

## APPENDIX C. MARCH 16, 2012 MINUTES: “APPLEGATE TRAIL I (ATI) NORTH SEXTON PASS I-5 EAST” FIELD TRIP



### Hugo Emigrants Trails Committee Josephine County Historical Society Hugo Neighborhood Association & Historical Society

#### I. PURPOSE

The purpose of the trip was to field investigate the Applegate Trail (*Trail*) site at the physical ATI (Appendix AA) road/*Trail* per the *Applegate Trail I North Sexton Pass I-5 East: I* paper<sup>1</sup> (Appendix BB). Maps of the ATI can be found at the web location per the ATI paper and the *Telegraph Lines and Applegate Trail at Smith Hill Pass* paper (Appendix CC).<sup>2</sup>

The “*Applegate Trail I North Sexton Pass I-5 East: I*” publication was preliminary and it was planned that it would be updated with “*Applegate Trail I North Sexton Pass I-5 East: II*” in the sense of incorporating later research and field pedestrian surveys by the GLO Field SubCommittee, Hugo Emigrant Trails Committee (HETC). This field trip’s purpose is to continue collecting information about the ATI for the updated paper (Appendix BB).

The archaeological technique of pedestrian survey, also called surface survey or reconnaissance survey, involves walking the surface of an archaeological site or large region in stratified patterns, and either marking the location of identified artifacts, or collecting a sample for further investigation. The field method is an established practice for providing data on settlements in large regions, and is usually considered one part of an investigation strategy. Minimum objectives for information that will be inventoried and/or verified for all ATI stations (Appendix AA) during the surface surveys are identified in Appendix BB.

#### II. PARTICIPANTS

Jim and Rene Ford and Mike Walker visited the Applegate Trail I (ATI) on March 16, 2012 from noon to 2:30 p.m. They parked at the old U.S. Weather Bureau parking area.

#### III. FIELD INVENTORY

Just prior to noon at the Sexton Mt. Summit it was raining with some fog. About noon it cleared up to overcast and wet, with the seasonal streams really flowing, but there was no snow.

## A. Specific ATI Station Numbers

The group placed orange ribbon on each wooden station stake each with its own unique ATI station number (Appendix AA). The idea is that any member of the group could participate in a field trip, on their own, or with others and record different geomorphic evidence or topographical evidence tied to the nearest ATI station number location. The topographical feature inventoried could be recorded as a true bearing and distance from the ATI station. Linear features within the road bed could be recorded with this same method or located along the line. For example, the Line-of-Rocks feature could be recorded when it starts (e.g., ATI 1+ 39) and when it ends (e.g., ATI 6+ 25).

## B. Specific Topographical Features At Each ATI Station

Members then recorded different geomorphic evidence or topographical features as expressed by the weathering of the ATI through erosional processes at each of the ATI stations (e.g., road widths, berms, gullies or seasonal streams, road shoulders, etc.). This inventory information was recorded on a new form Inventory “*Form ATI-1. Topographical Trail Evidence at Stations for ATP*” dated March 16, 2012. The information on Form ATI-1 is the cumulative information gathered by members of the HETC from several field trips to ATI.

October 18, 2011  
October 21, 2011  
October 23, 2011  
October 28, 2011  
November 15, 2011  
March 6, 2012  
March 8, 2012  
March 16, 2012

An important feature is the width of the *Trail* as one would expect the *Trail* from ATI 7+60 to ATI 11+40 to be narrower as it was the original *Trail* not improved as much as later routes. A September 16, 1858 report from First Lieutenant G. H. Mendell, Topographical Engineers, to Captain George Thom, Corps of Topographical Engineers, San Francisco, California recorded the military road as 16' in width (Appendix DD).<sup>4</sup>

“The character of the road is 16' in width, free of roots and stumps, the timber cut down to width of 30' to 60'. The width is reduced where there is heavy rock or earth excavation, but in all places it will be easily practicable for a 6-mule team.” (page 1,213<sup>4</sup>)



**Photo 1. Jim & Mike At Big Tree After Which Station 8 + 00 Was Named**

### C. 486' Special Line-of-Rocks Feature

One special feature was recorded, the line-of-rocks. The following is from page 22 of the *Telegraph Lines and Applegate Trail at Smith Hill Pass* paper.<sup>2</sup>

In rocky areas emigrants often cleared larger rocks out of the *Trail* and placed them along the sides of the *Trail* to make wagon passage easier. A line of rocks may mark the edge of trails, often partially embedded in the soil (MET Manual<sup>3</sup>, page 9). The 1,060' ATI has a line of rocks that Joe Neiderheiser, HETC, observes look very similar to those on the emigrant Barlow Trail. Joe can not tell the difference in the two topographic features.



