DEPARTMENT OF THE ARMY
WALLA WALLA DISTRICT, CORPS OF ENGINEERS
201 NORTH THIRD AVENUE
WALLA WALLA WA 99362-1876

REPLY TO ATTENTION OF:

Cultural Resources Branch

May 15, 2018

Robert Whitlam, Ph.D.
State Archaeologist
Department of Archaeology and Historic Preservation
Post Office Box 48343
Olympia, Washington 98504-8343

SUBJECT: PL-84-99 Waitsburg Levee Emergency Rehabilitation Project: Walla Walla County, WA

Dear Dr. Whitlam:

The U.S. Army Corps of Engineers (Corps) proposes to repair a damaged portion of the Waitsburg Levee (undertaking) located on the Touchet River in the city of Waitsburg, Walla Walla County, Washington (Figures 1 - 5). The purpose of the emergent undertaking is to restore the damaged levee to pre-flood levels of protection to protect life and property from future flooding. The Corps has determined and documented the area of potential effect (APE) for the undertaking and is consulting with your office under Section 106 as provided at 36 C.F.R. § 800.4(a). This letter also summarizes efforts the Corps has taken to date to identify historic properties that may be affected by the undertaking.

The non-federal levee was constructed to provide flood protection from periodic recurring flooding from the Touchet River. The levee is approximately 6,600 feet long and is constructed of local earthen materials with armor rock scour protection and a weighted toe. The average riverward slope is 2 horizontal (H) to 1 vertical (V). The landward height is 0 to 8 feet high. The levee has a top width of 10 feet and is armored with Class IV to V riprap. The levee driving surface is spall rock and gravel. This levee protects residential and commercial areas. It is estimated that an event as small as a 50-year flood could cause enough erosion to lead to a levee breach. If repaired, the levee would provide 200-year level of protection (LOP) to the inhabitants of Waitsburg.

The Touchet River near Waitsburg experienced a significant flood event during the 2017 flood season. The flood peak that caused erosion damage to the left bank segment was not recorded or measured, and have not been measured since 1993. Many basins near the Touchet River experienced floods greater than a 10-year average annual event this past year.

The location where erosion is occurring is where the river is impinging the levee. The 2017 damages were the result of erosion extending downstream from the main impingement area, to the tie-in point where the levee meets high ground. The damage location is at the upstream end

of the levee where it meets the remnants of an elevated railroad bed. The high river flows resulted in scour of the levee slope and toe, including loss of riprap and embankment material for about 65 feet of the left bank.

Under the proposed action, the Corps would re-construct the damaged locations along 65 feet of the Waitsburg Levee System to the as-was condition by re-constructing portions of the levee that eroded away and building a riprap buttress at the upstream end of the levee to armor and protect the levee tie-in point. To construct the buttress, the levee would be excavated and the bench surface on top of the levee would be extended upstream to provide a stable surface to stage excavation machinery. Once a work platform is stabilized, the levee would be excavated to approximately 20 feet back from its current slope. A trench will be excavated along the base of the levee for the length of the repair segment and riprap boulders up to 4 feet diameter will be placed to construct a robust revetment. The riprap would then be filled with rock up to 24-inch diameter to restore the original 2:1 slope of the levee.

To minimize any further impingement of the river at high flows, the riprap buttress would not extend into the river. Riprap would be scavenged, if available, but it is expected that riprap will need to be brought in from off site. Imported riprap would be clean quarry rock from an established, nearby commercial quarry. Temporary access will utilize the existing downstream levee and a previously established gravel parking area adjacent and southeast of the repair location.

Preliminary research suggests that the original levee was likely constructed by individual landowners in the 1930s and eventually became conjoined and extended by the Waitsburg Levee Project of 1951. That levee project was undertaken by the Corps and was built with the leftover tailings from a snagging and clearing operation to clear rocks and debris from the river (Amonette 2009). Several hundred feet of revetment repairs were completed downstream of the subject repair location soon after a 1996 flood event that overtopped the levee and inundated 75% of the town. It was estimated that the 1996 flood was a 200-year flood event.

