

# **Application for Site Certificate Exhibit S – Historic, Cultural, and Archaeological Resources Boardman to Hemingway Transmission Line Project**

## **Errata Sheet – February 2019**

Exhibit S provides information on the historic, cultural, and archaeological resources that may potentially be impacted by the Boardman to Hemingway Transmission Line Project (B2H or Project).<sup>1</sup> The information in Exhibit S demonstrates that the Project will comply with the Oregon Energy Facility Siting Council's (EFSC or Council) Historic, Cultural, and Archaeological Resources Standard, Oregon Administrative Rule (OAR) 345-022-0090, by showing that the construction and operation of the Project, taking into account mitigation, are not likely to result in significant adverse impacts to historic, cultural, or archaeological resources that are listed or eligible for listing on the National Register of Historic Places (NRHP); archaeological objects; or archaeological sites.

Information concerning the location of archaeological sites or objects is exempt from public disclosure under Oregon Revised Statute (ORS) 192.501(11).<sup>2</sup> Therefore, such information, including archaeological survey reports, is provided confidentially to the Oregon Department of Energy (ODOE).

Exhibit S of the Project's Application for Site Certification (ASC) was submitted to and accepted by ODOE in September 2018. Subsequent to ODOE's acceptance, ODOE provided requests for supplemental information. This errata sheet provides the requested information and documents associated changes to Exhibit S.

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<sup>1</sup> The Exhibit includes data regarding cultural resources identified within the analysis area, as well as a high level summary of field survey data collected to date. The State Historic Preservation Office (SHPO) is yet to concur with findings of field surveys. Therefore, IPC's analysis of potential significant adverse impacts to cultural resources is not considered final for SHPO purposes, but the Exhibit is considered complete for ODOE purposes. IPC is now submitting more complete field survey data in support of its ASC in a manner and on a schedule agreeable to ODOE.

<sup>2</sup> OAR 345-021-0010(s) provides that "information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.502(4) or ORS 192.501(11)," and that the applicant "shall submit such information separately, clearly marked as 'confidential,' and shall request that the Department and the Council keep the information confidential to the extent permitted by law."

**Summary of Changes in Exhibit S**

<b>Page #</b>	<b>Section #</b>	<b>Description of Change(s) Made</b>
S-29 through S-130	Section 3.3, Table S-2	It is recognized that page numbers of Table S-2 skip even numbers. The table is correct and complete as presented. Page numbers have not been changed in this errata sheet in order to maintain clear references to the changes made in response to RAIs.
S-55	Table S-2	35UN0326 NRHP eligibility status changed to unevaluated. Management recommendation changed to “Avoid. Additional archival research and data recovery needed.” Applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.
S-81	Table S-2	6B2H-SA-12 and 6B2H-SA-16 NRHP eligibility status changed to unevaluated. Management recommendations changed to “Avoid. Additional archival research and testing needed.” Applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.
S-107	Table S-2	2B2H-SA-16 and 2B2H-SA-17 NRHP eligibility status changed to unevaluated. Management recommendations changed to “Avoid. Testing needed.” Applicable EFSC Standard changed to a) Potential Historic Property.
S-115	Table S-2	“Warm Springs Pump Canal” removed as Other ID for Site 4B2H-EK-43 and replaced with “Willow Creek Diversion.”
S-139 – S-143	Table S-4	Order of Oregon Trail resources in table modified to list resources from north to south and from west to east. The order corresponds to the new subsection 3.3.2.2 that includes extracts from Oregon Trail resource forms from Exhibit S Attachments S-6 and S-10.
S-144	Section 3.3.2.1	Section 3.3.2.2 added and titled “Oregon Trail ILS – Resource Descriptions and Evaluations (Extracts).”
S-148	Section 3.4, 1st Paragraph	Number of resources subject to the EFSC standards criteria revised to reflect changed NRHP eligibility recommendations.

<b>Page #</b>	<b>Section #</b>	<b>Description of Change(s) Made</b>
S-154	Section 3.4.1, 1 <sup>st</sup> paragraph	Number of historic properties and potential historic properties revised based on changed NRHP-eligibility recommendations for 2B2H-SA-16, 2B2H-SA-17, 6B2H-SA-12, 6B2H-SA16, and 35UN0326.
S-154	Table S-7	Table revised to reflect changed number of resources subject to EFSC criteria standard “a” as historic properties or potential historic properties. This includes changing the number of sites in the Direct Analysis Area (construction footprint) of the Proposed Route in Baker County from 12 to 14; the number of sites in the Direct Analysis Area of the Proposed Route in Union County from 0 to 1; and the number of sites in the Direct Analysis Area of the Double Mountain Alternative from 0 to 2. This reflects the changed NRHP-eligibility recommendations for 2B2H-SA-16 and 2B2H-SA-17 in the Double Mountain Alternative, 6B2H-SA-12 and 6B2H-SA-16 in the construction footprint of the Proposed Route in Baker County, and 35UN0326 in the direct analysis area of the Proposed Route in Union County.
S-163	Table S-8	35UN0326 added to table.
S-168	Table S-8	2B2H-SA-16 and 2B2H-SA17 added to table.
S-172	Table S-8	6B2H-SA-12 and 6B2H-SA-16 added to table.
S-175	Table S-8	“Warm Springs Pump Canal” removed as Other ID for Site 4B2H-EK-43 and replaced with “Willow Creek Diversion.”
S-206	Table S-14	6B2H-SA-12 and 6B2H-SA-16 applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.
S-226 – S-227	Section 8	With the new subsection 3.3.2.2 that includes extracts from Oregon Trail resource forms from Exhibit S Attachments S-6 and S-10, additional citations have been added to this section.

**Detailed Listing of Changes in Exhibit S**

**Page S-29 through S-130, Section 3.3, Table S-2**

It is recognized that page numbers of Table S-2 skip even numbers. The table is correct and complete as presented. Page numbers have not been changed in this errata sheet in order to maintain clear references to the changes made in response to RAIs.

**Page S-55, Table S-2**

**Change:** 35UN0326 NRHP eligibility status changed to unevaluated. Management recommendation changed to “Avoid. Additional archival research and data recovery needed.” Applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.

**Revised Text:**

Assigned Trinomial or Other ID	Cultural Resources Pedestrian Survey Temporary Resource #	Visual Assessment Temporary Resource #	Exhibit S Attachment	County	Resource Type	Pre-Contact/ Historic	Generalized Resource Description	NRHP Recommendation	Management Recommendation	Project Route(s)	Project Component	Land-ownership	Applicable EFSC Standard	Impact Avoided?/ Project Effect
35UN0326	N/A	N/A	S-6	Union	Archaeological Site	Historic	Refuse Scatter	Unevaluated (Criteria A and B); Not Eligible (Criterion C); Eligible (Criterion D)	Avoid. Additional archival research and data recovery needed.	Proposed Route	Direct Analysis Area	PV	a) Potential Historic Property; b) Archaeological site on private land.	Yes

**Page S-81, Table S-2**

**Change:** 6B2H-SA-12 and 6B2H-SA-16 NRHP eligibility status changed to unevaluated. Management recommendation changed to “Avoid. Additional archival research and testing needed.” Applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.

**Revised Text:**

Assigned Trinomial or Other ID	Cultural Resources Pedestrian Survey Temporary Resource #	Visual Assessment Temporary Resource #	Exhibit S Attachment	County	Resource Type	Pre-Contact/ Historic	Generalized Resource Description	NRHP Recommendation	Management Recommendation	Project Route(s)	Project Component	Land-ownership	Applicable EFSC Standard	Impact Avoided?/ Project Effect
TBD	6B2H-SA-12	N/A	S-6	Baker	Archaeological Site	Historic	Homestead	Unevaluated (Criteria A, B, and D); Not Eligible (Criterion C)	Avoid. Additional archival research and testing needed.	Proposed Route	Direct Analysis Area (Construction Footprint)	PV	a) Potential Historic Property; b) Archaeological site on private land.	No - Will be directly impacted.
TBD	6B2H-SA-16	N/A	S-6	Baker	Archaeological Site	Historic	Ranching	Unevaluated (Criteria A, B, and D); Not Eligible (Criterion C)	Avoid. Additional archival research and testing needed.	Proposed Route	Direct Analysis Area (Construction Footprint)	PV	a) Potential Historic Property; b) Archaeological site on private land.	No - Will be directly impacted.

**Page S-107, Table S-2**

**Change:** 2B2H-SA-16 and 2B2H-SA-17 NRHP eligibility status changed to unevaluated. Management recommendation changed to "Avoid. Testing needed." Applicable EFSC Standard changed to a) Potential Historic Property.

**Revised Text:**

Assigned Trinomial or Other ID	Cultural Resources Pedestrian Survey Temporary Resource #	Visual Assessment Temporary Resource #	Exhibit S Attachment	County	Resource Type	Pre-Contact/ Historic	Generalized Resource Description	NRHP Recommendation	Management Recommendation	Project Route(s)	Project Component	Land-ownership	Applicable EFSC Standard	Impact Avoided?/ Project Effect
TBD	2B2H-SA-16	N/A	S-6	Malheur	Archaeological Site	Pre-Contact	Lithic Scatter	Unevaluated	Avoid. Testing needed.	Double Mountain Alternative	Direct Analysis Area	BLM	a) Potential Historic Property	Yes
TBD	2B2H-SA-17	N/A	S-6	Malheur	Archaeological Site	Pre-Contact	Lithic Scatter	Unevaluated	Avoid. Testing needed.	Double Mountain Alternative	Direct Analysis Area	BLM	a) Potential Historic Property	Yes

**Page S-115, Table S-2**

**Change:** "Warm Springs Pump Canal" removed as Other ID for Site 4B2H-EK-43 and replaced with "Willow Creek Diversion."

**Revised Text:**

Assigned Trinomial or Other ID	Cultural Resources Pedestrian Survey Temporary Resource #	Visual Assessment Temporary Resource #	Exhibit S Attachment	County	Resource Type	Pre-Contact/ Historic	Generalized Resource Description	NRHP Recommendation	Management Recommendation	Project Route(s)	Project Component	Land-ownership	Applicable EFSC Standard	Impact Avoided?/ Project Effect
Willow Creek Diversion	4B2H-EK-43	N/A	S-6, S-10	Malheur	Historic Site/ Aboveground	Historic	Water Conveyance	Unevaluated	Avoid. Research needed.	Proposed Route	Direct Analysis Area (Construction Footprint); Visual Assessment analysis area	PV	a) Potential Historic Property	Yes

**Page S-139 through S-143, Section 3.3.2.1, Table S-4**

**Change:** Order of Oregon Trail resources in table modified to list resources from north to south and from west to east. The order corresponds to the new subsection 3.3.2.2 that includes extracts from Oregon Trail resource forms from Exhibit S Attachments S-6 and S-10.

**Revised Text:**

**Table S-4. List of Oregon Trail-Related Resources in Analysis Area**

ID Number (Archaeology ID) <sup>1</sup>	Resource Name	Eligibility Recommendation <sup>2</sup>	Associated Project Component	Status
N/A	Oregon Trail NHT	EC	Proposed Route/ West of Bombing Range Road Alternatives 1 & 2/ Morgan Lake Alternative/ Existing 138-kV Rebuild/ Double Mountain Alternative/ Existing 230-kV Rebuild	See Attachments S-6 and S-10.
B2H-MO-004 (35MW00230)	Emigrant Cemetery	EC (contributing resource to Well Springs Segment – pending NRHP revision)	Proposed Route/ West of Bombing Range Road Alternatives 1 & 2	Impact Analysis
35MW00224	Well Springs, Oregon Trail Site	EC (contributing resource to Well Springs Segment – pending NRHP revision)	Proposed Route/ West of Bombing Range Road Alternatives 1 & 2	Impact Analysis
35MW00227	Historic Road	NC	Proposed Route, West of Bombing Range Road Alternative 1, West of Bombing Range Road Alternative 2 (Site Boundary)	No Further work

<b>ID Number (Archaeology ID)<sup>1</sup></b>	<b>Resource Name</b>	<b>Eligibility Recommendation<sup>2</sup></b>	<b>Associated Project Component</b>	<b>Status</b>
B2H-MO-007	Oregon Trail (Well Springs Segment)	NRHP-Listed (revised boundary pending)	Proposed Route/West of Bombing Range Road Alternatives 1 & 2	Impact Analysis
3B2H-CH-01	Oregon Trail (Well Springs Segment)	EC	Proposed Route/West of Bombing Range Road Alternatives 1 & 2	See Attachments S-6 and S-10.
4B2H-EK-02	Oregon Trail Segment (Unnamed)	EC	Proposed Route (Site Boundary)	See Attachments S-6 and S-10.
3B2H-SA-03	Oregon Trail Segment (Unnamed)	EC	Proposed Route/West of Bombing Range Road Alternative 1 & 2	See Attachments S-6 and S-10
3B2H-SA-04	Oregon Trail Segment (Unnamed)	EC	Proposed Route/West of Bombing Range Road Alternative 1 & 2	See Attachments S-6 and S-10.
4B2H-EK-03	Oregon Trail Segment (Unnamed)	EC	Proposed Route/West of Bombing Range Road Alternative 1 & 2	See Attachments S-6 and S-10
5B2H-SA-01	Oregon Trail Segment (Unnamed)	EC	Proposed Route (Site Boundary)	See Attachments S-6 and S-10
B2H-MO-008	Oregon Trail: Unnamed Segment (Lindsay Feedlot Lane)	NC (Lindsay Feedlot Lane)	Proposed Route/West of Bombing Range Road Alternatives 1 & 2	No Further Work
3B2H-SA-05	Oregon Trail Segment (Sand Hollow)	EC	Proposed Route/West of Bombing Range Road Alternatives 1 & 2	See Attachments S-6 and S-10

<b>ID Number (Archaeology ID)<sup>1</sup></b>	<b>Resource Name</b>	<b>Eligibility Recommendation<sup>2</sup></b>	<b>Associated Project Component</b>	<b>Status</b>
SL-MO-001; SL-MO-005	Sand Hollow Battle Ground – (Associated Report #26196)	Previously determined eligible (resource is also a historic property with religious and cultural significance)	Proposed Route/West of Bombing Range Road Alternative 1/2	Consultation Required
35UM00365	Meacham Pioneer Memorial Cemetery Site	NC	No View of Project	No Further Work
35UM00472	Grave Associated with Oregon Trail	UN	Proposed Route	Impact Analysis
B2H-UN-001	Oregon Trail (California Gulch/Blue Mountain Segment)	EC	Proposed Route	Impact Analysis
35UN00517	Oregon Trail	EC	Proposed Route	Impact Analysis
B2H-UN-005 (O-BK-UN-1)	Oregon Trail: Whiskey Creek Segment	NC (non-contributing segment)	Proposed Route/Morgan Lake Alternative	No Further Work
6B2H-RP-09	Oregon Trail	EC	Proposed Route (Site Boundary)	See Attachments S-6 and S-10
35UN00074	Lithic Scatter, Homestead, Grave, Campground, & Trail	EC	Proposed Route, Morgan Lake Alternative	Impact Analysis
35UN00435	Oregon Trail (in Ladd Canyon)	UN	No View of Project	No Further Work
B2H-BA-327	Goodale's/Sparta Trail	EC (area assessed overlaps with B2H-BA-282)	Proposed Route/ Existing 230-kV Rebuild	Impact Analysis
B2H-BA-282	Oregon Trail Virtue Flat Segment and Flagstaff Hill	EC (NRHP listing pending)	Proposed Route/ Existing 230-kV Rebuild	Impact Analysis
B2H-BA-281	Oregon Trail White Swan	EC	Proposed Route	Impact Analysis



<b>ID Number (Archaeology ID)<sup>1</sup></b>	<b>Resource Name</b>	<b>Eligibility Recommendation<sup>2</sup></b>	<b>Associated Project Component</b>	<b>Status</b>
N/A	Signature Rock	UN	Proposed Route	No further work. Insufficient location information as only Township 9, Range 42 is provided by Baker County. Not mapped due to imprecise location.
B2H-BA-285	Oregon Trail (Straw Ranch: Segments 1 and 2)	EC	Proposed Route	Impact Analysis
3B2H-CH-05	Oregon Trail	EC	Proposed Route	See Attachments S-6 and S-10
B2H-BA-291	Oregon Trail Swayze Creek (near Plano Road and including Sisely Creek Segment)	EC	Proposed Route	Impact Analysis
35BA01366 (3B2H-CH-06)	Oregon Trail Segment	EC	Proposed Route	Impact Analysis
B2H-BA-337	Oregon Trail Powell Creek Segment (Chimney Creek)	EC	Proposed Route	Impact Analysis
4B2H-EK-41	Oregon Trail Segment (Unnamed)	EC	Proposed Route	See Attachments S-6 and S-10
B2H-MA-042	Oregon Trail Birch Creek Segment	EC	Proposed Route/Existing 138-kV Rebuild	Impact Analysis
B2H-MA-010	Oregon Trail ACEC -- Tub Mountain	EC	Proposed Route/Existing 138-kV Rebuild	Impact Analysis
B2H-MA-041	Oregon Trail: Alkali Springs Segment	EC	Proposed Route	Impact Analysis
0503040048SI	Oregon Trail	UN	Proposed Route	See Attachments S-6 and S-10

ID Number (Archaeology ID) <sup>1</sup>	Resource Name	Eligibility Recommendation <sup>2</sup>	Associated Project Component	Status
B2H-MA-007	The Dalles Military Road	NC	Proposed Route (Construction Footprint)	Not identified during field survey; No Further Work
B2H-MA-003	Meek Cutoff	NC (non-contributing segment)	Proposed Route/ Double Mountain Alternative	No Further Work

<sup>1</sup> Some Oregon Trail Area of Critical Environmental Concern (ACEC) segments are listed in the OHSD by different names than in the BLM's Oregon National Historic Trail Management Plan (1989). This table lists the BLM name first with the OHSD name in parentheses.

<sup>2</sup> NRHP eligibility evaluations: EC=Eligible/Contributing, ES=Eligible/Significant, NC=Not Eligible, UN=Unevaluated

**Page S-144, Section 3.3.2.1**

**Change:** Section 3.3.2.2 added to include redacted extracts from Attachment S-10. Section titled Oregon Trail ILS-Resource Descriptions and Evaluations.

**Revised Text:** "Section 3.3.2.2" added and titled "Oregon Trail ILS – Resource Descriptions and Evaluations (Extracts)"

This section provides textual extracts from the Oregon Trail ILS recorded within the Project Analysis Area. Some portions of the extracts have been redacted to conform with the confidentiality requirements associated with state and federal cultural resource laws and regulations. In other instances, repetitive text has been removed for readability.