*Photo 2. Mike & Jim At "I-5 Culvert" Station 10 + 00  
Where Two Benches Are Located*

Leta Neiderheiser and Jim Ford, members of the Oregon Historic Trails Advisory Council (OHTAC) and the HETC, have the same opinion.

The Line-of-Rocks feature was recorded on Form ATI-1, and on another form specific for the Line-of-Rocks topographical feature "*Form ATI-2. Line of Rocks Evidence at Stations for ATP*" dated March 16, 2012. The Line-Of- Rocks was recorded as being 486' long from ATI 1+39 - ATI 1+ 625.

Both forms will be updated on future field trips with more specific topographical *Trail* evidence.

### IV. MINUTES

Minutes were recorded by Mike Walker April 23, 2012.

Mike Walker, Minutes Secretary & Member  
GLO Field Review SubCommittee  
Hugo Emigrants Trails Committee  
Hugo Neighborhood Association & Historical Society  
3388B Merlin Rd #195  
Grants Pass, Oregon 97526  
541-471-8271  
Email: hugo@jeffnet.org  
Web Page: <http://www.hugoneighborhood.org/>

Minutes were reviewed and edited by the following participating members of the Hugo Emigrant Trails Committee: Jean Boling, Jim and Rene Ford, Karen Rose, and Mike Walker.

## Footnotes

HETC's Web Published Applegate Trail Inventories (Footnotes 1 - 2) at:  
[http://www.hugoneighborhood.org/miscellaneous\\_research\\_papers\\_and\\_documents.htm](http://www.hugoneighborhood.org/miscellaneous_research_papers_and_documents.htm).

1. Walker, M., Rarey K., & Rose. K. January 30, 2012. *Applegate Trail I North Sexton Pass I-5 East: I*. For Hugo Neighborhood Association & Historical Society. Hugo, OR.
2. Boling, Rarey, Rose, & Walker. February 22, 2012. *Telegraph Lines and Applegate Trail at Smith Hill Pass*. For Hugo Neighborhood Association & Historical Society & Josephine County Historical Society. Hugo, OR.
3. Oregon-California Trails Association (OCTA). July 2002, *Mapping Emigrant Trails MET Manual*. Fourth Edition. Independence, MO (<http://www.octa-trails.org/preserve/training.php>;  
[http://www.octa-trails.org/preserve/pdf/MET\\_2008.pdf](http://www.octa-trails.org/preserve/pdf/MET_2008.pdf)).
4. U.S. Secretary of War Report, 1858, U.S. Congress. 35<sup>th</sup> Congress, 2<sup>nd</sup> Session, House of Representatives, Executive Document No. 2. Message from the President of the United States to the Two Houses of Congress At the Commencement of the Second Session, of the Thirty-Fifth Congress, December 6, 1858 – Read, December 11, 1858 – Resolved. Volume II, Part II. Washington: James B. Steedman, Printer. 1858. [Appendix G (page 1,211), OFFICE MILITARY ROADS PACIFIC COAST, San Francisco, California, September 25, 1858; Lt. Mendell report]  
September 16, 1858 Report of First Lieutenant G. H. Mendell, Topographical Engineers, to Captain George Thom, Corps of Topographical Engineers, San Francisco, California

## Photographs

Photo 1. Jim & Mike At Big Tree After Which Station 8 + 00 Was Named

Photo 2. Mike & Jim At “I-5 Culvert” Station 10 + 00 Where Two Benches Are Located

## Forms

Form ATI-1. Topographical Trail Evidence at Stations for ATI

Form ATI-2. Line of Rocks Evidence at Stations for ATI

## Appendices

Appendix AA. Trail Names & ATI Station Numbers

Appendix BB. VII. Preliminary Analysis from “*Applegate Trail I North Sexton Pass I-5 East: I*” Paper

Appendix CC. Maps of ATI

Appendix DD. September 16, 1858 Report of First Lieutenant G. H. Mendell, Topographical Engineers, to Captain George Thom, Corps of Topographical Engineers, San Francisco, California

**Appendix AA. Trail Names & ATI Station Numbers**

(from Appendix H of *Applegate Trail I for North Sexton Pass I-5 East* paper)

**Linear Road Features** Understanding the Applegate Trail and its evolution at North Mt. Sexton Pass east of I-5 is fascinating. This understanding has created a need for the description of four linear Trail/Road features. Road feature No. 2, 1,060' "*Applegate Trail I (ATI) For North Sexton Pass I-5 East*" is the most significant as it is the original location of the Applegate Trail (*Trail*).