The Corps staff archaeologist has conducted a records search and literature review of the Washington Information System Architectural and Archaeological Records Database (WISAARD). The literature review and records search revealed that there have been no cultural resource investigations and no cultural resources recorded within the APE. Several cultural resource assessments have been undertaken within the vicinity of the APE. Amonette (2009) reported on a three mile fluvial geomorphic reach assessment of the Touchet River through Waitsburg. This included a discussion of the ethnographic and historic context for the general area by Catherine Dickson of the Confederated Tribes of the Umatilla Indian Reservation but no specific site recommendations were offered. Sanborn Insurance maps of 1896 were also reviewed.

A comprehensive survey of the town of Waitsburg was undertaken in 1977 which resulted in a National Register Nomination Form for the Waitsburg Historic District (DT 24). Five blocks of commercial and residential buildings exhibit the settlement and development of the town throughout the 19th century. Several additional historic buildings in town have been listed in the National and State Historic Register including the Mary Hubbard House, Preston Hall,

Waitsburg High School and the William Perry Bruce House. The undertaking will have no adverse effect to any historic buildings or the District, however a levee breach may endanger historic properties within Waitsburg.

The undertaking is located in Section 11, Township 9 North, Range 37 East in Waitsburg, Washington. The Corps has determined the area of potential effect (APE) for the Waitsburg Levee Rehabilitation Project to be the length of the levee repair (65 feet), as well as all staging and access along 900 feet of the existing levee (Figure 2). The APE for both direct and indirect effects encompasses approximately 0.5 acre. The Corps believes that the APE is sufficient to identify and consider both direct and indirect effects of the proposed project.

The Waitsburg Levee was constructed in 1951 beginning at a railroad trestle and ran downstream along the left bank to the US 12 highway bridge (Figures 6 and 7). The levee rehabilitation will occur at the location of the remnant railroad trestle. The railroad was constructed by the Oregon & Washington Territory Railroad in 1881 as a branch line from Walla Walla servicing Waitsburg and Dayton, Washington. A historic photograph shows the trestle as a wooden pier foundation and truss structure crossing the Touchet River (Amonette 2009). A local informant reported that the truss superstructure had been removed by circa 1980 (A. Colter, pers. comm. 2018). Possibly, a major flood in 1964 may have damaged the trestle and the superstructure may have been removed at that time. The rail line was abandoned in 1983. A segment of the right-of-way located south of the repair site was recorded as 45WW141 by the Corps in 2001(Keith 2001). The railroad line had been removed, graded, and in agricultural use and was determined not eligible for listing in the National Register on account of its loss of integrity (Keith 2002). However, it is listed as potentially eligible in WISAARD. James Wilson, landowner at the levee rehabilitation location since circa 1986, reported that the Burlington Northern Union Pacific Railroad Company de-constructed and removed the deck of the trestle in 1989. Mr. Wilson constructed a house near the levee rehab location and within the railroad right-of-way in the mid-1980s.

The erosion of the left bank at the repair location has exposed remnants of several vertical posts likely associated with the railroad trestle (Figures 8 – 10). Field visits have documented the location of the piers and the association with basalt fill material that indicates the railroad bed in profile. Access along the vertical bluff was limited but it appears that there are two sets of piers delineating the upstream and downstream edges of the structure; total width about 12 feet. The wood piers are round and approximately 8 – 10 inches diameter. They have been driven into a very compact silt substrata. A less compact silt layer approximately 8 feet thick overlies the substrate. Within the width of the structure, in profile, is an upper fill layer consisting of angular basalt cobbles up to 8 inches diameter. The fill layer appears to be about 6 feet thick and likely represents construction of the railroad bed by excavation of the silt and backfill with rock. One pier post extends to ground surface; the others are broken or cut. No additional architectural elements were observed. Roughly shaped broken concrete chunks and basalt boulders up to 4 feet diameter border the downstream edge of the trestle palimpsest and represent earlier levee revetment construction efforts.

Across the Touchet River, along the right bank and outside the project APE, is a wood board and beam structure that appears to be a flood control wall. It is not aligned with the trestle

remnant, is not associated with the trestle, and will not be affected by this undertaking. The right bank has been extensively graded and altered, and no trestle elements were observed.

It is obvious that the removal of the trestle in 1989 and subsequent natural erosion of the left bank has significantly affected the integrity of the structure. Therefore, the Corps has determined that no historic property will be affected by the proposed levee rehabilitation. A DAHP Site Form will be prepared and submitted to SHPO for archival purposes. No additional recordation or monitoring of construction activities is warranted.

