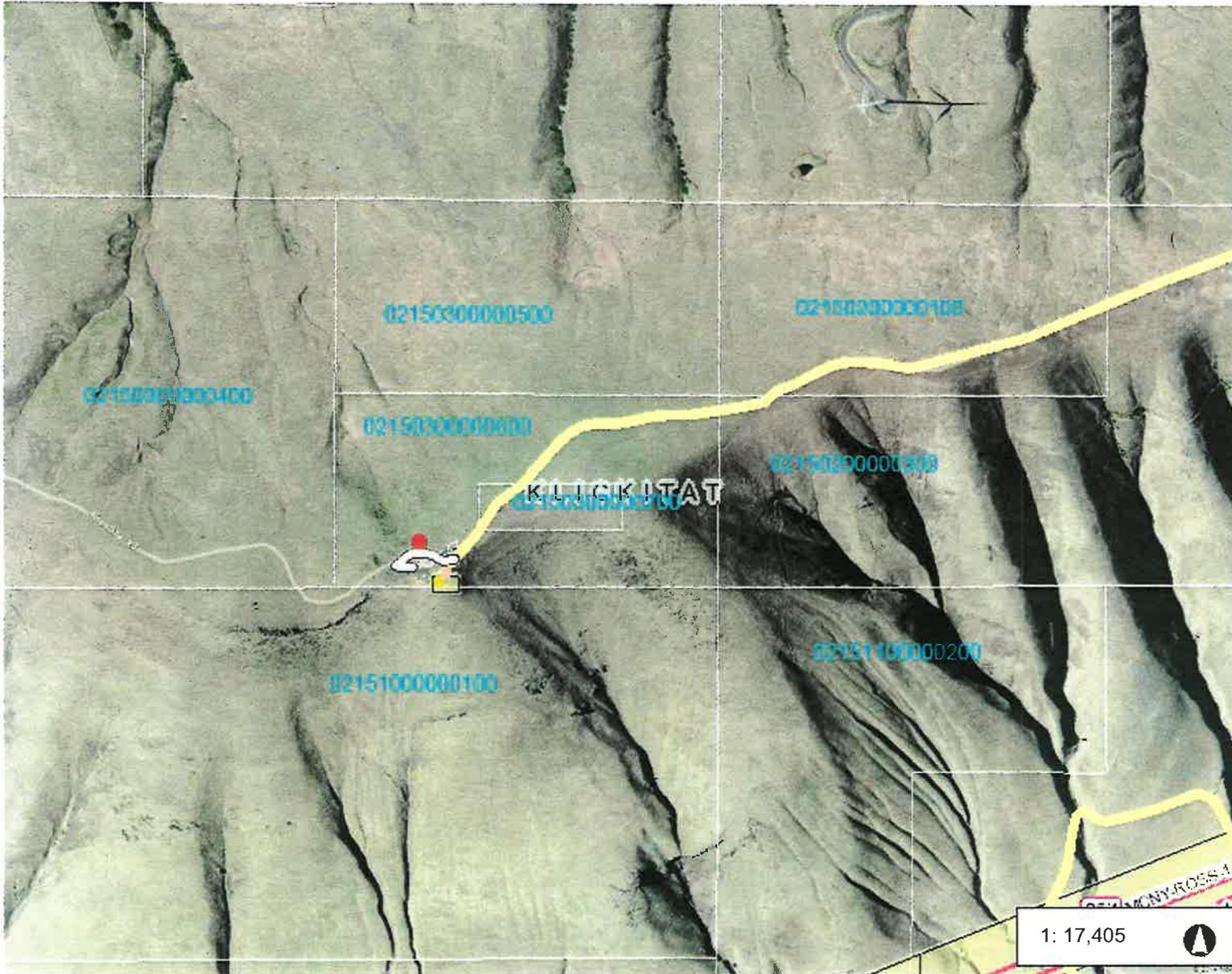


Haystack viewed from  
The Dalles 2nd & Lincoln Street  
14.2 miles - 105mm



Haystack viewed from  
The Dalles 2nd & Lincoln Street  
14.2 miles - 50mm





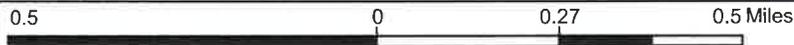
**Legend**

- All Substations
  - BPA Substation
  - BPA Maintenance HQ
  - Non-BPA Substation
- BPA Transmission Towers
- BPA Transmission Lines
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- BPA Outgrant Line
- BPA Outgrant Area
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    - Easement
    - Permit
    - Other, Lease, Neither
- Inactive BPA Tract Line
  - Land Acquisition Status - BPA
    - Acquisition Not Complete
    - Fee
    - Easement
    - Permit