- 1. New Access/Fire I-5 Road (200')**
- 2. Applegate Trail I (ATI) For North Sexton Pass I-5 East (1,060')**  
 "Y" Road No. 1 to "Y" Road No. 2 (760') &  
 "Y" Road No. 2 to Clearing Before I-5 Sign (300')
- 3. Applegate Trail II (ATII) For North Sexton Pass I-5 East (1,300')**  
 "Y" Road No. 1 1 to "Y" Road No. 2 (760') &  
 "Y" Road No. 2 to Highway Marker Post (540')
- 4. Applegate Trail III (ATIII) For North Sexton Pass I-5 East (1,853')**  
 "Y" Road No. 1 1 to "Y" Road No. 2 (760') &  
 "Y" Road No. 2 to beyond the Highway Marker Post at I-5 Ditch (1,093')

The following station information is for a section of the Applegate Trail I (ATI) for North Sexton Pass I-5 East which is 1,060' long.

| <b>Stations</b>    | <b>Stations</b> | <b>Distance</b> | <b>Distance From Beginning Of ATI Project</b>          |
|--------------------|-----------------|-----------------|--|
| <b>Station ATI</b> | <b>0+00</b>     | <b>0'</b>       | <b>Starting Point Of ATI Project - "Y" Road No. 1</b>  |
| Station ATI        | 1+00            | 100'            | 100' from beginning point                              |
| Station ATI        | 2+00            | 200'            | 200' from beginning point                              |
| Station ATI        | 3+00            | 300'            | 300' from beginning point                              |
| Station ATI        | 4+00            | 400'            | 400' from beginning point                              |
| Station ATI        | 5+00            | 500'            | 500' from beginning point                              |
| Station ATI        | 6+00            | 600'            | 600' from beginning point                              |
| Station ATI        | 7+00            | 700'            | 700' from beginning point                              |
| <b>Station ATI</b> | <b>7+60</b>     | <b>760'</b>     | <b>760' from beginning point - "Y" Road No. 2</b>      |
| Station ATI        | 8+00            | 800'            | 800' from beginning point                              |
| Station ATI        | 9+00            | 900'            | 900' from beginning point                              |
| Station ATI        | 10+00           | 1,000'          | 1,000' from beginning point                            |
| <b>Station ATI</b> | <b>10+60</b>    | <b>1,060'</b>   | <b>1,060' from beginning point: End of ATI Project</b> |
| Station ATI        | 11+40           | 1,140'          | 1,140' from beginning point - I-5 Sign                 |

**APPENDIX BB. VII. PRELIMINARY ANALYSIS FROM “APPLEGATE TRAIL I NORTH SEXTON PASS I-5 EAST: I” PAPER**

The “*Applegate Trail I North Sexton Pass I-5 East: I*” publication was preliminary and will be updated by “*Applegate Trail I North Sexton Pass I-5 East: II*” in the sense of incorporating later research and field pedestrian surveys by the GLO Field SubCommittee, HETC.

The archaeological technique of pedestrian survey, also called surface survey or reconnaissance survey, involves walking the surface of an archaeological site or large region in stratified patterns, and either marking the location of identified artifacts, or collecting a sample for further investigation. The field method is an established practice for providing data on settlements in large regions, and is usually considered one part of an investigation strategy.

The minimum objectives are that the following information will be inventoried and/or verified for all ATI stations during the surface surveys.

|                          |  |
|--------------------------|--|
| <b>Coordinates</b>       | (i.e., GPS Latitude & Longitude)   |
| <b>Elevation</b>         | (i.e., GPS, Map Interpretation, feet)  |
| <b>Gradient</b>          | (i.e., Abney slope measurements)   |
| <b>Trail Course</b>      | (i.e., True Azimuth)   |
| <b>Trail Width</b>       | (i.e., Width in Feet)  |
| <b>Ditches</b>           | ( e.g., Uphill Ditch, Middle Erosion Ditch, etc.)  |
| <b>Downhill Shoulder</b> | (e.g., berm, rocks, line-of-rocks, etc.)   |
| <b>Trail Material</b>    | (e.g., dirt, granite, rock, macadam, etc.)   |
| <b>Photo Monitoring</b>  | (i.e., Key Observation Point: while standing at the station, pictures are taken in north, east, south, and west directions). The process is repeated once a year or more if there is activity in the area. |
| <b>Topographic</b>       | Traces: Physical or Topographical Evidence (e.g., trace, depression, swale, rut, erosion feature, etc.)  |
| <b>Artifacts</b>         | Wagon parts, pottery fragments, barrel hoops, line-of-rocks, telegraph post remnants, etc.   |