**Oregon National Historic Trail**

**State of Oregon**

The following text appears as contextual information on Oregon Trail-related resources recorded during the intensive level survey. To avoid repetition, it appears in this section only once.

*History*

The first wave of migration to Oregon occurred in the 1830s as Protestant missionaries traveled west to convert the native populations (Hutchison and Jones 1993). Explorers established other routes that were eventually incorporated into the historic Oregon Trail. The first emigrant wagon train, the Bidwell-Bartleson party, arrived in southeastern Idaho in 1841. Thirty- four members of the party continued west, accompanying missionaries along what would become the Oregon Trail. The remaining 35 party members headed southwest to California, establishing the California (Applegate) Trail (Hill 1986:10–11). Emigration increased in the following years, and numerous emigrant routes crossed Oregon in all directions.

The principal route of westerly migration across Oregon occurred via the Oregon Trail, which followed Native American travel routes. It appears that the trail was used by Euro-American emigrants from 1841 through the early 1900s, despite availability of rail service beginning in 1884 (Bureau of Outdoor Recreation 1977:20, 22). Native Americans often guided the

emigrants as well as missionaries and fur trappers and traded with them along the way. The National Historic Trail traverses 547 miles of Oregon's plains, deserts, mountains, and rivers. The route made possible one of the largest and longest mass migrations in the U.S., which seemingly bolstered the U.S. government's claims on the Pacific Northwest (Oregon Historic Trails Fund 2012).

Emigrants headed for Oregon largely traveled west along the Snake River, while those heading to California went southwest at the "Parting of the Ways" or "Separation of the Trails," located on the western bank of the Raft River east of present-day Burley, Idaho (Hutchison and Jones 1993). This diversion is documented in many of the emigrant diaries (Brock 2000; Haines 1981). Dreams of making it rich and enticements by the Hudson's Bay Company at Fort Hall often encouraged travelers to head toward California (Franzwa 1997:307). By 1849, the California Trail was in full use as more emigrants traveled to California than Oregon for the Gold Rush (Evans 1991). The Applegate Trail, a southern alternate that connected to the Oregon Trail via the California Trail, was established to avoid the difficult terrain at Burnt River Canyon, the Blue Mountains, and the dangerous crossings of the Snake and Columbia rivers. The Applegate Trail was blazed from west to east, cutting through northern Nevada and intersecting with the California Trail at the Humboldt River before heading north and approaching Willamette Valley from the south. Oregon's own gold discoveries in the Blue Mountains and other areas in Idaho also resulted in increased use of the Oregon Trail.

Several emigrants and wagon trains developed alternate routes in attempts to divert to new destinations or to avoid notoriously difficult terrain. Those who continued west along the main trail followed the southern side of the Snake River until crossing at Three Island Crossing and Thousand Springs (Stewart 1962). The Oregon Trail, after passing the Raft River plain, ascended a steep hill and approached the Snake River near Burley, Idaho. This section of trail was considered incredibly difficult given the desert environment and lack of grass and water (Stewart 1962). The next major stop along the Snake River was Fort Boise. From there, the Oregon Trail headed northwest departing the Snake River at Farewell Bend. Emigrants would stop at this location to rest and increase their supplies through fishing, hunting, and trade with other emigrants and Native Americans. Interactions were not always peaceful, however, and Farewell Bend witnessed skirmishes between local Native Americans and emigrants, including the Van Ornum Massacre (Valentine 2008). To the southeast, near Nyssa, is the Lytle Pass/Kenny Pass National Historic District where approximately 4 miles of Oregon Trail ruts have been preserved in a setting similar to that which would have been witnessed by emigrants (Brown 1973).

Westward migration on the Oregon Trail was reaching its peak in the mid-19th century, with Oregon's own gold rush occurring in the Blue Mountains in the early 1860s. The trail began to be increasingly used for transporting freight, eventually being labeled as the "Baker and Boise City Road" on the 1882 GLO plats. Trading centers, ferries, and stage stations, including Millers Station near the town of Huntington, were established to support the travelers (Valentine 2008:6). Eventually more than 500,000 would-be settlers would trudge over the Oregon Trail to western Oregon, accompanied by more than 1.5 million animals. Many pioneer journals contain references to the welcome sight of the Baker Valley, near the mid-point of the Project, after their long and arduous trip through the heat and dust of the Snake River Plain and the narrow, rocky Burnt River Canyon. After resting at the Lone Pine in Baker Valley, emigrants descended the face of Craig Mountain to the southern entry to Ladd Canyon at the northern end of Baker Valley. Numerous journal entries expounded upon the beautiful vista of camas in bloom and stately cottonwood trees lining the Grande Ronde River (Evans 1991). After struggling through the steep slopes and heavy timber of the Blue Mountains, immigrants made their way down one last steep stretch on Cabbage Hill to the grasslands of the Columbia River plain. Travel across

the Columbia Plateau region was relatively easy, although water and fuelwood were scarce. The Columbia Gorge posed the final, frightening obstacle, where many families chose to raft their wagons down the imposing Columbia River from The Dalles to the Portland basin.

Portions of the Oregon Trail continued to be used into the late 1890s, but the trail saw a decline once the transcontinental railroad was completed in 1869. Many well-traveled segments of the trail were converted to modern highways and railroad segments, including several segments of I-84 in Idaho and Oregon and I-80 in Nebraska. Numerous markers have been erected along the route at burial spots, emigrant camps, inscription spots, and in areas containing visible wagon ruts. Congress declared the 2,170-mile-long Oregon Trail a National Historic Trail in 1978. The Well Spring Segment is the only segment of the Oregon Trail located in the Project Analysis Area that is currently listed on the National Register of Historic Places (NRHP).

**35MW00230 (Emigrant Cemetery)/B2H-MO-004, & 35MW00224 (Well Spring Multicomponent Site)  
lone Vicinity, Morrow County  
NRHP-listed – Contributing Resource to Well Spring Segment, Oregon Trail (35MW00224 Eligible)**



View of Emigrant Cemetery, looking north towards interpretive panels.



View of Emigrant Cemetery, looking north.

### *Description*

This resource was listed on the NRHP on September 13, 1978 as the “Well Spring Segment – Oregon Trail/Boardman Bombing Range Segment – Oregon Trail.” It encompasses part of the Upper Well Spring, the trail campsite, 7 miles of continuous visible wagon ruts, and an emigrant cemetery (Rappel 1978). The NRHP-listed segment also encompasses the 24-acre Well Spring Homestead site. In April 2013, Robert Jones of CardnoTEC recommended that the NRHP listing for the Oregon Trail – Well Spring Segment be amended to include 35MW00224 Well Spring Multicomponent Site – also known as the Well Spring Homestead site Well Spring (Jones 2013). The trail segment contributes to the larger Oregon National Historic Trail (ONHT) landscape and is one of only four NRHP-listed resources in Morrow County. The Well Spring Segment NRHP nomination is currently being revised and updated such that it would now qualify as a contributing resource under the currently proposed Oregon Trail, Oregon, 1840-1880 Multiple Property Documentation Form (MPDF). The revised draft nomination has not added 35MW00224 as a contributing resource.

The Well Spring segment is located in the vicinity of the present Naval Weapons Systems Training Facility, Boardman Bombing Range (NWSTF Bombing Range), established in 1941 as an aerial bombing practice range for the U.S. Army Air Corps. The U.S. Navy acquired the range from the U.S. Air Force in 1960 and half the range was soon transferred to the State of Oregon. The NWSTF setting is a rural agricultural area with vast open spaces. The setting has not appreciably changed since the 1990s (NWSTF Boardman 2015: 3.10-14).

The cemetery site’s three interpretive panels are mounted on hard wood posts with subsurface foundations. An American Legion metal plaque and flagpole have been installed on a concrete foundation. One of the interpretive panels describes the hardships emigrants faced during their journey and how the wooden markers commonly used for graves usually disintegrated or were trampled by post-migration cattle drives. The other two panels describe the area’s grasslands and wildlife. Two stone pillars with metal plaques also stand in memory of Robert Evan Williams, buried at the cemetery in 1852, and Col. Cornelius Gilliam, killed at the location on March 24 during the Cayuse War of 1848 by accidental discharge of his own gun. Col. Gilliam commanded the volunteer forces sent from the Willamette Valley against the Cayuse Indians to

avenge Dr. Marcus Whitman and his missionaries who were killed at Walilatpu in November 1847 (Scott 1926). The Emigrant Cemetery is in good condition.

### *Significance*

Organized cemeteries, such as Emigrant Cemetery, began to appear in Oregon around the mid to late 1840s, coinciding with increasing waves of emigration (Allen and Schelereth 2015: 91). Robert Evans Williams, one of the only two identified emigrants buried at Well Spring emigrant cemetery, traveled the Oregon Trail in 1852 with his wife Jane Roberts Williams and their son, Robert Evans Williams, Jr. After Williams died at Well Spring, Jane and their son continued their journey, which eventually concluded in Portland. They moved to Oregon City in 1853 and Robert, Jr. later attended Portland's National Business College. After a series of jobs in Oregon and Idaho, Robert, Jr. settled in The Dalles, where he became an owner of The Dalles Mercantile Company. He eventually became The Dalles' postmaster and an active participant in local political and civic affairs (Carey 1922: 529). Research from online sources did not reveal biographical information about Dorothy Kane, the other emigrant known to be buried at the emigrant cemetery.

This resource was listed on the NRHP on September 13, 1978 as the "Well Spring Segment – Oregon Trail/Boardman Bombing Range Segment – Oregon Trail." The trail segment is significant under Criterion A as a contributing resource to the Oregon Trail MPDF and is one of only four NRHP-listed resources in Morrow County. The Well Spring segment of the Oregon Trail retains all aspects of historic integrity: design, materials, workmanship, location, setting, association, and feeling.

As a contributing resource to the Oregon Trail – Well Spring segment, Emigrant Cemetery retains integrity of location, materials, setting, design, association, and feeling and is found nationally significance in the areas of Exploration/Settlement, Transportation, and Commerce. The cemetery's integrity of materials and workmanship is diminished due to the loss of grave markers, but these aspects are not essential to convey the historical significance of the resource. The cemetery does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with the cemetery. The cemetery does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Emigrant Graves MPDF property type. The cemetery would be eligible at the national level for the NRHP as it individually meets the Oregon Trail MPDF's Registration Requirements for the Emigrant Graves property type. The segment is located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. It also contains graves of individuals who perished while traveling on the Oregon Trail, is in close proximity to the Well Spring Segment, and through soil depressions are identifiable. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource is its date of construction. The NRHP nomination notes that the cemetery is one of the largest identified along the Oregon portion of the Oregon Trail (Rappel 1978) and is therefore likely individually eligible for the NRHP as it meets the conditions of Criteria Consideration D for its association with historic events.

**35MW00227 (Historic Period Road)**  
**lone Vicinity, Morrow County**  
**Not Eligible (previous determination)**

This description and significance statement is from an archaeological site record for 35MW00227 (Jones 2013). The resource was not revisited for the B2H Project as it was previously determined not eligible by the Department of Defense.

*Description*

This site consists of a set of deeply incised wagon ruts extending east out of Tub Springs. The ruts are visible as they rise out of the Juniper Canyon floor. There they pass over a sharp rise then across the relatively flat rolling terrain northeast of Tub Springs. They dip again to pass through the unnamed drainage east of Juniper Canyon, and are still visible on aerials as they meet the eastern boundary of NWSTF Boardman. They run through an area of cheatgrass and sagebrush, and in some places are so deep that they are filled with Russian Thistle (tumbleweed). Lewarch et al. (1997) investigated these ruts as an alternative route of the Oregon Trail, the Lower Well Spring diversion; however, the rut alignments do not correspond to possible Oregon Trail alignments on historical maps. Instead, they match an unnamed road from the 1906 USGS map. The fact that the ruts do not appear on earlier maps, runs fairly directly to the section of Juniper Canyon adjacent to the Carty homestead at Tub Springs, and are visible on 1906 topographic maps leads to the inference that the ruts are associated with the Carty occupation at Tub Springs (35MW00207) which began near the turn of the century. In the area directly adjacent to 35MW00207, rut alignments and parallel tracks are visible, but disturbance has made them difficult to trace. Likewise, these tracks would have had to pass through the seasonal drainage at Juniper Canyon to reach Tub Springs, and would likely have been erased by 100 years of erosion in the canyon. This rut alignment may have originally connected to a set of very similar ruts leading west out of Tub Springs, but they cannot currently be connected. The ruts were walked and recorded with submeter-accurate GPS.

The ruts are deeply incised with a V-shaped cross section, but in some cases the walls have slumped, creating a shallow-sided basin cross section. In some places, the ruts are cut nearly 2 m (7 ft) into the ground, though this occurs most often where active erosion has contributed to their formation. The ruts are visible for approximately 3,060 m (10,039 ft) east of Tub Springs before they meet the eastern boundary of NWSTF Boardman.

*Significance*

The wagon ruts extending northeast out of Tub Springs likely post-date the use of the Oregon Trail. The ruts match the alignment of an unnamed road from the 1906 USGS map, and probably connected the homestead at Tub Springs to settlements in the Boardman area. The alignments themselves are badly eroded but are visible until they meet the agricultural land outside of NWSTF Boardman. The site retains integrity of location, design, setting, and materials, but not of workmanship, feeling or association. Although it is possibly associated with the historic occupation of the Tub Springs area, the ruts are badly weathered and their route outside of NWSTF Boardman has not been determined. The site cannot be associated with specific events or persons important to the past, and is therefore not eligible under Criteria A or B. The site does not represent a period, type or construction method, and is not the work of a master, and so is not eligible under Criterion C. Additionally, the site is a relatively well-documented historic phenomenon (a rural road), limiting its potential to provide new information on the history of the region, and as such it is not eligible for listing under Criterion D. Therefore, the site is recommended not eligible for listing in the NRHP.

**Oregon Trail – Well Spring Segment/B2H-MO-007  
Boardman Vicinity, Morrow County  
NRHP-listed (1978)**



View of Oregon Trail, Well Spring segment, looking northeast.



View of interpretive kiosk at the Well Spring segment, looking south.

***Description***

This resource was listed on the NRHP on September 13, 1978 as the “Well Spring Segment – Oregon Trail/Boardman Bombing Range Segment – Oregon Trail.” It encompasses part of the Upper Well Spring, the trail campsite, 7 miles of continuous visible wagon ruts, and an emigrant cemetery (Rappel 1978). The NRHP-listed segment also encompasses the 24-acre Well Spring



Homestead site. In April 2013, Robert Jones of CardnoTEC recommended that the NRHP listing for the Oregon Trail – Well Spring Segment be amended to include the associated trinomial and recorded site information related to the Well Spring Homestead site (Jones 2013). The trail segment contributes to the larger ONHT landscape and is one of only four NRHP-listed resources in Morrow County. The Well Spring Segment NRHP nomination is currently being revised and updated such that it would now qualify under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF.

The Well Spring segment is located in the vicinity of the present NWSTF Bombing Range, established in 1941 as an aerial bombing practice range for the U.S. Army Air Corps. The U.S. Navy acquired the range from the U.S. Air Force in 1960 and half the range was soon transferred to the State of Oregon. The NWSTF setting is a rural agricultural area with vast open spaces. The setting has not appreciably changed since the 1990s (NWSTF Boardman 2015: 3.10-14).

### *Significance*

The first whites to pass near Well Spring were likely John Work and his party of Hudson Bay Company fur trappers, who passed through the area in 1831 on their way to Old Fort Walla Walla from California. Work, however, did not specifically mention the springs in written accounts (Scott 1926). The Great Migration, the first emigrant wagon train, left Independence, Missouri, with nearly 1,000 people in 1843. Initially, the emigrant trail went through Whitman Mission near present-day Walla Walla, Washington, passing several Indian villages on the way to The Dalles. This strained relations between emigrants and villagers. With the increasing influx of emigrants, Marcus Whitman established a new route to The Dalles in 1844 that passed several miles south of the riverside villages via Well Spring. After the Whitman massacre in 1847, emigrants avoided the river route altogether. The alternate route went westward from the Umatilla River at Pendleton, across the arid plains south of the Columbia River via Butter Creek, Upper Well Spring, and Willow Creek. Previously known as the Native American Indian trail, this route became popular with wagon trains seeking a shorter passage to The Dalles (Martin 2012).

As emigrants began following this alternate route, Well Spring, historically known as Upper Well Spring, became a stopping point. Located in Well Spring Canyon, it was known as a consistent source of water in an otherwise arid landscape. Well Spring and the main section of the Oregon Trail crossed the southern part of the NWSTF Boardman Range. Another diversion in the Oregon Trail led to Tub Springs, historically known as Lower Well Spring, located in Juniper Canyon on the southern part of the NWSTF Boardman. Both springs continued to be used until overland travel on the Oregon Trail ceased in the 1860s (NWSTF 2015: 3.10-5). The two distinct springs, now dry, were located about 400 yards apart. Emigrants typically traveled east from Butter Creek along the Well Spring segment of the Oregon Trail in late August and early September, eager to reach the Upper Well Spring, which constituted the only water source for the 30 miles between Butter Creek (18 miles east) and Willow Creek (12 miles west) (Scott 1926).

The Upper Well Spring was previously believed to be the site of an old stage station established around 1863 by Newton Smith, the area's first settler. By 1926, the land was being used for Joseph T. Peter's sheep ranch (Scott 1926). Emigrant Cemetery (B2H-MO-004) is located less than ½ mile from the spring (NPS 1981:366).

Thousands of emigrants traversed the notoriously difficult and parched trail section between Butter Creek and Well Spring. Many did not survive. Historian Leslie M. Scott wrote that emigrants encountered, among other challenges, a scarcity of water:

*The country is rough, the land is dry, water supplies in ox-team transport were far apart, grass became scarce, heat and dust were oppressive, sickness was prevalent, food had to be carried in the wagons or obtained from slaughter of jaded cattle, there was little or no wild game, salmon supplies were unpalatable and dangerous, frequent graves afforded mute evidence of the extremities of suffering. (Scott 1926)*

In 1926, Scott wrote that “traces of nearly a score of graves near Well Spring are seen at this late day; doubtless there were many other burials in this locality.” Although most emigrants there were buried in unmarked graves, Scott identified Robert Evan Williams (d. September 1852) as the only person known to be interred there and for whom a commemorative marker was dedicated on June 6, 1926 (Scott 1926).