**Notes**

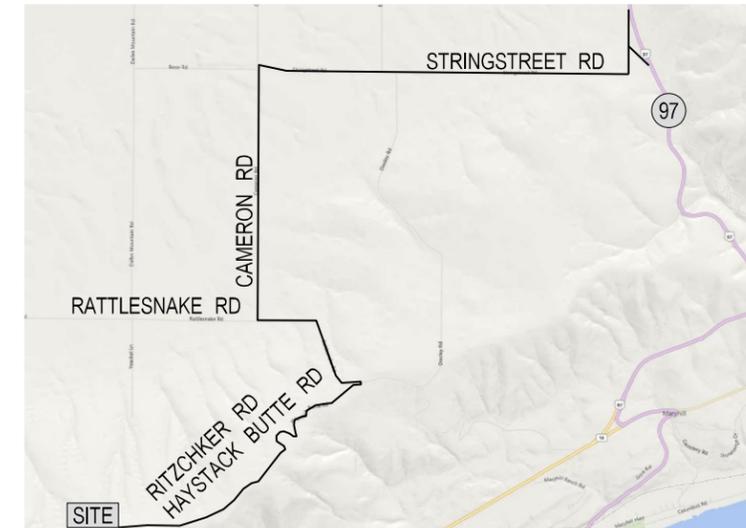
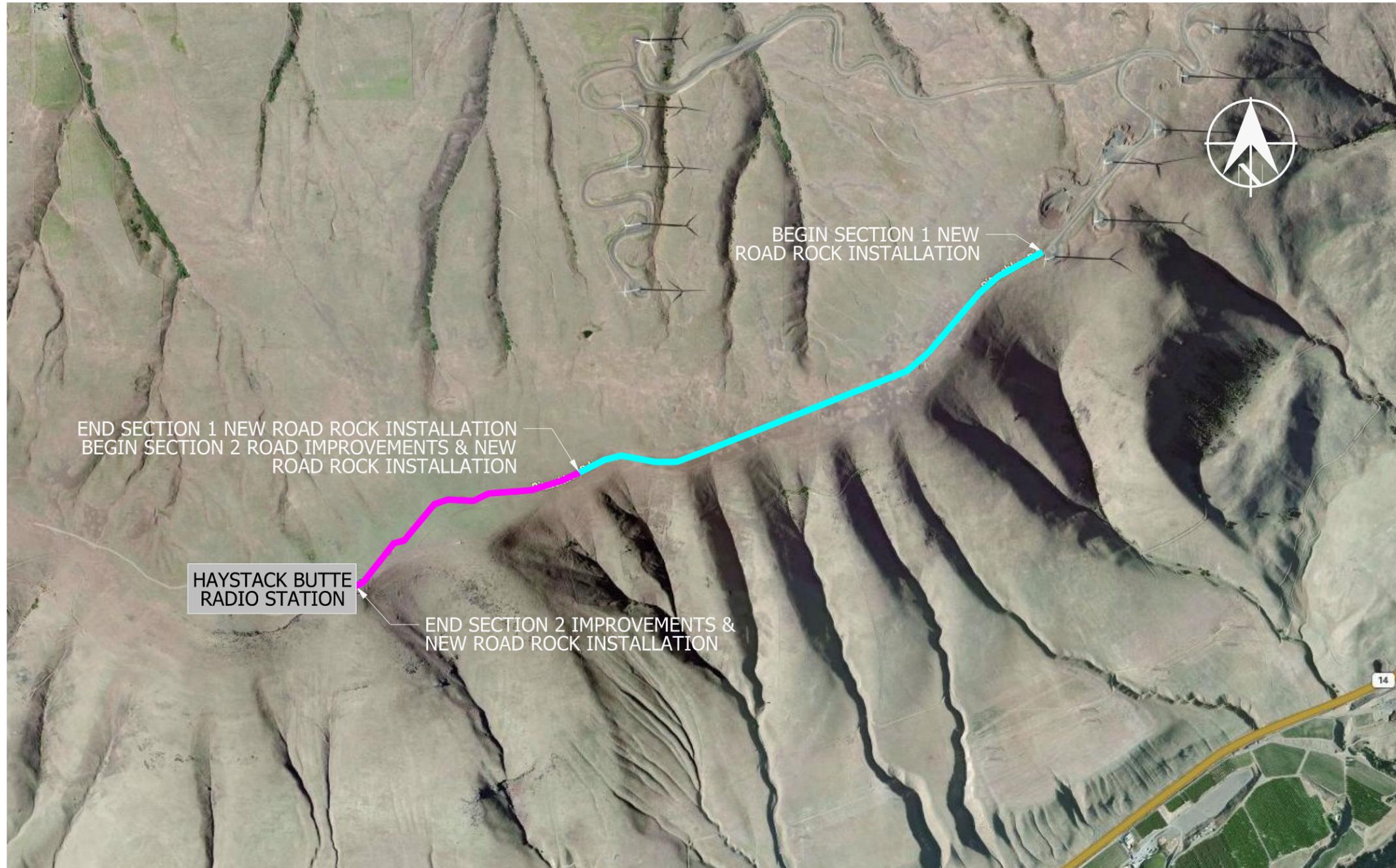
Parcels within 200' Haystack Butte Radio Site parcel