The following terms are trail terminology representing topographical evidence (MET Manual) They are used for the purpose of standardizing the definition of terms used to describe real or possible emigrant wagon trails. Geomorphic evidence equals topographical evidence as expressed by weathering of an emigrant trail through erosional processes represented by traces, depressions, swales, ruts, and erosion features.

|                  |   |
|------------------|---|
| Trace:           | General term for any original trail remnant.  |
| Depression:      | Shallow dip in surface, often very faint and difficult to see.  |
| Swale:           | A depression, but of deeper dimensions and with sloping sides.  |
| Rut:             | Deep depression, without a center mound and having steep sides.   |
| Erosion Feature: | A trace of any sort that has been deepened and altered by subsequent wind and/or water action. Sides and bottom irregular (i.e., stream channel/gully). |

|                |   |
|----------------|---|
| Track:         | Visible trace caused by compacting of surface or discoloration due to salt evaporation on alkali flats. Little or no depression. Often seen as streaks across an alkali flat. |
| Scarring:      | Irregularly wide flat surface, devoid of vegetation, that no longer shows any wagon depressions or swales. Often seen trailing through sagebrush flats in an uneven pattern.  |
| Two-track:     | Parallel wheel tracks separated by center mound. Typically an unimproved ranch road used by motor vehicles.   |
| Improved Road: | Improved Road or Secondary Road: Bladed, graded, crowned, gravelled, oiled or blacktop roads usually having side berms, curbs or gutters.                                     |

The Smith Hill Pass was unnamed until the 1890s. The 1846 - 1853 ingress and egress to the pass was narrow and difficult for wagon passage, especially the north slope after the pass. It was improved with pick and shovel by Brevet Major B. Alvord, United States Army, in 1853, but was still steep in ascent and descent and difficult for wagon passage. These steep passage areas are where artifacts such as wagon parts, pottery fragments, and barrel hoops are commonly located. They are the remains of wagon breakdowns or abandoned provisions (MET Manual).

### **Grades Information Added December 29, 2011**

*“Some of the steepest grades on the Interstate Highway System are located in southern Oregon, between Hugo and Glendale. Most freeway climbs are built on grades of 5.0 percent or less. In percent), Smith Hill (6.74) and Stage Road Pass (5.00). Southbound I-5 drivers will encounter a 6.00 percent grade at Stage Road, 6.12 at Smith Hill, and 6.50 on Sexton Mountain.”*

Source: I-5: Glendale to Hugo Paving and Sexton Climbing Lane, Frequently Asked Questions (<http://www.oregon.gov/ODOT/HWY/REGION3/docs/I-5-Glendale-Hugo-FAQ.pdf>)

Source I-5: Glendale to Hugo Paving & Sexton Climbing Lane (<http://www.oregon.gov/ODOT/HWY/REGION3/glendale-hugo1.shtml>)

|                    |   |
|--------------------|---|
| <b>Soil Survey</b> | USDA, Soil Conservation Service. 1983. <i>Soil Survey of Josephine County, Oregon.</i>  |
| Mt. Sexton Pass    | 48F Josephine gravelly loam, 35 to 55 percent north slopes (pages 67 - 68, Sheet No. 19. The soil 48F is approximately 750' in a north-south direction on both sides of the pass. |
| ATI                | 1D Abegg gravelly loam, 12 to 20 percent slopes (pages 15 - 17, Sheet No. 19 <sup>2</sup> )   |

Analysis: Abegg is basically alluvial/colluvial soil, and according to the SCS, it's well drained, and is comprised of gravelly, very gravelly, or extremely gravelly soil. This is about as good as you can get for traveling by covered wagon. So, while some areas may have been "swampy", this shows that some areas were likely far from it.

**Appendix CC. Maps of ATI: Telegraph Lines and Applegate Trail at Smith Hill Pass<sup>1</sup>**  
[http://www.hugoneighborhood.org/miscellaneous\\_research\\_papers\\_and\\_documents.htm](http://www.hugoneighborhood.org/miscellaneous_research_papers_and_documents.htm)

- Map 1. 1.8 Mile Applegate Trail At Smith Hill Pass From JA-14 To JA-16: 1901 - 1902
- Map 2. Telegraph Lines At Old Smith Homestead Smith Hill Pass: 1940
- Map 5. Telegraph Lines At Applegate Trail I North Sexton Pass I-5 East: 1940
- Map 7. Applegate Trail At Sexton Pass: 1998