One of the first recorded emigrant observations of Well Spring was found in Elizabeth Dixon Smith’s 1847 diary. That year, Smith was among nearly 4,000 emigrants who used the trail to reach Oregon country (LaSalle 2011: xv). Her October 17 diary entry detailed the arrival at Well Spring: “Here we found a great hole of water, 12 or 15 feet across. Had to water 150 head of cattle with pails. Had to stand out all night in the rain to keep the cattle from drowning” (Scott, 1926).

The following year, other emigrants recorded their experiences traveling through the Well Spring area including Riley Root of the Gates wagon company and William Anderson of the Miller wagon company. Root and Anderson were among the 1,300 emigrants who followed the trail west in 1848 (LaSalle 2011: xv). The Gates company departed from Independence, Missouri, around April 29, 1848, arrived in August at the Sand Hollow battleground, then traveled 8 miles to camp at Well Spring. The next morning, August 25, Root wrote that the Gates company left Well Spring and followed the trail 13 miles west “over a miserably poor and uneven country” to Willow Creek (LaSalle 2011: 357). The Miller wagon company, which departed from St. Joseph, Missouri, on April 30, 1848, followed the same route as the Gates company. The Miller company arrived at Well Spring on August 25, after traveling 25 miles. The journey that day led the emigrants 6 miles from east of Echo to Butter Creek, where the company divided into three groups. After traveling another 10 miles, they reached Well Spring at 10 p.m. Diarist William Anderson described the springs:

*[V]erry [sic] deep our cattle being verry [sic] dry they rushed up to drink and some of them pitched in head foremost and went clear under head and ears and would have drowned if we had not helped them out this is a poor camp it was verry [sic] dry and dusty around these springs . . . At these springs, Col. Gilem [sic] was shot a few weeks before by the accidental discharge of a gun. (LaSalle 2011: 363)*

Anderson’s diary entry references how Col. Gilliam, who led the Oregon Volunteers in battle against the Cayuse, died by inadvertently discharging his own weapon before the Miller company passed through the area.

Other diarists from early 1850s wagon trains also mentioned Well Spring, describing its appearance and, in particular, the poor water quality and sulfuric taste (Scott 1926). P.V. Crawford described the springs on August 29, 1851 as “in a sort of valley or depression in the hills, and consists of several small mounds with water boiling up in the center and sinking to the base of the mounds” (Scott 1926). The following year, emigrant Origen Thomson wrote, “Never was so dry in my life: drank half a gallon or more during the fifteen minutes we were here [at Well Spring]” (Scott 1926). On September 6, 1852, E.W. Conyers wrote, “Well Spring . . . Very strongly impregnated with sulphur, and fit only for the cattle, and hardly fit for that. Some danger of the cattle getting mired at this spring. Another spring, the water a little better” (Scott 1926).

John T. Kerns described the springs as “a mudhole spring . . . A pretty sick one” in September 1852 and Cecelia Emily McMillen Adams called it “a spring of miserable water” in October 1852 (Scott 1926).

Several years later, in 1855-56, Well Spring marked the Oregon line of supply for volunteer forces in the Yakima Indian War. During that campaign, Major Mark A. Chinn led volunteers from Well Spring to establish Fort Henrietta 30 miles east at Echo (Scott 1926). Chinn and Company B reached Well Spring on November 17 after camping at Willow Creek. From Willow Creek to Well Spring, Chinn wrote that, “Throughout the march I had kept a number of scouts acquainted with the country, scouring the country along the route, but no signs of Indians, cattle, or horses had been seen.” The company reached the Umatilla River the following night and began erecting a stockade (Reese 1965:135).

Organized cemeteries, such as Emigrant Cemetery, began to appear in Oregon around the mid to late 1840s, coinciding with increasing waves of emigration (Allen and Schelereth 2015: 91). Robert Evans Williams, one of the only two identified emigrants buried at Well Spring’ emigrant cemetery, traveled the Oregon Trail in 1852 with his wife Jane Roberts Williams and their son, Robert Evans Williams, Jr. After Williams died at Well Spring, Jane and their son continued their journey, which eventually concluded in Portland. They moved to Oregon City in 1853 and Robert, Jr. later attended Portland’s National Business College. After a series of jobs in Oregon and Idaho, Robert, Jr. settled in The Dalles, where he became an owner of The Dalles Mercantile Company. He eventually became The Dalles’ postmaster and an active participant in local political and civic affairs (Carey 1922: 529). Research from online sources did not reveal biographical information about Dorothy Kane, the other emigrant known to be buried at the emigrant cemetery.

Decades after the wagon trains crossed the Oregon Trail, interest grew in retracing the route and commemorating those who crossed it (Dielman 2010, rev’d 2013). In the 63 years since the first wagon train of 1843 traveled the trail’s full length, traces of the trail were being obliterated by human activity or natural forces. In February 1906, 1854 emigrant Ezra Meeker set off on his first journey with William Mardon to travel the trail by wagon from west to east (Meeker went again in 1910). Along the way, Meeker solicited donations to purchase small stone as markers where the trail intersected with primary travel routes and larger stone monuments, which were constructed in towns on or near the Oregon Trail. Meeker erected monuments at The Dalles, Pendleton, La Grande, Baker City, Durkee, Huntington, Vale, and Straw Ranch (Dielman 2010, rev’d 2013). Meeker’s 1906 commemorative journey included a stopover at Well Spring.

This resource was listed in the NRHP on September 13, 1978 as the “Well Spring Segment – Oregon Trail/Boardman Bombing Range Segment – Oregon Trail.” The trail segment was determined nationally significant in the areas of Exploration/Settlement, Transportation, and Commerce. The nomination occurred prior to the use of criteria. A revised nomination for this segment includes an expanded boundary but has yet to be approved by the National Park Service. This assessment believes that the segment should remain listed with the expanded boundary as indicated by the amended nomination. The Well Spring segment would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF’s Registration Requirements. The segment is located in Oregon, were used during the Oregon Trail’s Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. The segment would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. The Well Spring segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it

does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The Well Spring segment of the Oregon Trail retains all aspects of historic integrity: design, materials, workmanship, location, setting, association, and feeling. The 1978 nomination's "specific dates" list 1841-1846, but it is recommended that the segment's period of significance be expanded for the full period covered under the MPDF which is 1840-1880.

As a contributing resource to the Oregon Trail – Well Spring segment, Emigrant Cemetery retains integrity of location, materials, setting, design, association, and feeling. The cemetery's integrity of materials and workmanship is diminished due to the loss of grave markers, but these aspects are not essential to convey the historical significance of the resource. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

**Oregon Trail – Newly Identified Ruts of Well Spring Segment (Segments 3B2H-CH-01 and 4B2H-EK-02)  
Boardman Vicinity, Morrow County  
NRHP-listed**



Oregon Trails segment 3B2H-CH-01, looking northwest.



Oregon Trail segment 3B2H-CH-01, looking southeast.



Oregon Trail segment 4B2H-EK-02, overview at western-most trail marker, looking west.



Oregon Trail segment 4B2H-EK-02, overview at eastern-most trail marker, looking

**Oregon Trail – Unnamed Segment/Segment 3B2H-SA-03  
Boardman Vicinity, Morrow County  
NRHP-listed**

*Description*

Segment 3B2H-SA-03 consists of a single segment of the Oregon Trail, indicated by a rutted swale that measures approximately 515 feet long. It is within proximity of the Oregon NHT and several other recorded segments of the Oregon Trail (3B2H-SA-04 and 3B2H-SA-05). For the purposes of this report, Segment 3B2H-SA-03 has been given a Class 1 designation (unaltered original trail) (OCTA 1994:13). The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. The trail segment appears to be minimally altered.

*Significance*

Segment 3B2H-SA-03 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 3B2H-SA-03 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The segment neither embodies the distinctive characteristics of an architectural style or architect nor exhibits high artistic value (Criterion C). Given the extent of historic use of the trail, the well-worn nature of the segment, and the depositional environment of the recorded trail segment, there is potential for associated artifacts to be present. Until subsurface probing or metal detecting can be conducted along the recorded trail segment, it is also considered unevaluated under Criterion D (additional data). Given the segment's recommended NRHP-eligibility under Criterion A and unevaluated status under Criterion D, Tetra Tech recommends that the site be avoided. If

avoidance is not feasible, it is recommended that additional documentation and archival research of the site be conducted in coordination with the Oregon SHPO, BLM, and OCTA. It is also recommended that subsurface probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.

**Oregon Trail – Unnamed Segment/Segment 3B2H-SA-04  
Boardman Vicinity, Morrow County  
NRHP-eligible**

*Description*

Segment 3B2H-SA-04 consists of a single segment of the Oregon Trail, indicated by a rutted swale that measures approximately 1,831 feet long. It is within proximity of the Oregon NHT and several other recorded segments of the Oregon Trail (3B2H-SA-03 and 3B2H-SA-05). For the purposes of this report, Segment 3B2H-SA-04 has been given a Class 1 designation (unaltered original trail) (OCTA 1994:13). The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. The trail segment appears to be minimally altered, despite erosion.

*Significance*

Segment 3B2H-SA-04 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 3B2H-SA-04 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The segment neither embodies the distinctive characteristics of an architectural style or architect nor exhibits high artistic value (Criterion C). Given the extent of historic use of the trail, the well-worn nature of the segment, and the depositional environment of the recorded trail segment, there is potential for associated artifacts to be present. Until subsurface probing or metal detecting can be conducted along the recorded trail segment, it is also considered unevaluated under Criterion D (additional data). Given the segment's recommended NRHP-eligibility under Criterion A and unevaluated status under Criterion D, Tetra Tech recommends that the site be avoided. If avoidance is not feasible, it is recommended that additional documentation and archival research of the site be conducted in coordination with the Oregon SHPO, BLM, and OCTA. It is also recommended that subsurface probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.

**Oregon Trail – Unnamed Segment/4B2H-EK-03**  
**Boardman Vicinity, Morrow County**  
**NRHP-eligible**



View of unnamed segment of Oregon Trail (4B2H-EK-03), looking north.

*Description*

Segment 4B2H-EK-03 consists of a 667-foot rutted segment of the Oregon Trail. It appears to have been subsequently used as a two-track road. For the purposes of this report, the trail segment has been given a Class 2 designation (used original trail) (OCTA 1994:13). The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. The trail segment appears to be minimally altered, despite subsequent use as a two-track road.

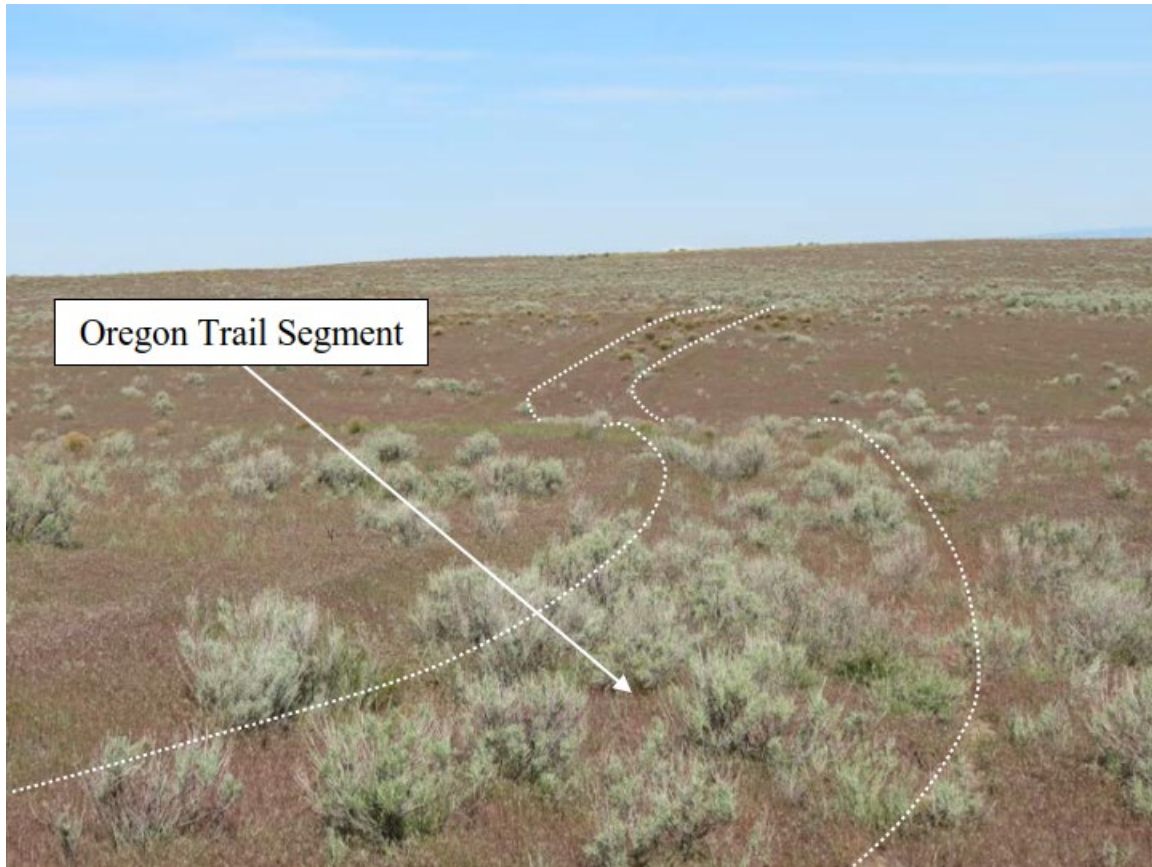
*Significance*

Segment 4B2H-EK-03 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 4B2H-EK-03 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The site neither embodies the distinctive characteristics of an architectural style or architect nor exhibits high artistic value (Criterion C). Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the site is also considered unevaluated under Criterion D (additional data). Tetra Tech recommends that the site be avoided. If avoidance is infeasible, it is recommended that additional documentation and archival research of the site be conducted in coordination with the Oregon SHPO, BLM, and OCTA. It is also recommended that subsurface



probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.

**Oregon Trail – Unnamed Segment 5B2H-SA-01**  
**Boardman Vicinity, Morrow County**  
**NRHP-eligible**



Oregon Trail segment 5B2H-SA-01, segment overview, looking west.

*Description*

The segment corresponds with one of the Oregon Trail routes identified in the Class I research as well as an “Immigrant Road” depicted on the 1940 GLO plat for T2N/R25E. The trail segment is 0.25 mile north of the Oregon NHT and Segment 4B2H-EK-02. The southeast-northwest trending trail segment recorded as Segment 5B2H-SA-01 is indicated by a shallow, vegetated swale with parallel berms. Based on its alignment and perceived angle of direction, the segment may be associated with the Oregon Trail-associated Tubbs Spring site (35MW00106). However, the area between the northwest terminus of the segment and 35MW00106 has not been subjected to pedestrian survey in order to affirm physical evidence to support the association. The recorded segment is terminated at its northwest end by an unnamed two-track road and at its southeast end by a transmission line and agricultural field. It measures approximately 0.2-mile-long and averages approximately 15 feet wide and up to 10 inches deep.

*Significance*

The Oregon Trail is an NRHP-listed resource and part of the National Trails System for its role in early national Exploration/Settlement, Transportation, and Commerce (Criterion A).

In Oregon, the Oregon Trail's NRHP nomination is currently being revised in the Oregon Trail, Oregon, 1840-1880 MPDF (Beckham 2012). The MPDF has been approved by the Oregon State Advisory Commission on Historic Preservation, but has yet to be approved by the Keeper of the National Register. The draft MPDF provides a framework for evaluating the various property types associated with the Oregon Trail in the State of Oregon that could be buildings, structures, objects, sites as well as districts. The MPDF also considers the Oregon Trail a linear historic district (in its totality) that contains contributing and non-contributing resources located within its historic boundaries. The Oregon Trail is also considered to be significant at the national level and has been designated as an NHT (Logan Simpson Design 2014). The MPDF discusses several Property Types associated with the Oregon Trail and specifically discusses the associated resources that fall under this typology, including river crossings, fords, and ferries; intersecting routes; Indian agencies/reservations; Euro-American towns; springs; mountain ascents and descents; valleys; landmarks; battle sites; and important camping sites. Segment 5B2H-SA-01 consists of a 0.2-mile segment of the Oregon Trail, which corresponds with the Oregon NHT and "Immigrant Road" on historic GLO plats of the segment location. Based on the segment's orientation and location, it may be associated with the Tubbs Spring site (35MW00106) which is related to the Oregon Trail. However, physical evidence for this association is lacking because the intervening area was not surveyed for this project. For the purposes of this report, the trail segment has been given a Class 1 designation (unaltered original trail) (OCTA 1994:13). The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. The trail segment appears to be minimally altered. Therefore, Segment 5B2H-SA-01 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 5B2H-SA-01 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The site neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion C). Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the site is also considered unevaluated under Criterion D (additional data).

**Oregon Trail - Unnamed Segment (Lindsey Feedlot Lane)/B2H-MO-008**  
**Unincorporated, Morrow County**  
**Not Eligible**



Unnamed segment of the Oregon Trail near Lindsey Feedlot Lane, looking north.

*Description*

This component (B2H-MO-008) of the Oregon Trail Unnamed segment is situated on the north side of Lindsay Feedlot Lane, an unpaved road. The segment is located within an agricultural setting and adjacent to component (3B2H-SA-05). The segment is located about 14 miles southeast of Boardman and situated between the Echo/Butter Creek area [REDACTED]

[REDACTED] The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. There are foothills to the northwest and a butte to the north. Mt. Hood and Mt. Saint Helens are visible in the distance. A small portion of trail appears to be unaltered. From Lindsay Feedlot Lane, a single carsonite Oregon Trail marker was observed near a shallow swale. The majority of the segment has been obscured by agricultural activities. This component of the Oregon Trail (Unnamed Segment) is in fair condition.

*Significance*

In Morrow County, emigrant wagons stopped at various places, but some camps were better known than others. Many stopped at Echo, formerly Fort Henrietta, where they forded the Umatilla River. The wagon trains then moved west to cross Butter Creek, just northwest of the present Echo Junction. They continued west across Sand Hollow and Juniper Canyon before reaching Well Spring (*Heppner Gazette-Times* 1972).

At Sand Hollow, [REDACTED] the Oregon regiment of volunteers fought Pakhat'aw'aw (Five Crows) and the Cayuse on February 28, 1848 [REDACTED]. As emigrants traveled from Sand Hollow, they traversed this trail segment to reach [REDACTED].

Well Spring, [REDACTED] (see B2H-MO-007 Oregon Trail Well Spring Segment). The summer following the Sand Hollow battle, emigrant Riley Root and the Gates company passed from Butter Creek to Well Spring. Root described the area between as “a poor tract of the Columbia River valley.” He also noted that “no grass nor water exists along this day’s route, where emigrants might refresh themselves and their weary teams” (LaSalle 2011: 35 and 56).