The Corps requests your review and agreement with our determination of the APE and finding of no historic properties affected. Please contact us within 30 calendar days from receipt. If you have any questions or desire additional information, please contact the project Archaeologist, Mr. Stephen Roberts at Stephen.J.Roberts@usace.army.mil or 509.527.7148. I may be contacted at Scott.M.Hall@usace.army.mil or 509-527-7297.

Sincerely,

For Scott M. Hall
Supervisory Archaeologist,
Cultural Resources Branch

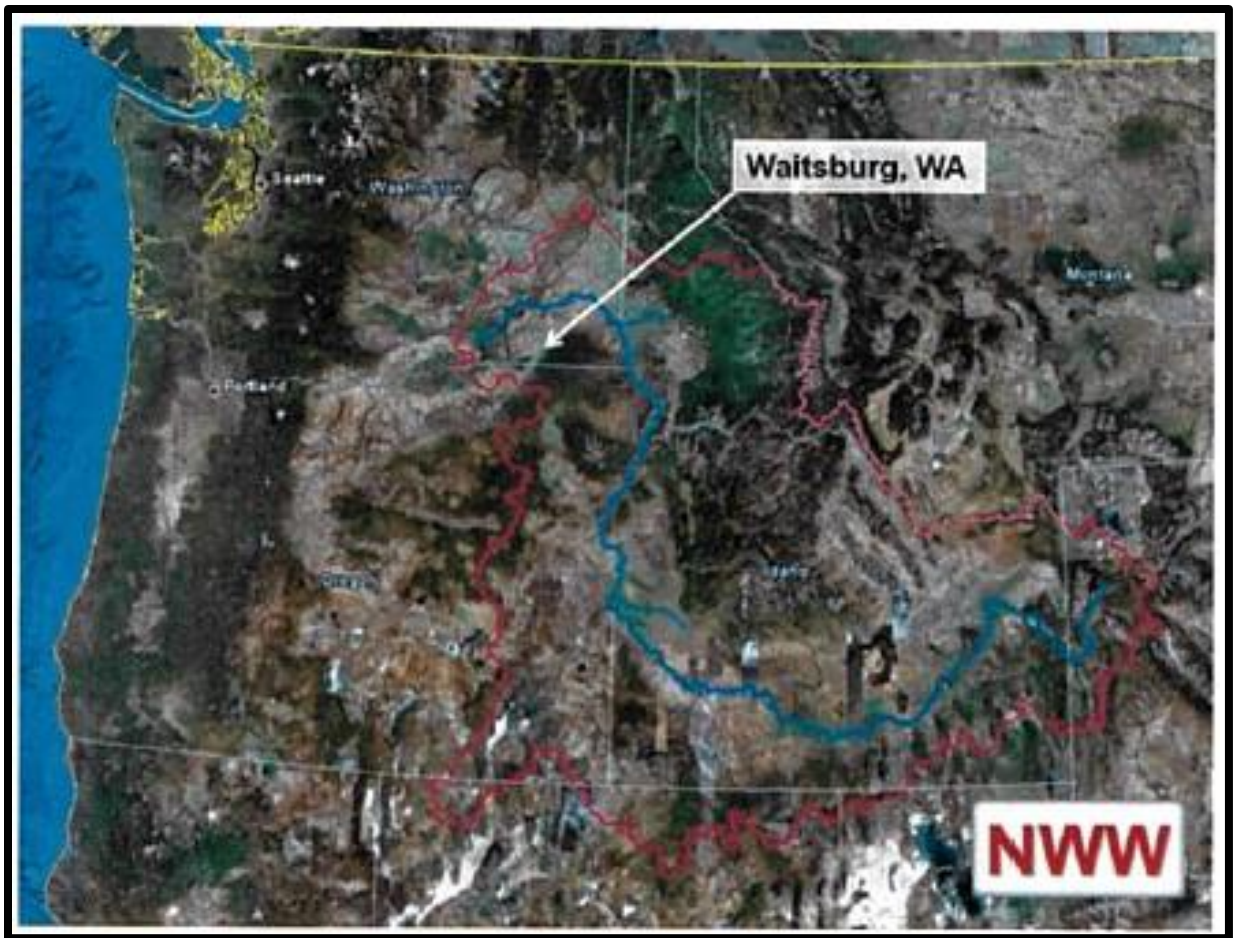

Figure 1. Location map.