**EXHIBIT F**



WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
eGIS.BPA.Gov

Map scale varies across map. Scale bars on printed maps are approximate and are not intended to be used for precise measurement. It is recommended that you use the measurement tools in eGIS Live Map for more precise measurements. This map is a user generated static output from BPA's Enterprise GIS System and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

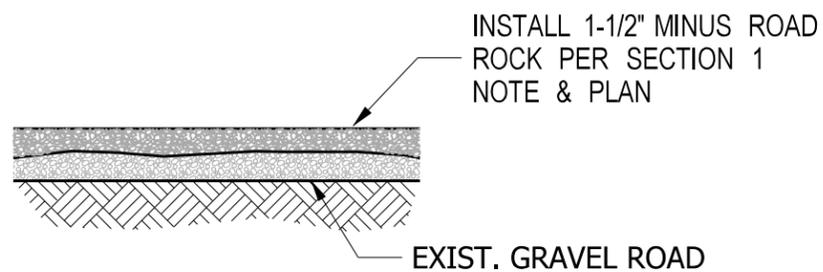


**VICINITY MAP**

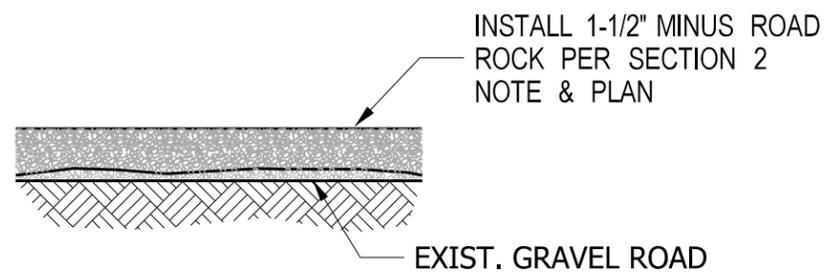
**SITE LOCATION:** APPROXIMATELY 9.5 MILES WEST OF HWY 97 KLICKITAT COUNTY, WA  
**SITE DIRECTIONS:** HWY 97 TO STRINGSTREET RD. WEST ON STRINGSTREET RD FOR 3.5 MI. LEFT ON CAMERON RD FOR 2 MI. LEFT ON RATTLESNAKE RD FOR 1 MI. RIGHT AT GATE AT INTERSECTION OF RATTLESNAKE ROAD & RITZCHKER RD/HAYSTACK BUTTE RD FOR 3 MI. ARRIVE AT SITE.

**NOTES:**

- SECTION 1 - LIGHT BLADE AND ROCK 5,200 L.F. EXISTING ROAD. 15 TONS PER STATION OF 1-1/2" MINUS CRUSHED ROCK.
- SECTION 2 - IMPROVE ROAD CONDITIONS, BLADE AND ROCK 2,650 L.F. EXISTING ROAD. 30 TONS PER STATION OF 1-1/2" MINUS CRUSHED ROCK.



**GRAVEL ROAD SECTION 1**  
NTS



**GRAVEL ROAD SECTION 2**  
NTS

NO.	C	WD# 377531	COMPUTER REVISION ONLY	BY	DATE	APPROVED
C=CONTRACT CONSTRUCTION ,FA=FORCE ACCOUNT CONSTRUCTION ,R=RECORD						
Design	WENDY HERBST					
Drawn	WENDY HERBST					
Chkd	KEN ADAMSON					
Sub	_____					
Rec	_____					
Rec	_____					
Appr	_____					
Date	JANUARY 2015					
SERIAL			SOURCE	SIZE	SHEET	REVISION
			SFC		1	0

UNITED STATES DEPARTMENT OF ENERGY  
**BONEVILLE POWER ADMINISTRATION**  
 HEADQUARTERS, PORTLAND, OREGON

**HAYSTACK BUTTE RADIO STATION  
 RITZCHKER RD/HAYSTACK BUTTE RD  
 ROAD IMPROVEMENT PROJECT**