The historical integrity of segment (B2H-MO-008) of the unnamed trail has been obscured by agricultural activities and is relatively isolated. It retains integrity of location, but has diminished integrity of setting, association, and feeling. This segment is recommended as not eligible as it does not appear to meet the registration requirements under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF as it does not retain sufficient integrity to convey its historical significance as a contributing resource to the ONHT. This segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource’s physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

**Oregon Trail – Unnamed Segment (Sand Hollow)/Segment 3B2H-SA-05  
Boardman Vicinity, Morrow County  
NRHP-eligible**



View of unnamed segment of Oregon Trail swale, looking west.



View of unnamed segment of Oregon Trail swale, looking east.

#### *Description*

This component (3B2H-SA-05) of the Oregon Trail Unnamed segment is located on a draw that climbs out of Sand Hollow. The segment is located within an agricultural setting, immediately north of Lindsay Feedlot Lane, an unpaved road and is adjacent to component (B2H-MO-008). The segment is located about 14 miles southeast of Boardman and situated between the Echo/Butter Creek area and Well Spring emigrant campground. An unmarked place believed to be the site of the Sand Hollow Battle lies east of the survey area ( ). The larger setting, which contains rolling hills and distant mountains, is generally unaltered, except for intensive agricultural development. There are foothills to the northwest and a butte to the north. Mt. Hood and Mt. Saint Helens are visible in the distance. A small portion of trail appears to be unaltered. From Lindsay Feedlot Lane, a single carsonite Oregon Trail marker was observed near a shallow swale. The majority of the segment has been obscured by agricultural activities. This component of the Oregon Trail (Unnamed Segment) is in fair condition.

#### *Significance*

In Morrow County, emigrant wagons stopped at various places, but some camps were better known than others. Many stopped at Echo, formerly Fort Henrietta, where they forded the Umatilla River. The wagon trains then moved west to cross Butter Creek, just northwest of the present Echo Junction. They continued west across Sand Hollow and Juniper Canyon before reaching Well Spring (*Heppner Gazette-Times* 1972).

At Sand Hollow, about three miles east of the survey area, the Oregon regiment of volunteers fought Pakhat'aw'aw (Five Crows) and the Cayuse on February 28, 1848 (see Sand Hollow TCP site). As emigrants traveled from Sand Hollow, they traversed this trail segment to reach Well Spring, a popular emigrant campground 8 miles to the west (see B2H-MO-007 Oregon Trail Well Spring Segment). The summer following the Sand Hollow battle, emigrant Riley Root and the Gates company passed from Butter Creek to Well Spring. Root described the area between as "a poor tract of the Columbia River valley." He also noted that "no grass nor water

exists along this day's route, where emigrants might refresh themselves and their weary teams" (LaSalle 2011: 35 and 56).

The historical integrity of segment (3B2H-SA-05) of the unnamed trail retains excellent integrity and should be considered NRHP-eligible at the national level in the areas of Agriculture, Archaeology, Commerce, Communications, Exploration, and Settlement (Anderson et al 2013). 3B2H-SA-05 consists of two segments of the Oregon Trail marked by BLM signs. These two segments have been given Class 1 designation as an unaltered original trail. This unnamed segment would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements and falls under the Trail/Wagon Road and Battle Sites MPDF Property Types. The segment is located in Oregon, was used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, is in close proximity to a marker of the Sand Hollow Battlefield, and retains the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. This segment would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. The unnamed segments do not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance is 1840-1880.

**Sand Hollow Battle Ground (SL-MO-001; SL-MO-005)**  
**Unincorporated, Morrow County**  
**NRHP-eligible**

This resource was identified by the Confederated Tribes of the Umatilla Indian Reservation as a Historic Property of Religious and Cultural Significance and determined eligible for the NRHP by the U.S. Navy in 2015 (U.S. Navy 2015).

**Meacham Pioneer Memorial Cemetery/35UM00365**  
**Meacham, Umatilla County**  
**Not Eligible**



View of Meacham Cemetery, looking southeast.

*Description*

The Meacham Pioneer Cemetery is located in a triangular patch of forest formed by Interstate I-84, Meacham Lake Road, and Frontage Road in Meacham, Oregon. The cemetery is fenced with metal stakes and wire with a wood and metal entry gate. There are two infant graves surrounded by low white picket fences. Burial markers are primarily modern wood placards attached to PVC pipe inscribed with dates ranging from 1852 to 2009. The 2003 Cultural Resources Reporting Form indicates that several slumps or linear depressions were noted within the cemetery borders not associated with the markers. Slumps were also noted outside the cemetery boundary.

The setting is characterized by the surrounding trees and fenced cemetery. The cemetery is in close proximity to Interstate 84 which separates the cemetery from the community of Meacham. Although the highway diminishes the property's setting, the surrounding trees create a visual barrier and helps retain some of the setting's integrity. Modern grave markers are installed throughout the cemetery boundaries that do not appear to be physically associated with the earthen slumps or linear depressions indicative of early graves, diminishing the property's integrity of association and feeling. The Meacham Pioneer Memorial Cemetery is in good condition.

*Significance*

In 1872, Alfred B. Meachum purchased 160 acres in Umatilla County from the General Land Office (GLO), including the land where the cemetery is located. The cemetery is not noted on GLO survey maps or records, nor is it visible on the 1932 Metsker Map for the area.

The Meacham Cemetery is registered with the Oregon Historic Cemeteries Association as an Oregon Pioneer Cemetery. However, the fencing and markers are recent and commemorative in nature. USGenWeb Archives lists twenty names with births ranging from 1809 to 1913 and deaths ranging from 1852 to 1931, although notes indicate that some of the deceased individuals were buried elsewhere. The existing markers include these names, as well as a marker in honor of Chinese Laborers, and several wood markers commemorating more recent deaths that occurred in the 1990s and 2000s (USGenWeb 2009; State of Oregon 2016).

The Meacham Pioneer Cemetery retains integrity in location and design. However, it has lost integrity in materials, setting, feeling, association, and workmanship due to the construction of Interstate 84 and the use of modern grave markers. Although, the cemetery has been recognized by the Oregon Historic Cemeteries Association it does not retain sufficient integrity recommended for eligibility under the NRHP Criterion and would not meet the Oregon Trail MPDF's Registration Requirements for the Emigrant Graves Property Type under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF.

Based on information gathered from digitized historic newspapers, online database, local libraries, and historic maps, the Meacham Pioneer Memorial Cemetery is recommended as not eligible under the NRHP Criteria A due to a lack of information associating it with historic events. Based on the cemeteries lack of association with important persons in local, state, or national history, it is recommended as not eligible under NRHP Criterion B. The cemetery does not exemplify a significant architectural style, construction or building type, or a work of a master, pursuant to Criterion C. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. Lastly, the Meacham Pioneer Cemetery does not derive importance from the graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events. NRHP Criteria Consideration D, therefore, would not apply.

**35UM00472, Grave Associated with Oregon Trail  
Unincorporated Umatilla County  
NRHP-eligible**

This site was not visited during fieldwork, however, the potential for project effects was analyzed. The information from the description comes from the site record for 35UM00472 by Scott Billat prepared in 2012 for a different project.

*Description*

The Class I review for the Oregon Trail within the current project area indicated that at least three possible routes of the Trail may be present. While one of the identified routes is Hwy 30, the other possible routes were reportedly dirt trails or tracks. The fieldwork conducted for the project eliminated two of the three routes, as no indications of any Trail alignments were found. Evidence of the Trail was found [REDACTED]. This route alignment closely followed the Oregon State Highway Department Oregon Trail map (sheet 5) produced in 1959. Also, an approximate 1000-foot long segment of the Trail had been previously identified by the Oregon-California Trail Association (OCTA), as three trail marker signs were present along the segment. [REDACTED]



While two breaks of no visible Trail were noted, one of which was along the OCTA section, a total of 3,000 feet (0.6 mile) of Trail was documented and GPS plotted during the fieldwork. The identification of the Trail was hampered by logging in the area in which about 60% of the forest has been removed and impacted by numerous logging trails. The general condition of the Trail was poor to fair, having been disturbed by logging activities including tree deadfall and logging trails, along with new trees growing within the Trail.

*Significance*

This resource was evaluated by Billat (2012) as eligible for the NRHP. No National Register Criteria for Evaluation are noted.

**Oregon Trail, California Gulch/Blue Mountain Segment/B2H-UN-001  
Unincorporated, Union County  
Unevaluated**



View of California Gulch/Blue Mountain Oregon Trail segment, looking south.

*Description*

This segment of the Oregon Trail is located in the Blue Mountains in the vicinity of California Gulch.

*Significance*

No further research/work was recommended for this resource as it is located in a heavily forested area and features limited to no views of the proposed project.

**35UN00517**

**Unincorporated Union County**

**NRHP-eligible**

No photographs of this resource were taken for the project as access was not obtained. Effects analysis was performed.

*Description*

The following text has been taken verbatim from the State of Oregon Archaeological Site Record for 35UN517 by Erik Harvey (2011). The record does not contain a bibliography linked to the sources that are cited.

“Previous site report (Wayne Parsons, 1972) mentions Oregon State Highway Department publication -Route of Oregon Trail shows identifiable ruts along entire route described above. The section of the Oregon Trail described above was the only portion to cross what is now National Forest Land. Marcus Whitman led the Great Expedition to Oregon in 1843. They reached Powder Valley in September 22, 1843 and Grande Ronde Valley in October. Whitman left wagon train there to head quickly to Walla Walla Mission, as his wife was ill. A Cayuse Indian Chief guided the train over the Blue Mountains to Walla Walla. A previous site report (CRC, 1978), stated that in a Preliminary Inventory of Historic Places, prepared by James Martin, USFS, Pendleton, Oregon, "An improved double-lane Forest Service road has replaced most of this route. Probably some evidence of the old route could be found where the present road has been straightened for better alignment. This is a route over which the earliest emigrants to the west traveled. The route was distinct when the first land surveyors surveyed the country. They plotted and identified this route on their GLO plats." A Daily Field Report (GN, 1994) found remnants of the old trail, in places obscured or destroyed by logging or road building. Later wagon roads make identification confusing.

Current site visit found the Oregon Trail as it crosses through the La Grande Ranger District of the Wallowa Whitman National Forest to be in a deteriorating condition. There are still pristine ruts located inside the boundary of Oregon Trail Interpretive Park. North of the park the trail is almost completely overgrown and inaccessible. South of the park the trail is becoming overgrown with new growth. On the open flats the trail is in pristine condition with a full viewshed of the surrounding area. As the trail gets close to Pelican Creek the flora starts to become over grown. The Oregon Trail has accumulated lots of organic duff that is decomposing into the soil and starting to fill the ruts. A fire regime along with a timber management plan needs to be permitted to happen to help keep the trail clear. The Oregon Historic Preservation Office is currently working on possibly adding this section of the Oregon Trail to the National Register of Historic Places. Adding the Oregon Trail to the National Register as it crosses through the La Grande Ranger District is fully supported.”

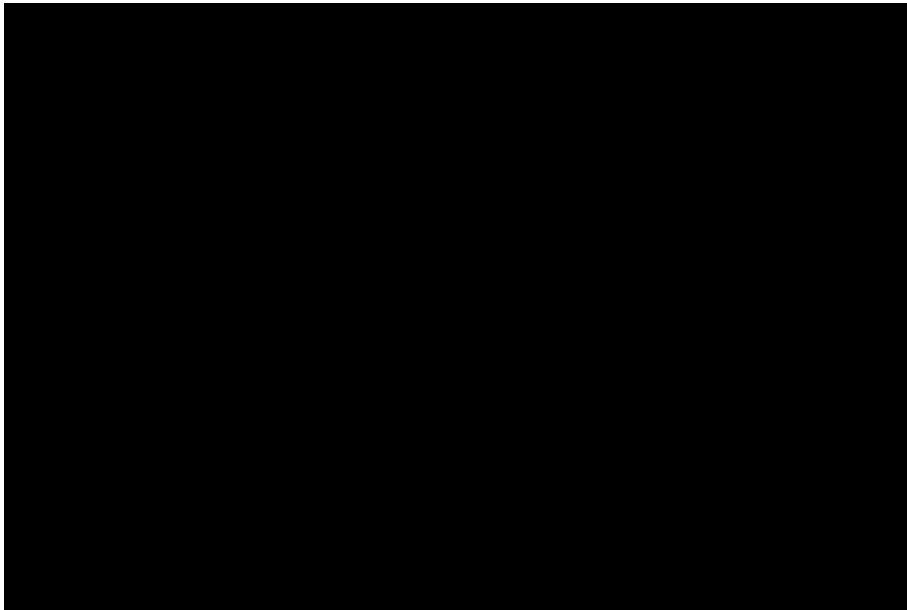
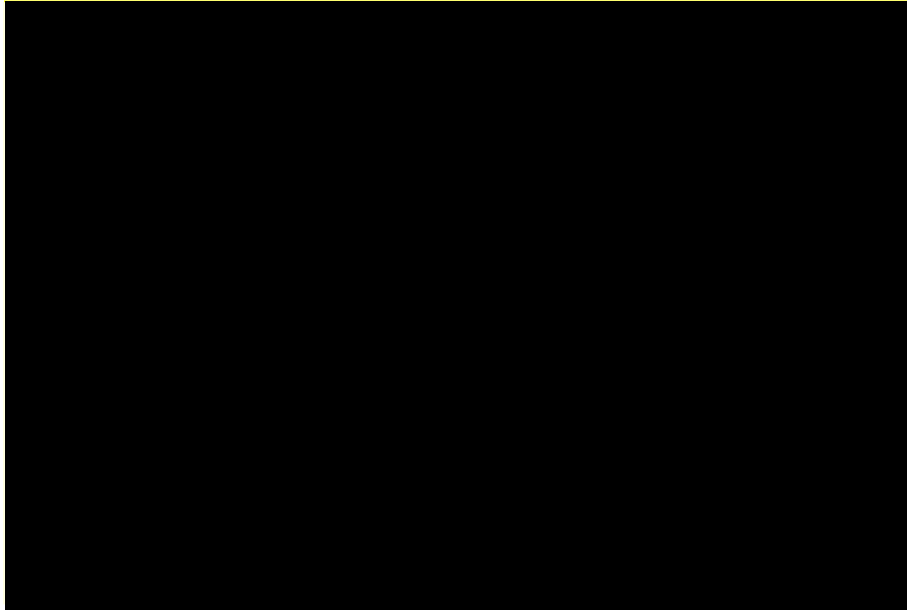
*Significance*

This resource was recommended as eligible for the NRHP by Harvey (2011). No National Register Criteria for Evaluation are noted in the site record.

**Oregon Trail – Whiskey Creek Segment (O-BK-UN-1)/B2H-UN-005**

**Unincorporated Union County**

**Not Eligible**



*Description*

This linear resource is the Oregon Trail Whiskey Creek segment, an approximately 4-mile long potential trail alternative segment [REDACTED]

[REDACTED] The segment passes through a pocket of grassland surrounded by clusters of evergreen trees. [REDACTED]

[REDACTED] Whiskey Creek is a small offshoot creek of the Grande Ronde River and flows to the southeast, [REDACTED]

[REDACTED] In 2016, a field crew identified only one set of possible swales on the BLM parcel; these occur at the east end of the property and run north to south. The potential swales are approximately 11 ft. wide east to west and are 100 ft. long. This “swale” was not present in previously recorded geospatial data, and may therefore be a natural product of erosion.

The segment observed was poorly preserved, with little to no remaining indications of the presence of the Oregon Trail. Strong indications of cattle grazing (including cattle trails and manure), as well as natural erosive processes (bioturbation) are present. The site has the feeling of an open grazing pasture or field. The setting is characterized by open grassy plains surrounded by low rolling hills with limited stands of pine in ravines and on hilltops. The hydrology of Whiskey Creek and the nearby Grande Ronde River contribute to the lush grasses in the landscape (Logan Simpson Design 2014).

*Significance*

After crossing the mountain from La Grande, emigrants camped at Hilgard Junction along the banks of the Grande Ronde River before making the ascent into the Blue Mountains (BLM 1998:306). The Manual 6280 Trails Inventory and Impacts Analysis for the Project describes the Blue Mountains as a notable landscape change along the Oregon Trail as it would have been historically experienced.

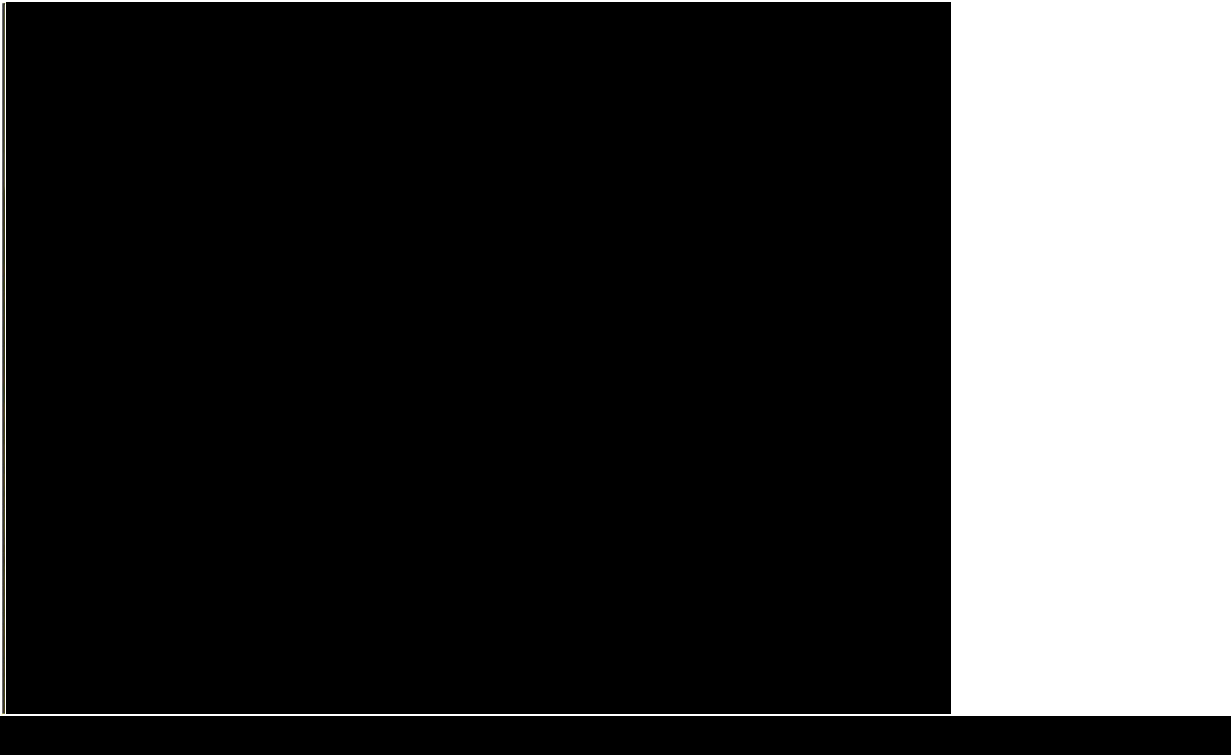
Emigrants reached the fertile valley of the Grande Ronde River after having traveled through miles of extensive sagebrush hills. The Blue Mountains stood as an imposing backdrop against the verdant river valley which received water from the Grande Ronde. Many emigrants stopped at the valley to camp before attempting to cross the mountains ... To the north of the valley, the precipitous slopes of the Blue Mountains were thick with pines, including spruce, balsam, and larches (Logan Simpson Design 2014:42).