**Maps of ATI: Applegate Trail I North Sexton Pass I-5 East: I<sup>1</sup>**  
[http://www.hugoneighborhood.org/miscellaneous\\_research\\_papers\\_and\\_documents.htm](http://www.hugoneighborhood.org/miscellaneous_research_papers_and_documents.htm)

- Map 2. Old Smith Homestead At Smith Hill Pass: 1940
- Map 5. Applegate Trail North Sexton Pass I-5 East: 1940
- Map 7. Applegate Trail At Sexton Pass: 1998

**Appendix DD. September 16, 1858 Report of First Lieutenant G. H. Mendell, Topographical Engineers, to Captain George Thom, Corps of Topographical Engineers, San Francisco, California<sup>4</sup>**

Portland, O. T., September 16, 1858

Captain George Thom  
Corps of Topographical Engineers  
San Francisco, Cal.

Captain: By direction of Major Bache, Corps of Topographical Engineers, I make to you the following report of operations on the military roads in Oregon and Washington Territories since the date of my last annual report. (page 1,212)

I - Roads in Southern Oregon

1. Road from Camp Stewart to Myrtle Creek:  
Amount of original appropriation \$30,000.00  
Balance on hand \$15,653.22  
Amount expended \$14,346.78

1. Road from Myrtle Creek to Scottsburg:  
Amount of original appropriation \$30,000.00  
Balance on hand \$19,302.40  
Amount expended \$10,697.60

These roads are a continuation of each other. From Scottsburg to Myrtle Creek is about 65 miles, from Myrtle Creek to Camp Stewart is about 95 miles. (page 1,213)

In accordance with instructions from proper authority I left San Francisco on the 10<sup>th</sup> of March ultimo, to make an examination of these roads, and upon my return rendered a report as to the proper method of disbursement. (page 1,213)

Appropriations were made some years since for both of these roads, and the road first named [Camp Stewart to Myrtle Creek] was located and partially constructed in 1853, and the other during the following



season. The work requisite to be done being chiefly that of repair, and difficult to describe accurately, it was determined to prosecute it by hired labor, giving contracts for the bridges, and for a portion of the road, which it would have been difficult to supervise carefully. Accordingly a party of labors was organized for each road was organized in San Francisco and detached to the Umpqua by Steamer on April 6, both parties being under the direction of Colonel Jos. Hooker. (page 1,213)

The party for the first named road proceeded to the canon, about 75 miles from Scottsburg, and commenced work immediately, and has progressed favorably since, with a force varying between 20 and 40 men. (page 1,213)

This canon is an artery of travel between the southern and northern portions of the coast. It is about 11 miles in length and has always presented the greatest difficulties. For wagons it has been almost impracticable, and for horsemen it has been by no means favorable. The principal features of difficulty have been the portion, about one mile in length, where the **walls of the canon become almost vertical**, and the southern end, some four miles in length, where the mud has collected to great depths. **On the former portion the road was previously located in the creek, and was but a succession of small precipices and huge boulders.** Where the creek attained its height it was entirely impracticable. **The line was relocated and placed on the side of the mountain. This has involved a great expense, as the road was been literally blasted out of the hard basaltic rock.** The improvement, however, is of the most permanent character, and perhaps at no point in the country would the application of the same amount of money have been more advantages to the public than in this instance. Improvements are now progressing on the southern end with a large force, with the intention of completing it before the arrival of the rainy season. Much of this **mud** is due to the entire lack of drainage, which will be remedied by the **construction of frequent drains and culverts**, while other portions will be bridged. It was estimated that \$18,000 or \$20,000 would make an excellent road through this canon, and **\$8,000** has been appropriated to a section of 13 miles, lying south of the canon, and including the **Grave Creek hills.** (page 1,213)

The character of the road is 16' in width, free of roots and stumps, the timber cut down to width of 30' to 60'. The width is reduced where there is heavy rock or earth excavation, but in all places it will be easily practicable for a 6-mule team. (page 1,213)

On this road the following contracts have been entered into, viz:

1. Hardy and Thomas Ellif, amount \$8,000, object, the through repair of 13 miles of road, commencing at Cow Creek, and extending toward Jacksonville. (pages 1,213 - 1,214)
2. [for bridges]

On the Scottsburg and Myrtle creek road . . . (page 1,214)

II - Astoria an Salem Military Road (did not copy)

III - Roads in Washington (did not copy)

1. Vancouver to Stellacoom Military Road
2. Stellacoom to Bellingham bay Military Road

Very respectfully, your obedient servant,

G. N. Mendell  
1<sup>st</sup> Lieut. Top. Engineers