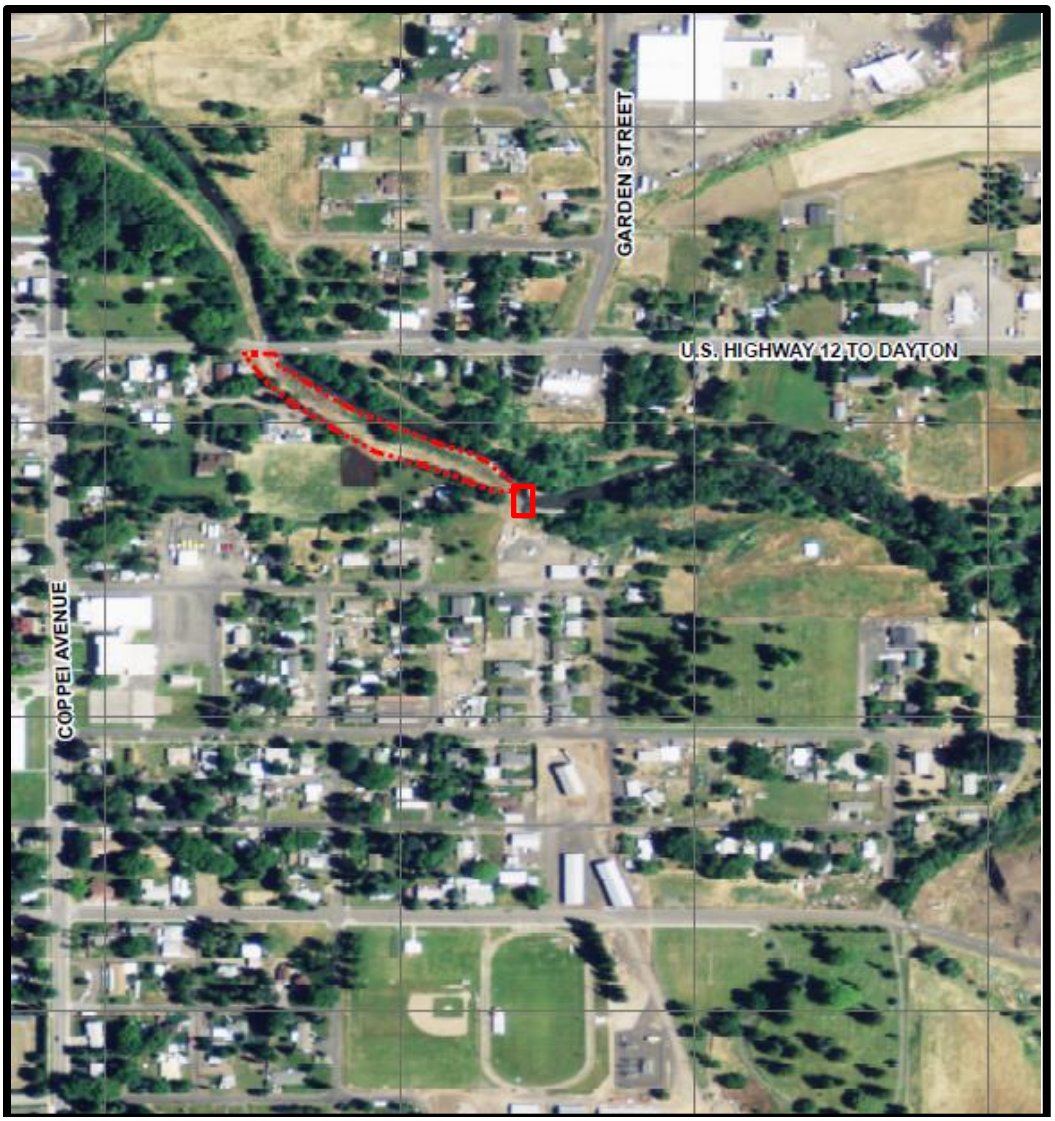

Figure 2. Aerial showing APE location of Waitsburg Levee (dashed red) with access road, and staging area (in solid red).