The Oregon Trail (Whiskey Creek Segment) retains integrity of location, feeling, and association. However, even though the historic setting, characterized by open fields and the tree-lined landscape, rolling hills, and views of mountains to the west, continues to convey the emigrant experience, the intrusion of modern gravel road and wood fence lines that cross the trail have compromised its integrity of design, workmanship, material, and setting. Heavy grazing activity have also diminished the trail’s trace such that no ruts or swales remain visible, diminishing the integrity of feeling. Due to the scholarly speculation regarding the trail’s associations with the Oregon Trail, its minimal historical integrity and relative lack of visibility on the existing landscape, the Whiskey Creek trail segment does not appear to meet the registration requirements to be a contributing resource under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. While potentially associated with the Foster Toll Road, the lack of historical integrity for this segment suggests that it does not meet the registration requirements and/or NRHP criteria for the Intersecting Routes Property Type under the proposed Oregon Trail MPDF and it also would not be individually eligible.

[REDACTED] Therefore the trail [REDACTED] do not appear to be eligible for the NRHP under Criteria A, B, or C. The resource’s physical

characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

**Oregon Trail Unnamed Segment/6B2H-RP-09**  
**La Grande Vicinity, Union County**  
**NRHP-eligible**





View of unnamed segment of Oregon Trail (6B2H-RP-09), looking [REDACTED].

#### *Description*

The site consists of a segment of the historic Oregon Trail [REDACTED]. The Oregon NHT and an “Emigrant Road” indicated on the 1868 GLO plat cross the northeastern terminus of the trail segment. An OCTA sign also marks the trail segment. The trail presents itself as an eroded but overgrown swale. [REDACTED]

It ranges in width between 7.25 feet and 9 feet. [REDACTED]

#### *Significance*

6B2H-RP-09 consists of an OCTA-marked segment of the Oregon Trail [REDACTED]. The trail would have been utilized during the middle to late nineteenth century. The trail is still evident today in the form of a gentle swale diverging from the Oregon National Historic Trail at its northeastern end. It has been minimally impacted. For the purposes of this report, the trail has been given a Class 2 designation (used original trail) (OCTA 1994:13).

The Oregon Trail Segment (unnamed) would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements and falls under the Trail/Wagon Road MPDF Property Type. The segments are located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. The resource is eligible for the NRHP for its significant association with the Oregon Trail and emigration in the West in the areas of Exploration/Settlement, Transportation, and Commerce. The segment is eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon,

1840-1880 MPDF. 6B2H-RP-09 does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the site is considered unevaluated under Criterion D.

**35UN00074**  
**Unincorporated Union County**  
**NRHP-eligible**

The information in the description and significance statement is extracted from a site form for 35UN00074 prepared by Nelson (2008). Not photographs were taken of the resource as it was visited during fieldwork as no access was obtained. Effects analysis was performed.

*Description*

Reed et al. (1980) also documented a diverse historic component at the site, much of which may have been related to the route of the Oregon Trail through the site. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Local informants also stated that a two-track road is a segment of the Oregon Trail. [REDACTED]

[REDACTED]

*Significance*

The resource was evaluated by Nelson (2008) as eligible for the NRHP. No National Register Criteria for Evaluation are noted on the site form.

**Oregon Trail – Unnamed Segment (near Ladd Canyon)/35UN00435**  
**Unincorporated Union County**  
**NRHP-eligible**

No photographs were taken of this resource as no views of the Project are currently anticipated. The following information was taken from the archaeological site form for 35UN00435 (Smits 2009).

*Description*

The site consists of physical evidence of the trail in and near the Facility Site Boundary. In this location, two sets of parallel ruts descend the hill from the south and merge before they enter the Facility Site Boundary. Within the Facility Site Boundary, the ruts continue northward,

crossing a natural drainage that has been channelized by heavy equipment and presently connects two stock ponds. It is possible that the Oregon Trail in this location is comprised of braided sets of ruts, and that the drainage itself also may have been used by emigrants and their wagons, but the modern channelization and water flowing through the drainage has destroyed any physical remnants of the Oregon Trail where it crosses the drainage. North of the drainage, the ruts continue northward, crossing a modern two-track dirt road and continuing north out of the Facility Site Boundary as a single set of discontinuous ruts. [REDACTED]

*Significance*

This resource was evaluated by Smits (2009) as eligible for the NRHP, but no National Register Criteria for Evaluation are noted.

**Goodale's/Sparta Trail/B2H-BA-327**  
**Unincorporated Baker County**  
**NRHP-eligible**



View of Goodales/Sparta Trail, looking west.





View of Goodales/Sparta Trail (overlapping with Virtue Flat and Flagstaff Hill segments), looking west.

#### *Description*

Goodale's Cutoff begins in Fort Hall, Idaho. It crosses the Snake River Plain to the Lost River, and then turns west across Camas Prairie toward the area of Boise. It rejoins the main trail between Ditto Creek and Boise, runs north, crossing the Snake River into Oregon at Brownlee's Ferry near Farewell Bend. In Oregon, the cutoff continued northwest, providing access to the Eagle Valley and Pine Valley areas, as well as the gold mines in Auburn. The cutoff rejoins the main Oregon Trail at the Powder River, near Baker City (McGill 2009).

The segment of the Goodale's/Sparta Trail surveyed is located to the east of Baker City within the Continental Zone Foothills of Eastern Oregon. The point of survey is flat and flanked by foothills to the southwest. Vegetation consists of native grasses and sagebrush. A segment of the trail overlaps portions of the Oregon Trail Virtue Flat and Flagstaff Hill segments, which are located west of the White Swan segment. Goodale's/Sparta Trail is in poor condition (except for that portion of the trail where it overlaps with the Virtue Flat and Flagstaff Hill segments).

#### *Significance*

Goodale's Cutoff, "which was used by settlers as early as 1852" (Anderson and King 2016: 3-53) formed a spur of the Oregon Trail beginning in Idaho and continuing into eastern Oregon. It was named for a guide named Tim Goodale who led a large emigrant party over Idaho segment of the route in 1862 (Merrill 1990). The trail still exists and overlaps with other Oregon Trail segments such as the Virtue Flat segment east and the White Swan segment east of Baker City, Oregon.

The Goodale's/Sparta Trail portions of the Oregon Trail that overlap with the discontinuous Oregon Trail Virtue Flat and Flagstaff Hill segments retain all aspects of the historical integrity (location, design, materials, setting, feeling, association, and workmanship) and is found locally significant in the areas of Exploration/Settlement, Transportation, and Commerce. The Goodale

Trail appears to fall under the Intersecting Routes Property Type of the Oregon Trail MPDF, but Intersecting Routes cannot be listed under that document. Judging from existing documentary evidence, the Goodale's/Sparta Trail is individually eligible under NRHP Criterion A as locally significant examples of an Intersecting Route to the Oregon Trail. The Goodale/Sparta Trail does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource falls within the 1840-1880 period currently proposed by the MPDF. The resource has not been previously listed in the National Register of Historic Places and is thus considered as eligible/contributing.

The most intact segment of the Goodale/Sparta Trail falls within the boundaries of the Flagstaff Hill segment of the Oregon Trail. It should be noted that a segment of the Goodale's Cutoff is listed in the NRHP in Idaho. It is also one of ten associated Oregon Trail routes currently being considered for inclusion in the National Historic Trail system.

**Oregon Trail, Virtue Flat (Flagstaff Hill)/B2H-BA-282**  
**Unincorporated Baker County**  
**NRHP-eligible**



View of Virtue Flat segment of the Oregon Trail, looking east.



View of Meeker Monument near Virtue Flat segment, looking south.

### *Description*

To clarify the relationship between Oregon Trail segments in this area, this description and history is inclusive of three different segments of the Oregon Trail. From south to north, they include the White Swan, Virtue Flat, and Flagstaff Hill Segments. It should be noted that the Goodale's/Sparta Trail (B2H-BA-327) connects with and overlaps with the Flagstaff Hill Segment. The Oregon Trail ACEC – White Swan segment is a nearly 1-mile long trail remnant that descends steep hills and west to Virtue Flat several miles east of the National Historic Oregon Trail Interpretive Center (NHOTIC) atop Flagstaff Hill in Baker City (Oman 1989: 61). A portion of the White Swan segment lies on BLM land within the Oregon Trail Area of Critical Environmental Concern (ACEC) (BLM 1989 Baker RMP (Vale District); BLM Baker RMP (Draft EIS) (Map 2.35) 2011)). An additional one-quarter mile segment was identified across a ravine to the east within the White Swan Mine area (Beckham 2012). The Virtue Flat and Flagstaff Hill segments of the Oregon Trail lie west of the White Swan segment and continue along a broad plain that eventually descends, on the flanks of Flagstaff Hill, to Missouri Flat which is part of the Baker Valley. The Virtue Flat segment consists of about one-quarter mile of wagon ruts on BLM land and two miles on private land (Oman 1989; Beckham 2012). It was also identified on an 1874 cadastral map as the “Quartz Mill Road” (Beckham 2013).

The Flagstaff Hill segment, located in the BLM's Oregon Trail ACEC (NHOTIC) consists of “one mile of pristine and intact trail ruts” and features views of the steep eastern escarpment of the Elkhorn Range of the Blue Mountains and Valley (Oman 1989; Beckham 2012). The National Park Service's Oregon Trail Comprehensive Management and Use Plan designated Flagstaff Hill as a “High Potential Site” (NPS 1998). Both the Flagstaff Hill and White Swan segments of the Oregon Trail are currently being considered for listing in the NRHP, as discontinuous, nationally significant segments of the Oregon Trail historic district, under “The Oregon Trail, Oregon, 1850-1880” MPDF (Beckham 2013). The Virtue Flat segment of the Oregon Trail was

not included in the MPDF as it is located on private property and owner permission for listing has not been received (Beckham 2013). The White Swan, Virtue Flat, and Flagstaff Hill segments of the Oregon Trail are considered Goal 5 Historic Resources by Baker County (Baker County Comprehensive Plan as cited in letter dated September 22, 2010: page v-33). The Virtue Flat and Flagstaff Hill Segments are in good condition.

### *Significance*

Travelers on the route through the Flagstaff Hill/Virtue Flat/White Swan area crossed the sagebrush hills north of the Burnt River Canyon, where they overlooked the Powder River Valley and the Blue Mountains beyond. One of the first historical accounts of the crossing included the Miller wagon company that traveled 20 miles on August 16, 1848 from near the eastern end of present Hixon Road to Flagstaff Hill. During that 20-mile stretch of the trail, they crossed numerous dry creeks and ravines in the hilly landscape. Upon reaching Flagstaff Hill, the emigrants looked down at the Powder River Valley, which William Anderson described as “8 or 10 mile wide the most of it is covered with good grass” (LaSalle 2011: 307). Four years later, in 1852, sisters Cecelia Adams and Parthenia Blank described their journey along the trail after leaving the Burnt River:

*[We] traveled over hills till afternoon then came to a pretty level piece of land covered with sage on which we traveled till nearly night and then descended to another beautiful smooth plain several miles in extent bounded by grass covered hills except on the west which is bounded by the Blue Mountains, beautiful in the distance covered with pine looks as if we were coming somewhere - camped among the sage without water plenty of grass for our cattle on hill nearby [sic]. (Holmes and Duniway 1995:300)*

After completing the journey west, Cecelia Adams and her family settled in Hillsboro, while Parthenia Blank and her family settled in Forest Grove, neighboring areas west of Portland (Holmes 2011:150).

During the 1920s, the *Oregon Daily Journal* published a series by Walter E. Meacham, president of the Old Oregon Trail Association, recounting trail history and emigrant experiences. The April 14, 1922 installment referenced the White Swan trail segment and vicinity: “The trail [from Burnt River] took a canyon a little south of what is now called Pleasant Valley and wended its way across the low foothills of what is now called Virtue Flat, coming into the Powder river valley at the pass near the old Flagstaff mine.” Meacham noted that, after emigrant trains descended Flagstaff Hill, “a well was dug at this point, where the thirsty travelers slaked the thirst of themselves and their cattle. The trail traversed the [Powder River] valley, coming out at the present site of North Powder” (Meacham 1922). By the time the emigrants arrived in the Powder River Valley, they had completed the White Swan segment and the difficult portion of the trail that preceded it. Many emigrants who successfully negotiated the trail as far as the Powder River Valley were farmers who decided to settle in the area, leading to the development of Baker City and environs. Others on their way west to the Willamette Valley chose to stay when they learned about the discovery of gold at the Powder River Valley town of Auburn (*Statesman Journal* 1933).

The Virtue Flat and Flagstaff Hill Segments of the Oregon Trail fall under the Trail/Wagon Road MPDF Property Type and are eligible for the NRHP as they meet the Oregon Trail MPDF's Registration Requirements. They are located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF (i.e. setting, feeling, and association). This segment could be identified as nationally significant in the area of Exploration/Settlement, Transportation, and Commerce. It is recommended as eligible under NRHP Criterion A for its association with these themes and for its mentioning in period trail

narratives. The Virtue Flat Segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it retains does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The nearby White Swan and Flagstaff Hill portions of the Oregon Trail (which bracket the Virtue Flat Segment to the southeast and northwest respectively) are currently under consideration for listing in the NRHP. The nomination was approved by the Oregon State Advisory Committee on Historic Preservation and awaits final federal land management agency approvals. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

The Virtue Flat Oregon Trail segment consists of about one-quarter mile of wagon ruts on BLM land and two miles on private land with the Flagstaff Hill segment composed of 1 mile of wagon ruts. The boundaries were visually confirmed by field investigations, aerial photography, and recent investigations performed in anticipation of the Oregon Trail MPD.

**Oregon Trail, White Swan)/B2H-BA-281  
Unincorporated Baker County  
NRHP-eligible**



Overview of White Swan segment, looking east.



Overview of White Swan segment vicinity, looking west.

### *Description*

For the purposes of clarification, three segments of the Oregon Trail are discussed in this description because the three lie in close proximity to each other but are discontinuous. The Oregon Trail ACEC – White Swan segment is a nearly 1-mile long trail remnant that descends steep hills and continues west to Virtue Flat several miles east of the NHOTIC atop Flagstaff Hill in Baker City (Oman 1989: 61). A portion of the White Swan segment lies on BLM land within the Oregon Trail ACEC (BLM 1989 Baker RMP (Vale District); BLM Baker RMP (Draft EIS) (Map 2.35) 2011)). An additional one-quarter mile segment was identified across a ravine to the east within the White Swan Mine area (Beckham 2012). The Virtue Flat and Flagstaff Hill segments of the Oregon Trail lie west of the White Swan segment and continue along a broad plain that eventually descends, on the flanks of Flagstaff Hill, to Missouri Flat which is part of the Baker Valley. The Virtue Flat segment consists of about one-quarter mile of wagon ruts on BLM land and two miles on private land (Oman 1989; Beckham 2012). It was also identified on an 1874 cadastral map as the “Quartz Mill Road” (Beckham 2013).

The Flagstaff Hill segment, located in the BLM’s Oregon Trail ACEC (NHOTIC) consists of “one mile of pristine and intact trail ruts” and features views of the steep eastern escarpment of the Elkhorn Range of the Blue Mountains and Valley (Oman 1989; Beckham 2012). The National Park Service’s Oregon Trail Comprehensive Management and Use Plan has designated Flagstaff Hill as a “High Potential Site” (NPS 1998). Both the Flagstaff Hill and White Swan segments of the Oregon Trail are currently being considered for listing in the NRHP, as discontinuous, nationally significant segments of the Oregon Trail historic district, under “The Oregon Trail, Oregon, 1850-1880” Multiple Property Documentation Form (Beckham 2013). The Virtue Flat segment of the Oregon Trail was not included in the MPDF as it is located on private property and owner permission for listing has not been received (Beckham 2013). The White Swan, Virtue Flat, and Flagstaff Hill segments of the Oregon Trail are considered Goal 5 Historic Resources by Baker County (Baker County Comprehensive Plan as cited in letter dated September 22, 2010: page v-33). The White Swan Segment is in good condition.

### *Significance*

Travelers on the route through the Flagstaff Hill/Virtue Flat/White Swan area crossed the sagebrush hills north of the Burnt River Canyon, where they overlooked the Powder River Valley and the Blue Mountains beyond. One of the first historical accounts of the crossing included the Miller wagon company that traveled 20 miles on August 16, 1848 from near the eastern end of present Hixon Road to Flagstaff Hill. During that 20-mile stretch of the trail, they crossed numerous dry creeks and ravines in the hilly landscape. Upon reaching Flagstaff Hill, the emigrants looked down at the Powder River Valley, which William Anderson described as “8 or 10 mile wide the most of it is covered with good grass” (LaSalle 2011: 307). Four years later, in 1852, sisters Cecelia Adams and Parthenia Blank described their journey along the trail after leaving the Burnt River:

*[We] traveled over hills till afternoon then came to a pretty level piece of land covered with sage on which we traveled till nearly night and then descended to another beautiful smooth plain several miles in extent bounded by grass covered hills except on the west which is bounded by the Blue Mountains, beautiful in the distance covered with pine looks as if we were coming somewhere - camped among the sage without water plenty of grass for our cattle on hill nearby [sic].* (Holmes and Duniway 1995:300)

After completing the journey west, Cecelia Adams and her family settled in Hillsboro, while Parthenia Blank and her family settled in Forest Grove, neighboring areas west of Portland (Holmes 2011:150).

During the 1920s, the *Oregon Daily Journal* published a series by Walter E. Meacham, president of the Old Oregon Trail Association, recounting trail history and emigrant experiences. The April 14, 1922 installment referenced the White Swan trail segment and vicinity: “The trail [from Burnt River] took a canyon a little south of what is now called Pleasant Valley and wended its way across the low foothills of what is now called Virtue Flat., coming into the Power river valley at the pass near the old Flagstaff mine.” Meacham noted that, after emigrant trains descended Flagstaff Hill, “a well was dug at this point, where the thirsty travelers slaked the thirst of themselves and their cattle. The trail traversed the [Powder River] valley, coming out at the present site of North Powder” (Meachum 1922). By the time the emigrants arrived in the Powder River Valley, they had completed the White Swan segment and the difficult portion of the trail that preceded it. Many emigrants who successful negotiated the trail as far as the Powder River Valley were farmers who decided to settle in the area, leading to the development of Baker City and environs. Others on their way west to the Willamette Valley chose to stay when they learned about the discovery of gold at the Powder River Valley town of Auburn (*Statesman Journal* 1933).

The White Swan, Virtue Flat, and Flagstaff Hill portions of the Oregon Trail, although discontinuous segments of the route, retain all aspects of the historical integrity (location, design, materials, setting, feeling, association, and workmanship) and is nationally significant in the areas of Exploration/Settlement, Transportation, and Commerce. The White Swan Segment of the Oregon Trail falls under the Trail/Wagon Road MPDF Property Type and is eligible for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements. It is located in Oregon, was used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retains the necessary aspects of historical integrity. It is recommended as eligible under NRHP Criterion A for its association with the migration of settlers to the Oregon Territory. The White Swan and Flagstaff Hill portions of the Oregon Trail are currently under consideration for listing in the NRHP. The nomination was approved by the Oregon State Advisory Committee on Historic Preservation and awaits final federal land management agency approvals. The White Swan Segment does not appear to be eligible under NRHP Criterion B, as documentary

research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it retains does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource is its period of use, 1840-1880. The resource has not been previously listed in the National Register of Historic Places and is thus considered as eligible/contributing.

The historic boundary of the resource is limited to its linear path that extends for approximately 1 mile near the White Swan Mining area and as otherwise described in the draft NRHP nomination. The boundaries were visually confirmed by field investigations, aerial photography, and recent investigations performed in anticipation of the Oregon Trail MPD.

**Signature Rock/No Resource # assigned**  
**Unincorporated Baker County**  
**N/A**

No photograph of the resource was taken as its location was never verified.

*Description*

The resource is noted as a Baker County Goal 5 resource. Insufficient location information as only Township 9, Range 42 is provided by Baker County. Not mapped due to imprecise location. No additional information concerning the resource was received from Baker County or the Oregon SHPO concerning the resource.

*Significance*

The resource is unevaluated as its location could not be verified. It has been removed from the study.



**Oregon Trail, Straw Ranch 1 & 2 Segments/B2H-BA-285**  
**Unincorporated Baker County**  
**NRHP-eligible**



Oregon Trail, Straw Ranch segment, looking north.



Oregon Trail, Straw Ranch segment, looking north.

***Description***

The two Oregon Trail segments located on the parcels named Straw Ranch I and Straw Ranch II are both part of the BLM's Oregon Trail ACEC (BLM Baker RMP 2011). Straw Ranch I

contains two sets of features: a northwest-southeast trending segment of the Oregon Trail and six in situ wooden utility poles and pole parts (non-contributing resource) in an area characterized by rolling hills and sagebrush. Straw Ranch is located where the Oregon Trail left Alder Creek and headed over the hill to Virtue Flat. The resource is situated between the communities of Pleasant Valley and Durkee in Baker County, near the confluence of Straw Ranch Creek, Alder Creek and Kitchen Creek, adjacent to US-30 and I-84, off Troy Road. The Straw Ranch I trail segment begins northwest of the bottom of the Troy Road "U" and continues northwest. A State of Oregon Archaeological Temporary Site Record (3B2H-CH-05) from May 2012 describes the trail segment as measuring 261 feet long by 20 feet wide with a six-inch-deep swale that bisects the site in an east to west direction. Field work during October 2016 confirmed this description, except for the trail alignment, which trends northwest to southeast and is barely visible or not visible at all throughout the segment. In addition, the utility pole and pole parts referenced in the previous site form were not re-located during the October 2016 site visit. Viewpoints were specifically noted at two concrete BLM trail markers. The Straw Ranch II segment of the Oregon Trail was not visited as it would have minimal to no view of the Project due to the presence of intervening topography and distance from the project (4 miles). Its presence is visible in aerial photography. The Straw Ranch segments are in good condition.

### *Significance*

In 1862, C.W. Herman settled on what was a tract of public land that became known as "Straw Ranch". Herman built a house and dug a ditch on the south side of Alder Creek, from which he drew water to irrigate a small garden. On May 3, 1864, Herman conveyed Straw Ranch to Hiram Huffman, who dug another ditch on the north side of Alder Creek to irrigate another small garden. Huffman subsequently transferred Straw Ranch to Valentine Gray, who returned the property to Huffman when he was unable to make payments. Around that time, a stage company built a house and barn at Straw Ranch, where the company kept its stock and way station. The station was discontinued and the buildings sold by George Atkison to Leonard Low in 1866. Atkison moved the buildings to his own property. It appears that Straw Ranch was vacant from 1866 to 1871 until Robert Kitchen took possession. Kitchen sold Straw Ranch to S.A. Hellner in 1879. S.A. Hellner was a senior member of Baker City's Hellner Commission Company. He owned a wool scouring and packing plant, a stone building erected near the OR&N tracks in Baker City (*East Oregonian* 1902).

John Rizor acquired possession of the land in 1884 and submitted a homestead filing in July 1891. Rizor was born in Iowa around 1867. His parents George and Sarah were farmers from Ohio (Ancestry.com 2010a). In 1880, the family was living in the Alder Creek area of Baker County, Oregon. When Rizor took possession, Straw Ranch consisted of a two-acre garden, the old ditches and two other ditches. One of the newer ditches was dug from Straw Ranch Creek and one from Kitchen Creek, both tributaries of Alder Creek. Rizor still owned the land in 1894, when he was sued over a water rights dispute (Pacific Reporter 1894: 551). Rizor died in 1947 and is buried at Eagle Valley Cemetery in Richland, Baker County (Ancestry.com 2012).

Straw Ranch served as an important stop for emigrants on the Oregon Trail and stage coaches. It was the point from which the Oregon Trail began to cross the mountains and into the Powder River Valley (Gaston 1912:628). The ranch was recalled decades later by emigrants, such as Michael R. Speelman (1849-1936). In 1862, the Speelman wagon train, which originated in Lee County, Iowa, set out west along the Oregon Trail. After reaching the present site of Huntington, Oregon, Speelman recollected how the party followed the Burnt River until reaching Straw Ranch, "an old stage station in the early days [of the migration], and now owned by John Troy, who has a fine farm on this old historic site." Speelman recounted how, from Straw Ranch, the Oregon Trail crossed the low range of foothills north into the Virtue Flat area. The 1862 wagon train had camped at Mud Springs, a short distance below Virtue Mine (Baker County 2016).

Two years after the Speelman wagon train passed through, Charles Nelson Teeter came to Straw Ranch. Teeter left Wisconsin in 1862 to seek gold in the “western wilds.” On April 2, 1864, he wrote, “We left the Straw Ranch, where we stayed last night, about seven o’clock, and about nine o’clock a.m. reached the divide between the Burnt and Powder rivers. At this point we had the first view of the Blue Mountains” (Teeter 1932:84). Around 1864, immigrant gold miner Herman Francis Reinhart stopped at Straw Ranch while traveling by stage. Reinhart recalled crossing the Powder River Valley into the Burnt River Valley, where he “passed several hotels; Straw Ranch was one, then the Express Ranch . . . Reinhart continued on to cross the Snake River at Olds Ferry (Nunis 1962).

Several robberies and assaults were recorded near Straw Ranch in the 1860s. In October 1865, a stage driver was robbed near Straw Ranch (*Daily Mountaineer* 1865a). Within weeks, one of the “Straw Ranch robbers,” a man named La Mar was shot with sixteen bullets and two charges of buckshot (*Daily Mountaineer* 1865b). Two years later, in July 1867, another stage was attacked. The report stated that “several Indians attacked a teamster near Straw ranch, Burnt River, Oregon. They fired several shots, one of which pierced his hat, but he was uninjured” (Commissioner on Indian Affairs 1868:102). In 1864, Boggs Greenwood shot and killed a man named Kinnear at the tollgate along the Burnt River. Greenwood was “the ringleader of the most widely known band of those highwaymen” who robbed pack trains and stages carrying gold from area placer mines. After killing Kinnear, Boggs appeared at Express Ranch (present-day Durkee), where he engaged in a gun fight with Mr. Scott. Wounded in the arm, Greenwood fled to the Straw Ranch vicinity and was found hiding in brush by local citizens. The citizens hanged Greenwood from a juniper tree near New York Ranch, several miles from his hiding spot (Dielman 1999; *Oregonian* 1914).

Straw Ranch also provided a stopping place for notable Baker County citizens. In September 1867, James W. Virtue, namesake of Virtue Mine and Baker County sheriff (1866 – 1870), headed from Clarksville to Auburn with two traveling companions, Pack and Brattain. On August 2, they stopped at Sutton Ranch, then “5 miles and another [illegible] at Straw Ranch. Thence 5 miles to Express Ranch [Durkee]. Another drink. Stopped [sic] at Central House. 56 miles from Auburn” (Dielman 2004: 84). Several years later, William C. Miller, who eventually served as a Virtue’s deputy sheriff, journeyed through Baker County in spring 1867 along C.E. Place’s toll road extending between Straw Ranch and Baker City (Baker City Herald updated 2016). Place, who died in Baker County around 1871, had incorporated the toll road around 1863 (*Weekly Oregon Statesman* 1871).

As the nineteenth century drew to a close, the Straw Ranch location remained close to major transportation routes. In 1882, the Burnt River Consolidated Wagon Road Company, headquartered in Baker City, incorporated in order to construct and maintain a wagon road from just south of Farewell Bend to Straw Ranch. The road was planned from “Olds’ ferry, on the Oregon side of the Snake river, following the line of ‘the Burnt river toll road company’s road,’ terminating at the end of the county road at the old ranch known as the Straw ranch, in said Baker county” (*Oregonian* 1882; Query 2008:40). The 1901 USGS Map (Baker City) shows the Oregon Railroad and Navigation Company (UPRR) tracks passing near Straw Ranch in a northwest-southeast alignment.

At the turn of the twentieth century, Straw Ranch was commemorated as part of the Oregon Trail with a monument installed by Ezra Meeker. Ezra Meeker, an emigrant on the Oregon Trail in 1852, sought to rescue the Oregon Trail from obscurity by erecting monuments and markers. In the 63 years since the first wagon train (1843) traveled the trail’s full length, traces of the trail were being obliterated by human and grazing activity or natural forces. In February 1906, Meeker set off with William Mardon to travel the trail by wagon from west to east. Along the way,

Meeker solicited donations from citizens he encountered to fund his project. He used the contributions to purchase small stones to mark the trail where it intersected with primary travel routes and larger stones for monuments, which were constructed in towns on or near the Oregon Trail. Meeker erected monuments at The Dalles, Pendleton, La Grande, Baker City, Durkee, Huntington, Vale, and Straw Ranch. In April 1906, Meeker wrote in his journal that, "Seven men have just come into camp and contributed for erecting a stone marker at Straw Ranch, the property of John Troy, where the stone is to be planted and who flatly refuses to donate a cent." On April 22, 1906, Meeker "stopped at 10 o'clock 4 miles from [Pleasant Valley] camp to set a granite stone to mark an intersection." Then, at noon, "five young men came and helped to build a mound of stone around the marker, which stands in short cut of the old Trail, at Straw ranch, near the bank of a small spring creek." After setting the Straw Ranch marker, Meeker continued to Durkee (Dielman 2010, rev'd 2013).

John S. Troy, who failed to donate to Meeker's cause, owned the Straw Ranch property by the time Meeker passed through in 1906. Troy was born in Ireland in 1852 and immigrated to the United States in 1873. His wife Mary immigrated the following year. He became postmaster of Pleasant Valley on February 4, 1896 (Ancestry.com 2010b). He was still serving as postmaster in 1903 (Ancestry.com 2014). By 1900, the couple had their six children, ages 2 through 14, living with them at the ranch. The 1920 US Census lists John Troy as a farmer. The 1952 Metsker map shows the Straw Ranch property as owned by Mary Troy with a portion owned by daughter Francis Troy. The map also shows that Mary Troy owned numerous other parcels in the Straw Ranch and Pleasant Valley area, mostly adjacent to the railroad tracks. John died on December 20, 1935 and was buried at Mount Hope Cemetery in Baker City (Ancestry.com 2012). Mary died on April 2, 1954 (Ancestry.com 2012) and was also buried at Mount Hope Cemetery. [REDACTED]

The Oregon Trail ACEC -Straw Ranch 1 segment retains integrity of location, setting, feeling, and association despite modifications in the surrounding landscape, such as the existing non-contributing transmission line visible from the segment. The Straw Ranch 1 segment would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements and falls under the Trail/Wagon Road MPDF Property Type. The segments are located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. The resource is eligible for the NRHP for its significant association with the Oregon Trail and emigration in the West in the areas of Exploration/Settlement, Transportation, and Commerce. The NRHP eligibility of the Straw Ranch 1 segment is consistent with the BLM management actions expressed in the 1989 Oregon National Historic Trail Management Plan. These segments would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. The Straw Ranch 1 and 2 Oregon Trail segments do not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type.

The NRHP eligibility of the Straw Ranch 2 segment of the Oregon Trail could not be verified at the time of field survey due to lack of access (although it is visible in aerial photographs). However, visual impacts are not likely due to intervening topography and distance from the Project. Judging from previous evaluations and aerial photography it appears to have the same levels of integrity and significance as Straw Ranch 1. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information

significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource is 1840-1880.

**Oregon Trail – Unnamed Segment/3B2H-CH-05**  
**Unincorporated Baker County**  
**NRHP-eligible**



Unnamed Oregon Trail segment (3B2H-CH-05), looking east.

*Description*

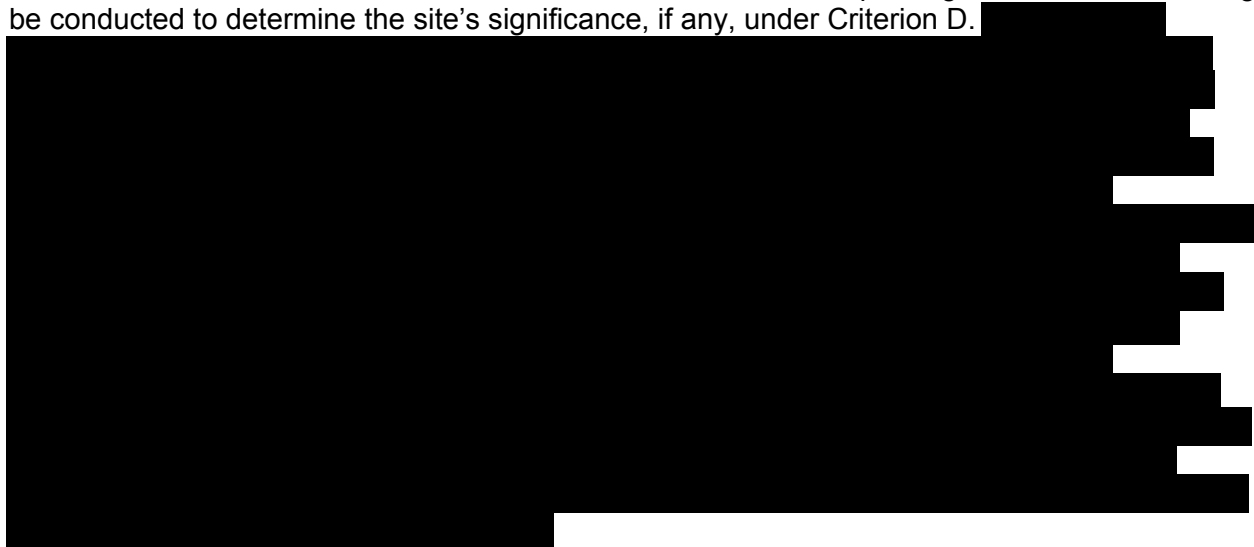
Segment 3B2H-CH-05 consists of a 261-foot-long segment of the Oregon Trail, an *in situ* utility pole, and five fallen utility poles or utility pole parts. The trail would have been utilized during the middle to late nineteenth century, [REDACTED]

[REDACTED] The trail segment is still evident today in the form of a gentle swale diverging from the Oregon NHT at its eastern end. It corresponds with the BLM's Oregon Trail ACEC – Straw Ranch I. For the purposes of this report, the recorded trail segment has been given a Class 2 designation (used original trail) (OCTA 1994:13). The larger setting, with open spaces and mountains, is generally unaltered, except for I-84 and Straw Ranch. The trail segment appears to be minimally altered by cattle driving and use as a two-track road.

*Significance*

Segment 3B2H-CH-05 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 3B2H-CH-05 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, was used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retains the necessary aspects of historical integrity as noted in the Oregon Trail MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring

and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The feature neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion C). Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the feature is also considered unevaluated under Criterion D (additional data). Given the recommended NRHP eligibility of the feature under Criterion A and its unevaluated status under Criterion D, Tetra Tech recommends that the trail segment be avoided. If avoidance is infeasible, it is recommended that additional documentation and archival research of Segment 3B2H-CH-05 be conducted in coordination with the Oregon SHPO, BLM, and OCTA. It is also recommended that subsurface probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.



**Oregon Trail ACEC – Swayze Creek Segment/B2H-BA-291  
Unincorporated Baker County  
NRHP-eligible**



Oregon Trail, Swayze Creek segment near Plano Road, looking northeast.



Oregon Trail, Swayze Creek segment (running diagonally along drainage), looking north.

### *Description*

The Oregon Trail's primary route detours from Burnt River, ascending Sisley Creek to a pass over low hills, and then descending Swayze Creek into the Burnt River Valley at Durkee. The Sisley Creek to Swayze Creek route is a 6-mile cut-off, known locally as the Gold Hill Cut-Off. Obelisks mark the route on BLM land and additional markers appear on private lands (BLM 1989: 60). Segments of this cutoff that are visible lie near Plano Road, east of I-84. The trail runs along the north bank of Swayze Creek, which meanders through a small valley. Plano Road is paved and graded; construction of the road and the cut/fill slopes obliterated most of the Oregon Trail in this valley. In the surrounding area are some concrete Oregon Trail markers and one carsonite marker. There is one short segment (approximately 25 feet long) of what appears to be the trail on the north side of Plano Road at the top of the cut slope, approximately 6 feet above the asphalt. Another more intact segment (of approximately one mile) is located on the east side of Plano Road as it descends the eastern flank of Gold Hill to Swayze Creek. Swayze Creek Segment is in good condition.