Figure 3. Aerial showing location of levee rehabilitation location (Work Area).

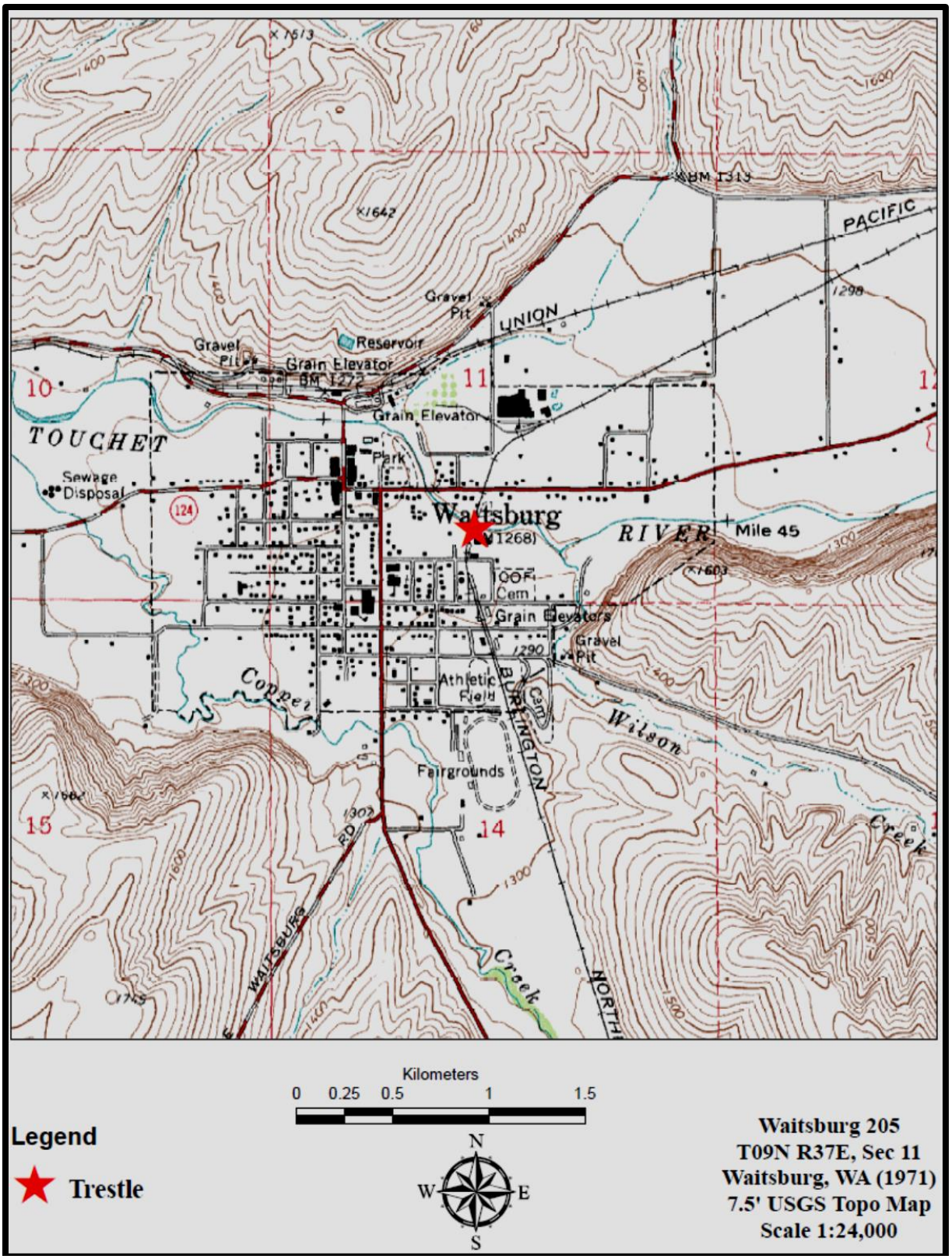

Figure 4. Waitsburg quadrangle USGS 7.5' (1971) showing location of levee rehabilitation location, Touchet River and Burlington Northern Railroad.

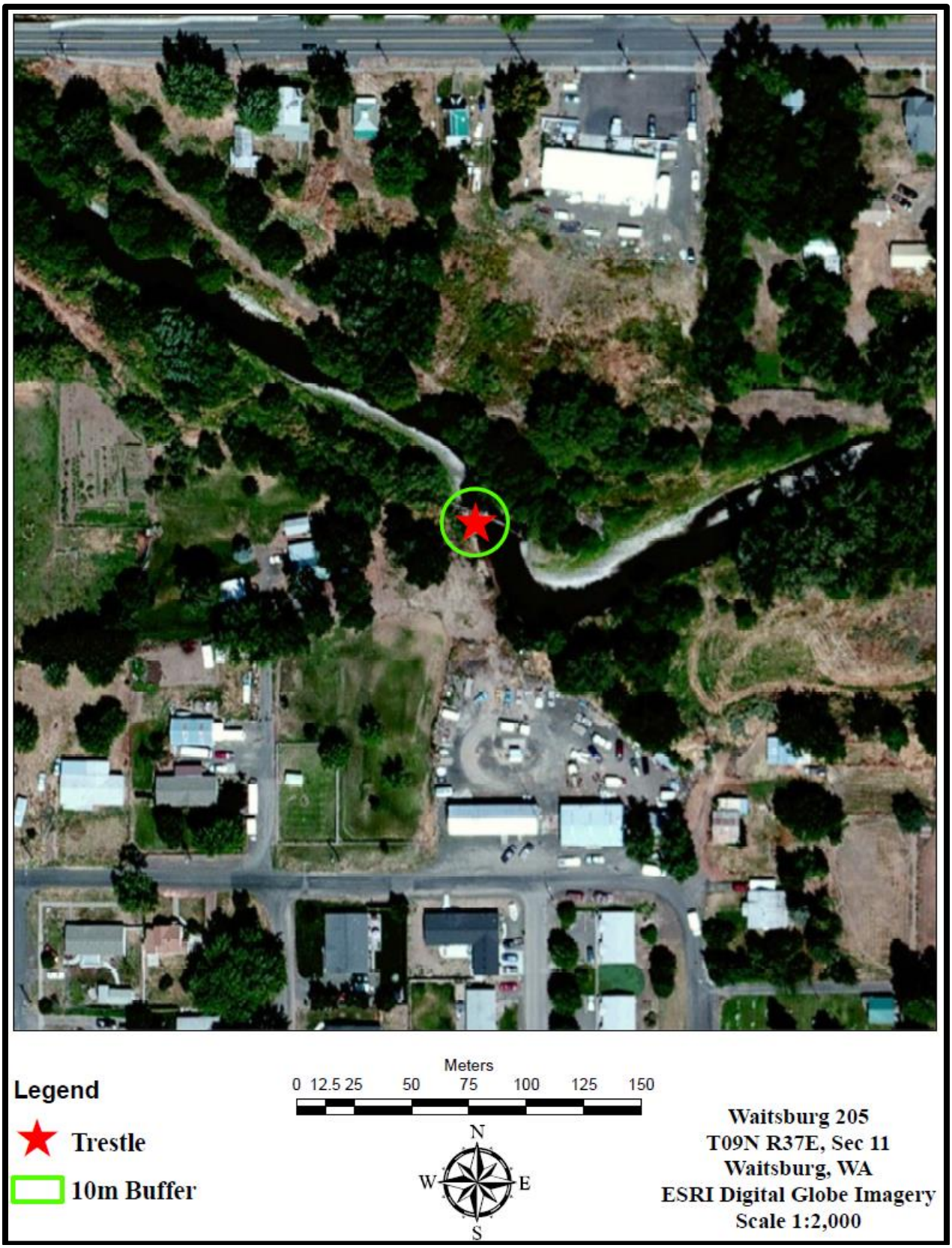

Figure 5. Aerial photo showing levee rehabilitation location.

Figure 6. Historic photo of railroad trestle over the Touchet River at River Mile 44.5 showing foundation piers. Photo courtesy of the Waitsburg Historical Society and Tom and Anita Baker (from Amonette 2009).