### *Significance*

The Oregon Trail Sisley to Swayze Creek segment is located near what was one of the most difficult Oregon Trail sections for emigrant wagon trains. When Robert Stuart traveled east in the area during his 1812-13 expedition, he arrived at Swayze Creek from Burnt River and found himself before Gold Hill and its 1,550-ft. summit. Stuart ascended Swayze Creek to its headwaters and reached the saddle at Gold Hill's northeast corner. After crossing the saddle, he veered southeast, then south and encountered a small drain, which followed to its confluence with Burnt River. He arrived at a location one mile upstream from present-day Weatherby (Rollins 1995:96 n.94).

Over four decades later, in August 1866, Delila Wait and her family reached the Swayze Creek vicinity during their three-month journey on the Oregon Trail. On the afternoon of August 26, Delila wrote that the wagon train “had several hills to climb” and then stopped “in a gulch through which were several spring brooks, where there were a lot of packers” (Dielman 1982, rev’d. 2013). Historian Gary Dielman notes that the hills Delila described are likely part of the detour from Burnt River, where the Oregon Trail went up Sisley Creek near Weatherby, skirted around the north side of Gold Hill, then descended Swayze Creek into Durkee Valley. This detour enabled emigrants to avoid a particularly narrow section of Burnt River Canyon (Dielman 1982, rev’d 2013).

This segment of the Oregon Trail is adjacent to and in some places covered by a paved road. As a result, the integrity of setting and association has changed since the trail was in use. Portions of the segment are only visible by the trail markers rather than ruts thus diminishing the integrity of feeling while others, such as the highly visible ruts on the east side of Plano Road to the east of Gold Hill (in a drainage) maintain a high degree of historical integrity. The Swayze Creek segment retains integrity of setting, location, feeling, and association and is found nationally significant in the areas of Exploration/Settlement, Transportation, and Commerce. The Sisley Creek to Swayze Creek Oregon NHT segment would be eligible for the NRHP under Criterion A as a contributing resource under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. Falling under the Trail/Wagon Road MPDF Property Type, the resource meets the registration requirements outlined in the MPDF as it retains sufficient integrity, is discernable on the landscape, and is of sufficient length to convey the historic setting, feeling, and association of the Oregon Trail. The Swayze Creek Oregon Trail segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource’s physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource is 1840-1880.

**Oregon Trail – Unnamed Segment/35BA01366 and 3B2H-CH-06**  
**Unincorporated Baker County**  
**NRHP-eligible**

*Description*

Segment 35BA01366/3B2H-CH-06 includes two spurs of the Oregon Trail, one marked by OCTA, [REDACTED]. For the purposes of this report, the trail has been given a Class 2 designation (used original trail) (OCTA 1994:13). The larger setting, with open spaces and mountains, is generally unaltered, except for Plano Road. The two trail segments appear to be minimally altered by use as two-track roads.

*Significance*

Segment 35BA01366/3B2H-CH-06 is recommended as a contributing resource to the Oregon Trail MPDF under Criterion A. Oregon Trail Segment 35BA1366/3B2H-CH-06 would be eligible at the national level for the NRHP as it meets the Oregon Trail MPDF's Registration Requirements under the Trail/Wagon Road Property Type. The segment is located in Oregon, was used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retains the necessary aspects of historical integrity as noted in the Oregon Trail



MPDF. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western United States, there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The feature neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion C). Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the feature is also considered unevaluated under Criterion D (additional data). Given the recommended NRHP eligibility of the feature under Criterion A and its unevaluated status under Criterion D, Tetra Tech recommends that Segment 35BA01366 be avoided. If avoidance is infeasible, it is recommended that additional documentation and archival research be conducted in coordination with the Oregon SHPO, BLM, and OCTA. It is also recommended that subsurface probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.

**Oregon Trail, Powell Creek Segment/B2H-BA-337  
Huntington Vicinity, Baker County  
NRHP-eligible**



Overview of visual context of the Powell Creek segment of the Oregon Trail, looking west.



Overview of visual context of the Powell Creek segment of the Oregon Trail, looking southwest.

#### *Description*

The Oregon Historic Trail ACEC - Powell Creek and Chimney Creek Segments of the Oregon National Historic Trail, which contain route traces on two isolated BLM parcels, have also been identified by Baker County as a NRHP-eligible Goal 5 resource. Since they are discontinuous segments they are treated as two resources. The Powell Creek and Chimney Creek Segments of the Oregon Trail are specifically referred to the BLM's Oregon NHT Management Plan (1989). Neither of the segments of the trail was accessible at the time of survey (see photographs showing access restrictions (i.e. gates)). The Chimney Creek segment is located to the north (as depicted on the attached map) and the Powell Creek segment is located to the south. The setting in the vicinity is mostly undeveloped, except for the presence of nearby Interstate 84, a campground, and some agricultural fencing within the ACEC. Within the ACEC, the trail, which is barely evident, runs along the west side of a wire fence with metal posts and occasional rock basket fence braces. A livestock pen surrounded by trees and Interstate 84 are visible to the northwest. Four windmills from a windfarm are visible to the southeast. The Powell Creek and Chimney Creek Segments are in fair condition.

#### *Significance*

In August 11, 1848, after leaving camp on the Burnt River about a mile northwest of Huntington, the Gates wagon company continued up the Burnt River Canyon. The 13-mile journey took the company through the vicinity of the Chimney Creek ACEC segment. In his diary, Riley Root of Gates company wrote that, "For 5 or 6 miles of our morning route up the [Burnt] river, the road was very rough and stony, and it crosses the creek seven times within that distance. Remainder of the day's travel was more easily performed, though more hilly, yet smooth . . . Along this stream emigrants have formerly been much intimidated through fear of sudden attacks from Indians" (LaSalle 2011:301). The Gates company camped on the Burnt River that evening about a mile southeast of the present Weatherby Rest Area along Interstate 84.

The Oregon Trail ACEC Powell Creek/Chimney Creek segments falls under the Trail/Wagon Road Property type of the Oregon Trail MPDF and retains integrity of location, setting, feeling, and association despite cultural modifications in the surrounding landscape and is nationally

significant in the areas of Exploration/Settlement, Transportation, and Commerce. The Powell Creek/Chimney Creek segments would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. The resources remain eligible for the NRHP and as Goal 5 resources for their significant association with the Oregon Trail and emigration in the West. They also meet the Oregon Trail MPDF's Registration Requirements. They are located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity. The Powell Creek/Chimney Creek Segments do not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. These segments do not appear eligible under Criterion C as it retains does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The NRHP eligibility of the Powell Creek/Chimney Creek segment is consistent with the BLM management actions expressed in the 1989 Oregon National Historic Trail Management Plan. The resources' physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. They therefore hold little to no potential to yield information significant to the past and therefore are recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

A complete NRHP eligibility of the Powell Creek segment of the Oregon Trail could not be verified at the time of field survey due to lack of access and thus the eligible/contributing evaluation is for assumed eligibility and is based upon aerial photography and previous investigations. The visual impacts are not likely due to intervening topography, existing modifications to the landscape, and distance from Project.

**Oregon Trail – Unnamed Segment/4B2H-EK-41  
Huntington Vicinity  
NRHP-eligible**



View of unnamed segment of the Oregon Trail (4B2H-EK-41), looking southeast.

### *Description*

4B2H-EK-41 consists of a 0.25-mile segment of the historic Oregon Trail in the vicinity of Farewell Bend. The site is indicated by two shallow ruts in a gentle swale and corresponds with Oregon Trail routes identified in the Class I data. One of the OCTA-designated routes of the Oregon Trail identified through Class I research corresponds with the recorded segment (but has not been formally recorded or evaluated prior to this survey). The trail would have been utilized during the mid- to late nineteenth century. For the purposes of this report, the trail has been given a Class 1 designation (unaltered original trail) (OCTA 1994:13). However, this designation may be altered as a result of a forthcoming trails study associated with the Project.

### *Significance*

The Oregon Trail is a NRHP-listed resource and part of the National Trails System for its role in early national commerce, exploration/settlement, and transportation (Criterion A). The trail segment appears to be minimally altered. There is minimal modern development in the vicinity and the recorded segment does not appear to have been impacted by cattle grazing or a nearby pipeline. This suggests that the aspects of integrity are retained by the site: location, design, setting, materials, workmanship, feeling, and association and is nationally significant for its association with the Oregon Trail and emigration in the West in the areas of Exploration and Settlement, Transportation, and Commerce. This unnamed segment also meets the Oregon Trail MPDF's Registration Requirements and falls under the Trail/Wagon Road MPDF Property Type. The segment is located in Oregon, was used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retains the necessary aspects of historical integrity. Oregon Trail segment 4B2H-EK-41 would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF.

Given the good integrity of the recorded segments and the co-occurrence of the OCTA-designated route, 4B2H-EK-41 is also considered NRHP-eligible under Criterion A. Although numerous emigrants traveled along the Oregon Trail, some of whom played significant roles in exploring and establishing the early western U.S., there is no clear indication of an association between any those individuals and the recorded segment (Criterion B). The site neither embodies the distinctive characteristics of an architectural style or architect, nor exhibits high artistic value (Criterion C). Until subsurface probing or metal detecting can be conducted along the recorded trail segment, the site is also considered unevaluated under Criterion D (additional data). Tetra Tech recommends that the site be avoided. If avoidance is infeasible, it is recommended that additional documentation and archival research of the site be conducted in coordination with the Oregon SHPO, BLM, and the OCTA. It is also recommended that subsurface probing and/or metal detecting be conducted to determine the site's significance, if any, under Criterion D.

**Oregon Trail, Birch Creek Segment/B2H-MA-042**  
**Unincorporated Malheur County**  
**NRHP-eligible**



View of Birch Creek segment of Oregon Trail, looking east.



View of interpretive panel near Birch Creek segment of Oregon Trail, looking northeast.

### *Description*

The Oregon Trail ACEC - Birch Creek Segment contains a ½ mile segment of the Oregon Trail in the Snake River Plain about 3 miles south of the Snake River's Farewell Bend, west of U.S. 84. The one-half mile long segment of the Oregon Trail is located on BLM land with an interpretive wayside along the creek and is designated as an ACEC segment. Wagon ruts are highly visible in most places and the trail follows a clear obvious course around a small hill. An interpretive sign is located at the southern end of this segment and carsonite markers are found along the segment. The Birch Creek Segment is in good condition.

### *Significance*

Emigrants camped at the Birch Creek segment before continuing on three more miles to the Snake River at Farewell Bend (BLM 1989: 57). Travelers heading west on this trail segment would have just passed through Alkali Springs, an area with poor quality water and soils that were dusty when dry and became sticky mud when wet. Birch Creek provided travelers with much-needed fresh water. Riley Root and Miller company reached Birch Creek in August 1848 after leaving their camp on the Malheur River. Root detailed this portion of the journey:

*25 miles to camp on Birch creek. 13 miles to sulphur spring, where we nooned. This distance is up an arm of the Malheur, though dry at the time. Its course is through a level flat, from one to two miles wide, having high ranges of land on each side. From Sulphur spring, the road ascends rapidly to its highest point, a mile or two farther on, where the country can be viewed for a considerable distance all around. (LaSalle 2011: 300)*

The Anderson party, following two days behind Gates company, also reached Birch Creek after leaving the Malheur River. They camped where the trail crossed Birch Creek, about one mile southwest of where U.S. 84 crosses the creek. Anderson wrote, "August the 11th we traveled 24 miles and Camped on a small beach Caled brich creek on the banks of which there were a considerably birch timber this is not a very good camp" (LaSalle 2011:306). The following month, William Porter and Purvine company reached Birch Creek after traveling 22 miles from "Aux Matthew River" (Malheur River) (LaSalle 2011:367). The last Oregon-bound company on the trail in 1848, Stone Company, left the camp on Birch Creek on September 1, 150 miles behind Porter and Purvine company (LaSalle 2011:404).

On August 24, 1852, Abigail Jane Scott described the journey from the Malheur River and Alkali Springs to the wagon train's camp in the Birch Creek vicinity:

*We traveled about ten and one half miles; Eight miles to a dry branch two from there to Birch creek and one half mile to another (point) of the same where we encamped; There are several good springs at the head of this stream which is a small one; it heads near the road; The Snake river is about one mile distant from our camp; A range of mountains of great beauty is situated (just beyond it). (Holmes and Duniway 1995:115)*

In August 1853, John Fothergill documented an emigrant gunfight near Birch Creek:

*15 Decamped at 2. o'c p.m. a fine breeze but very hot & traveled 8 miles 3 from "birch c'k" to the Columbia river . . . 3 miles from us this morning a man of the name of Wilson was shot by a fellow emigrant they had a quareel, & it ended in drawing pistols when Wilson recd 4 balls out of 5 fired at him & died immediately.*

Wilson left behind a wife and 9 children (Evans 1991).

*In 1862, Captain Medorem Crawford commanded the emigrant escort from Camp Lincoln, Nebraska to Oregon and Washington territory. By late September, the emigrant train had reached camp at the Malheur River. They continued on to Birch Creek where*

*“roads better; 10 miles to Birch creek; nooned 3 miles to Farewell bend of Snake river; 6 miles to Burnt river; 1 mile up to camp; fine place; distance 20 miles”. (Crawford 1863)*

This is a well-preserved segment of the Oregon Trail that is located in an area with high-quality views. There are few to no visual intrusions in the landscape for a viewer heading north (west) on the trail. The resource retains integrity of location, setting, feeling, and association. The setting retains a high degree of integrity and likely appears much as it did to the original trail users. Wagon ruts are highly visible and the trail follows a very obvious course in the terrain.

The Oregon Trail ACEC – Birch Creek Segment retains integrity of location, setting, design, materials, workmanship, feeling, and association, and is nationally significant for its association with the Oregon Trail and emigration in the West in the areas of Exploration/Settlement, Transportation, and Commerce. The Birch Creek Segment also meets the Oregon Trail MPDF's Registration Requirements and falls under the Trail/Wagon Road MPDF Property Type. The segments are located in Oregon, were used during the Oregon Trail's Period of Significance (1840-1880), identified in period literature, and retain the necessary aspects of historical integrity. The Birch Creek Segment would be eligible for the NRHP under Criterion A under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF. The Birch Creek Segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D.

**35ML00747 (Oregon Trail, Tub Mountain Segment)/B2H-MA-010/B2H-MA-041 (Alkali Springs)  
Unincorporated Malheur County  
NRHP-eligible**



Overview of Tub Mountain segment of Oregon Trail, looking north.



Overview of Tub Mountain segment of Oregon Trail, near Alkali Springs, looking north.

***Description***

The Oregon Trail ACEC Tub Mountain Segment (B2H-MA-010) contains a segment of the Oregon Trail in the vicinity of Alkali Springs (B2H-MA-041) that begins about 6 miles north of Vale and continues to the Willow Springs Camp. The relatively long route is about 22 miles from



the Malheur River crossing to Birch Creek. For much of this segment the Oregon Trail survives as a dirt ranch road. The segment is largely located on land managed by the BLM and one of several stretches of the Oregon Trail designated as an Area of Critical Environmental Concern (ACEC). Although the trail alignment is marked with carsonite markers, there are only intermittent signs of wagon ruts. It is likely that the existing dirt road that runs along the Oregon Trail alignment has obliterated traces of the ruts. A few of the intact segments are particularly visible including a series of three parallel ruts that descend down a hill about midway along the segment and is referred to the OCTA interpretive panel as the "Tub Mountain Swales." Prior to reaching these swales (to the south), the segment includes several surviving springs that are referred to as the "Alkali Springs" as well as "Tub Springs." The Oregon Trail CMUP considers the Tub Mountain Segment (called the Alkali Springs) a "High Potential Segment" by the NPS as discussed in the Oregon Trail CMUP. Much of this route is marked by its intact natural setting. The Tub Mountain Segment is in fair condition.

### *Significance*

Oregon Trail emigrants often stopped at midday ("nooned") at Alkali Springs (then known as Sulfur Springs), the only water source along the 22-mile crossing from the Malheur River to Birch Creek. The Alkali Springs vicinity had poor water quality and soils that were dusty when dry and became sticky mud when wet. Riley Root and Miller Company traversed this trail section August 1848 after leaving their camp on the Malheur River. Root detailed this portion of the journey:

*25 miles to camp on Birch creek. 13 miles to sulphur spring, where we nooned. This distance is up an arm of the Malheur, though dry at the time. Its course is through a level flat, from one to two miles wide, having high ranges of land on each side. From Sulphur spring, the road ascends rapidly to its highest point, a mile or two farther on, where the country can be viewed for a considerable distance all around. (LaSalle 2011:300)*

Emigrants also camped at the springs after watering their cattle at the Malheur River. On August 23, 1852, Abigail Jane Scott described the journey to "Sulphur springs":

*The road was through the valley of the dry branch for several miles . . . Leaving this bottom we struck sand hills and traveled through a very dusty ravine until ten o'clock when we reached the before mentioned spring and encamped . . . The water of these springs is not very palatable, it being strongly impregnated with Sulphur. (Holmes and Duniway 1995:114-15)*

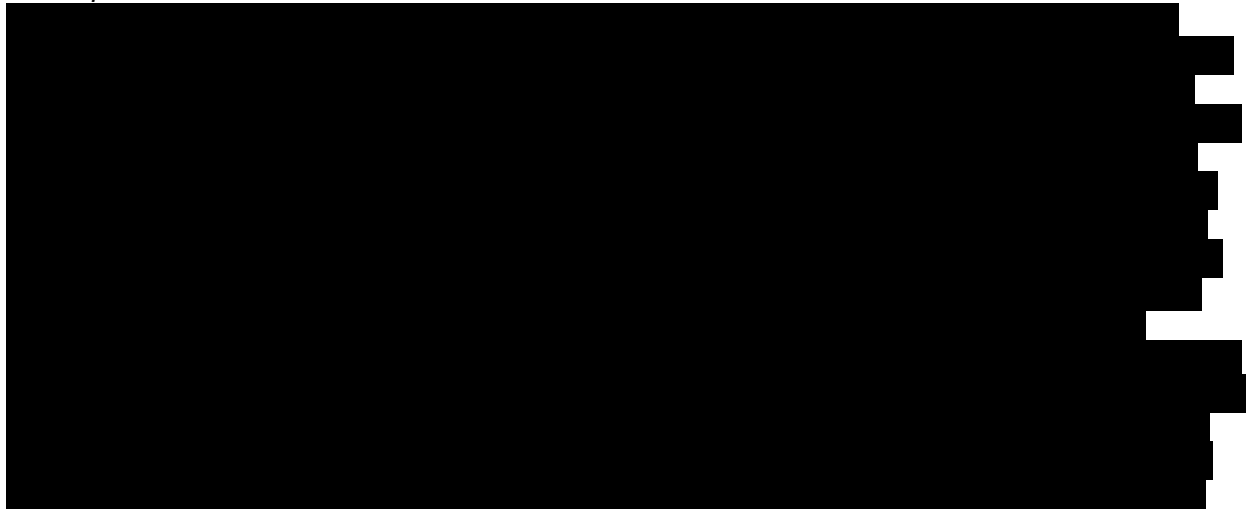
Although the trail ruts are intermittently visible, the Tub Mountain (Alkali Springs) Segment retains integrity of location, setting, feeling, and association, and is found nationally significant in the areas of Exploration/Settlement, Transportation, and Commerce. Aside from some dirt roads and barbed wire fencing, the landscape looks much like it probably did during the period when the Oregon Trail was in use, with expansive long-range views, and a dirt road that generally follows the trail alignment. The Tub Mountain (Alkali Springs) segment would be eligible for the NRHP under Criterion A as a contributing resource under the currently proposed Oregon Trail, Oregon, 1840-1880 MPDF under the Trail/Wagon Road MPDF property type. The resource meets the registration requirements outlined in the MPDF as it retains sufficient integrity, appears in period literature, is discernable on the landscape, and of sufficient length to convey the historic setting, feeling, and association of the Oregon Trail. The Oregon Trail ACEC - Tub Mountain Segment does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not necessarily retain particularly distinctive characteristics of the Trail/Wagon Road Section MPDF

property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NHRP Criterion D. The recommended period of significance for the resource is 1840-1880.