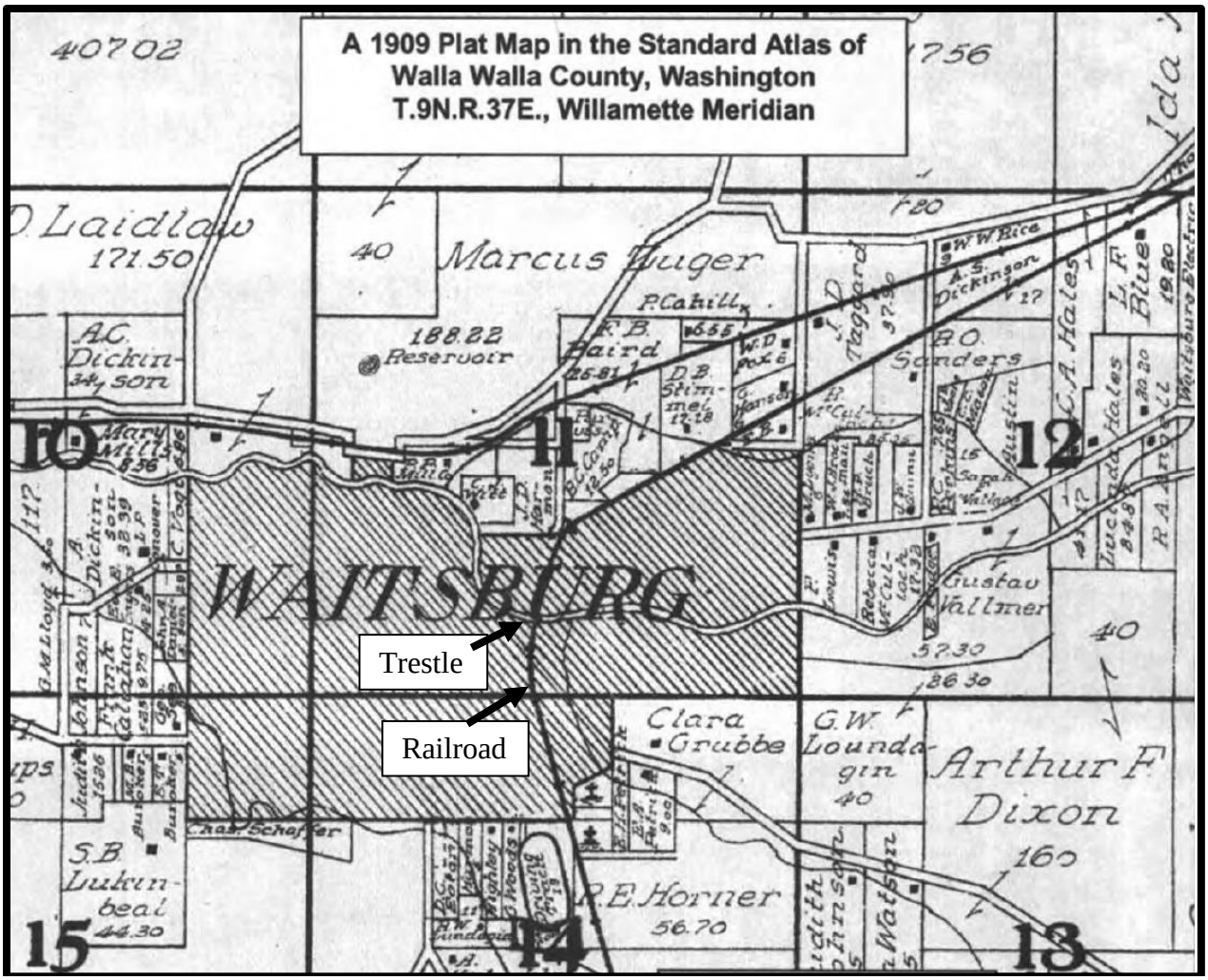

Figure 7. 1909 Plat Map in Standard Atlas of Walla Walla County, Washington showing railroad running north into town, crossing Touchet River over trestle, and curving to east.

Figure 8. Photo looking south at levee rehabilitation location showing remnant trestle piers and modern house within railroad right-of-way.

Figure 9. Photo looking south at levee rehabilitation location showing remnant trestle piers, rail bed fill, and levee riprap.

Figure 10. Photo looking upstream along bluff showing remnant trestle piers and rail bed fill (upper right).

References

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