**Oregon Trail – Unnamed Segment (0503040048SI)  
Unincorporated Malheur County  
Not Eligible**

The information contained in this entry is from an archaeological update completed for this site (Anderson 2017).

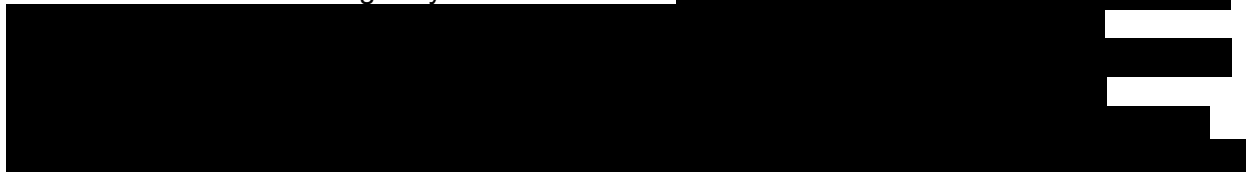
*Description*



However, an OCTA sign at the site was noted commemorating the Oregon Trail's path by Alkali Springs. Indeed, the route of the Oregon National Historic Trail passes through the site and is now a gravel road called "Old Oregon Trail." No trail ruts or swales were noted. The OCTA sign notes that early emigrants referred to the area as "The Sulphur Springs," referring either to Alkali Springs or Tub Springs. Alkali Springs, at the site location, served as a daytime stopover to rest and water livestock and horses before continuing on. However, the alkali content of the water sometimes resulted in loss of livestock.

*Significance*

Site 0503040048SI was originally recorded in 1990



However, an OCTA commemorative sign for the Oregon Trail at Alkali Springs was noted as was the route of the Oregon NHT, now used as a gravel road (Old Oregon Trail). The trail would have been utilized during the middle to late nineteenth century. For the purposes of this report, the trail segment has been given a Class 4 designation (impacted) (OCTA 1994:14-15); however, this designation may be altered as a result of the trails study associated with the Project's Intensive Level Survey of aboveground resources. The

Oregon Trail is a NRHP-listed resource and part of the National Trails System for its role in early national commerce, exploration/settlement, and transportation (Criterion A). The recorded segment has been altered by blading, grading, and placement of gravel roadbed. The only aspects of integrity that have been retained by the site are location and setting. OCTA (1994:15) recommends that Class 4 trail segments not be considered significant or as contributing elements to the NHT. The resource's significance lies only in the location and the ability to retrace the emigrant trail. Although OCTA indicates protective corridors may be established in rural areas, such as the location of Site 0503040048SI, the commemorative sign at the site has provided sufficient interpretation of the area and the trail within it. Therefore, the recorded segment is recommended as a non-contributing element of the Oregon NHT and is not eligible under NRHP Criteria A, B, C, or D, and no further management consideration of the resource is recommended.

**The Dalles Military Road/B2H-MA-007**  
**Unincorporated Malheur County**  
**Not Eligible**

*Description and Significance*

The segment of the Dalles Military Road investigated for the B2H project is located in Malheur County was identified using historic maps, however, field investigation did not uncover its location due to modern road grading and an existing railroad. Due to the lack of physical integrity, the segment of the resource situated in the Analysis Area (in so far as it is not visible from surface investigations) is not eligible under the NRHP Criteria A, B, C, or D.

**Meek Cutoff/Meek Study Route Hambleton Line/B2H-MA-003**  
**Unincorporated Malheur County**  
**Not Eligible**



View of Meek Cutoff vicinity along former railroad berm, looking northwest.



View of Meek Cutoff vicinity, looking northeast along bladed road.

#### *Description*

The Meek Cutoff was an alternate route of the Oregon Trail established in 1845 by Stephen Meek. In 1995, the Oregon legislature recognized the Meek Cutoff as one of five “alternate routes of the Oregon Trail” (NPS 1998). Section 5 of the National Trails System Act (16 U.S.C. 1244) was amended in 2005, in order to initiate studies to analyze the feasibility of adding the Meek cutoff as a part of the Oregon NHT. The study of the route is ongoing (NPS 2015). The Meek cutoff route diverged from the Oregon Trail near modern day Vale at the Malheur River and crossed directly west. At the point of survey the segment of Meek Cutoff consists of a gravel road.

No cultural resources associated with the Meek Cutoff were recorded on BLM land during the Class II 15 percent random sample surveys (Anderson et al. 2013). Additional investigations conducted during the 2013 RLS and 2016 ILS failed to identify an intact segment of the Meek Cutoff within the Project study area, thus the portion of the trail within the project area is a non-contributing segment of the larger trail. Even if the trail did survive at this location, the Project would minimally affect the route as it would be an aerial crossing in the vicinity of the deeply incised Malheur Canyon. The historic location of the trail would likely have a view of the Project for less than a mile (0.71) and the level of impact was noted as moderate in the trail study conducted in 2014 for the project (BLM Manual 6280 study 2014: 102). Meek Cutoff is in poor condition.

#### *Significance*

Meek Cutoff was an alternate route of the Oregon Trail established in 1845. The route, one of the most infamous of the Oregon Trail alternative routes, headed directly west from the Oregon Trail's junction with the Malheur River. Stephen Meek, an experienced mountain man, led 750 to 1,000 emigrants, approximately 200 wagons, and thousands of head of livestock across the desert plain west of Vale, determined to find a more direct middle route towards the Cascades and into the Willamette Valley (Beckham 1991; Oregon Historic Trails Fund 2012). Meek used

this alternate route to avoid potential Indian attacks along the main trail and the dangers of crossing the Blue Mountains.

Based on emigrant Jesse Heritt's diary, the journey took 44 days to travel 370 miles with ox-team wagons on the following route: "from the Snake river up Owyee river; thence to South fork of Malheur river; along the north side of Malheur Lake, near the later city of Burns; up Silvies river to the headwaters of Crooked river; past Prineville, thence near Madras, Gateway, Shaniko; down Buck hollow to a crossing of the Deschutes river north of Sherar's bridge; up Butler canyon and Tygh ridge, past Dufur to The Dalles" (*Bend Bulletin* 1945).

Meek led the wagon train along the rocky banks of the Malheur River, through Harper Valley and the Malheur Mountains, up and over steep rocky bluffs. The oxen-driven wagons and travel-weary emigrants experienced a difficult time along the unproven route. At times, several miles separated parties in the group causing some to fall several days behind. By the time Meek reached the north fork of the Malheur River near Beulah Reservoir and Castle Rock, the terrain had become so difficult that trailing emigrants noted the iron-stained marks from the wagon wheels and bloody oxen footprints on the rocks along the trail left by the leading party. It was here that the first death in the party occurred. Ms. Sarah Chambers died of "camp fever," or typhus, on September 3, 1845. Her burial was marked just south of Castle Rock with a large inscribed stone (Beckham 1991; Oregon Historic Trails Fund 2012).

On the 10th day after separating from the main trail, grasses grew drier and water became scarcer, causing the followers to question Meek's decision to leave the main route. This was underscored when the wagons left Harney Valley, expecting to see Malheur Lake near modern-day Burns, to only find a marshy, stagnant pool. The emigrants had to search for miles for potable water. The lead wagon train camped along the northern lakeshore of Harney Lake, where the emigrants had their first direct experience with Paiutes since leaving the main Oregon Trail route. With increasing doubt in Meek, the emigrants overruled their leader and crossed 50 miles of arid lands toward Silver Lake and then Wagonfire Mountain. Camped at Lost Hollow at Wagonfire Mountain, similar issues with availability of freshwater at Malheur Lake were encountered (Oregon Historic Trails Fund 2012).

While many of the emigrants felt that Meek had misled them and were desperate to head upriver along the Deschutes River toward The Dalles, others still desired a more direct route over the Cascades. At Lost Hollow, the wagon train re-organized, moving the camp 30 miles north to Crooked River near present-day G.I. Ranch where a fresh water source had been found. The night of September 16, 1845, the wagon train split just south of the Maury Mountains. One group of 40 wagons and 200 emigrants followed Solomon Tetherow of Tennessee and Meek northwest toward the Deschutes River, while another group headed directly north toward the Columbia River, navigating by the North Star and the sun's shadows. Enduring a lack of water and limited rations of rancid beef, the northbound group began to experience bouts of "camp fever," which made the trip even more difficult. It was along Meek and Tetherow's route that the future legend of the Blue Bucket gold nuggets had its origins. The group covered more arduous terrain, but was aided by a member of the Warm Springs Tribe who directed them toward fresh water and guided them to the Deschutes River after scouts could not find a pass through the Cascades. Unable to find water on the intended route west, the train had turned north and, after a difficult search, found water at Buck Creek at the South Fork Crooked River. By the time, the wagon train arrived in The Dalles, at least 23 people had died (Oregon Historic Trails Fund 2016).

Meek Cutoff retains integrity of location. However, it has been obscured by development and environmental elements within the Project analysis area, specifically Vogue Road, agricultural activities, grazing, the Oregon Short Line railroad grades, Vines ditch, and a natural area

between the railroad grade and the Malheur River. The historical segment of the Meek Cutoff is within the study's analysis area but does not appear to be visible. As a trail segment, the portion of the Meek Cutoff within the project area does not appear to meet the registration requirements of the Intersecting Routes property type as contained in the Oregon Trail, Oregon, 1840-1880 MPDF. The Meek Cutoff does not retain sufficient integrity per the MPDF and is not discernable on the landscape and so is not eligible under NRHP Criterion A. The Meek Cutoff does not appear to be eligible under NRHP Criterion B, as documentary research could not confirm that significant individuals or groups are associated with this Oregon Trail segment. This segment does not appear eligible under Criterion C as it does not retain distinctive characteristics of the property type. The resource's physical characteristics are aboveground and visible, and existing documentary sources discuss little to no significant information about the property. It therefore holds little to no potential to yield information significant to the past and therefore is recommended as not eligible under NRHP Criterion D. Surface and/or subsurface archaeological survey/testing would be necessary to verify whether archaeological remains would be significant under NRHP Criterion D.

**Page S-148, Section 3.4, 1st Paragraph**

**Change:** Number of resources subject to the EFSC standards criteria revised to reflect changed NRHP eligibility recommendations.

**Revised Text:** A total of 315 resources are subject to one or more EFSC standard criteria...The remaining 117 resources in the analysis area are not subject to any EFSC standard criteria.

**Page S-154, Section 3.4.1, 1st Paragraph**

**Change:** Number of historic properties and potential historic properties revised based on changed NRHP-eligibility recommendations for 2B2H-SA-16, 2B2H-SA-17, 6B2H-SA-12, 6B2H-SA16, and 35UN0326.

**Revised Text:** Based on the results of background research and field surveys, 333 cultural resources in the analysis area are either NRHP-listed, NRHP-eligible, or are unevaluated and considered potentially NRHP-eligible.

**Change:** Number of archaeological sites that are historic properties or potential historic properties within the analysis area revised based on changed NRHP-eligibility recommendations for 2B2H-SA-16, 2B2H-SA-17, 6B2H-SA-12, 6B2H-SA16, and 35UN0326.

**Revised Text:** This includes 196 archaeological sites, 33 historic sites, 1 archaeological/historic site, and 2 HPRCSITs.

**Page S-154, Section 3.4.1, Table S-7**

**Change:** Table revised to reflect changed number of resources subject to EFSC criteria standard "a" as historic properties or potential historic properties. This includes changing the number of sites in the Direct Analysis Area (construction footprint) of the Proposed Route in Baker County from 12 to 14; the number of sites in the Direct Analysis Area of the Proposed Route in Union County from 0 to 1; and the number of sites in the Direct Analysis Area of the Double Mountain Alternative from 0 to 2. This reflects the changed NRHP-eligibility recommendations for 2B2H-SA-16 and 2B2H-SA-17 in the Double Mountain Alternative, 6B2H-SA-12 and 6B2H-SA-16 in the construction footprint of the Proposed Route in Baker County, and 35UN0326 in the direct analysis area of the Proposed Route in Union County.

Revised Text:

**Table S-7. Historic Properties in the Analysis Area by Route Segment<sup>1</sup>**

<b>Route Segments</b>	<b>Direct Analysis Area</b>	<b>Direct Analysis Area (Construction Footprint)</b>	<b>Visual Assessment Analysis Area</b>
<b>Proposed Route<sup>2,3</sup></b>			
Proposed Route, Morrow County	2	4	11
Proposed Route, Umatilla County	9	14	8
Proposed Route, Union County	1	5	53
Proposed Route, Baker County	7	14	53
Proposed Route, Malheur County	17	26	17
<b>Total</b>	<b>35</b>	<b>61</b>	<b>142</b>
<b>Alternative Routes</b>			
Double Mountain Alternative	2	0	0
Morgan Lake Alternative <sup>3,4</sup>	1	5	3
West of Bombing Range Road Alternative 1 <sup>4,5</sup>	0	2	2
West of Bombing Range Road Alternative 2 <sup>4,5</sup>	0	2	2

**Page S-163, Table S-8**

Change: 35UN0326 added to table.

Revised Text:

<b>Assigned Trinomial or Other ID</b>	<b>Cultural Resources Pedestrian Survey Temporary Resource #</b>	<b>Visual Assessment Temporary Resource #</b>	<b>Resource Type</b>	<b>NRHP Recommendation</b>	<b>Project Route(s)</b>	<b>Project Component</b>
35UN0326	N/A	N/A	Archaeological Site	Eligible	Proposed Route	Direct Analysis Area

**Page S-168, Table S-8**

Change: 2B2H-SA-16 and 2B2H-SA17 added to table.

Revised Text:

<b>Assigned Trinomial or Other ID</b>	<b>Cultural Resources Pedestrian Survey Temporary Resource #</b>	<b>Visual Assessment Temporary Resource #</b>	<b>Resource Type</b>	<b>NRHP Recommendation</b>	<b>Project Route(s)</b>	<b>Project Component</b>
TBD	2B2H-SA-16	N/A	Archaeological Site	Unevaluated	Double Mountain Alternative	Direct Analysis Area
TBD	2B2H-SA-17	N/A	Archaeological Site	Unevaluated	Double Mountain Alternative	Direct Analysis Area



**Page S-172, Table S-8**

**Change:** 6B2H-SA-12 and 6B2H-SA-16 added to table.

**Revised Text:**

<b>Assigned Trinomial or Other ID</b>	<b>Cultural Resources Pedestrian Survey Temporary Resource #</b>	<b>Visual Assessment Temporary Resource #</b>	<b>Resource Type</b>	<b>NRHP Recommendation</b>	<b>Project Route(s)</b>	<b>Project Component</b>
TBD	6B2H-SA-12	N/A	Archaeological Site	Unevaluated	Proposed Route	Direct Analysis Area (Construction Footprint)
TBD	2B2H-SA-16	N/A	Archaeological Site	Unevaluated	Proposed Route	Direct Analysis Area (Construction Footprint)

**Page S-175, Table S-8**

**Change:** "Warm Springs Pump Canal" removed as Other ID for Site 4B2H-EK-43 and replaced with "Willow Creek Diversion."

**Revised Text:**

<b>Assigned Trinomial or Other ID</b>	<b>Cultural Resources Pedestrian Survey Temporary Resource #</b>	<b>Visual Assessment Temporary Resource #</b>	<b>Resource Type</b>	<b>NRHP Recommendation</b>	<b>Project Route(s)</b>	<b>Project Component</b>
Willow Creek Diversion	4B2H-EK-43	N/A	Historic Site/Aboveground	Unevaluated	Proposed Route	Direct Analysis Area (Construction Footprint)

**Page S-206, Table S-14**

**Change:** 6B2H-SA-12 and 6B2H-SA-16 applicable EFSC Standard changed to a) Potential Historic Property and b) archaeological site on private land.

**Revised Text:**

Assigned Trinomial or Other ID	Cultural Resources Pedestrian Survey Temporary Resource #	Visual Assessment Temporary Resource #	Resource Type	Project Route(s)	Project Component	Applicable EFSC Standard	Impact Avoided?/ Project Effect
TBD	6B2H-SA-12	N/A	Archaeological Site	Proposed Route	Direct Analysis Area (Construction Footprint)	a) Potential Historic Property; b) Archaeological site on private lands	No - Will be directly impacted.
TBD	6B2H-SA-16	N/A	Archaeological Site	Proposed Route	Direct Analysis Area (Construction Footprint)	a) Potential Historic Property; b) Archaeological site on private lands	No - Will be directly impacted.

**Page S-226 through S-227, Section 8, References**

**Change:** With the new subsection 3.3.2.2 that includes extracts from Oregon Trail resource forms from Exhibit S Attachments S-6 and S-10, additional citations have been added to this section.

**Revised Text:**

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