Romancing the Stone at Willamette Meridian

In 1851 Oregon’s first Surveyor General, John B. Preston, established the point from which land surveying in the Pacific Northwest began. The original cedar stake that marked this principal meridian and baseline (one of 38 initial points in the United States) was replaced by an obelisk marker in 1885, which had engraved on two sides the words “BASE LINE.” On the other two sides was the somewhat more cryptic lettering, “WILL.MER.” This Willamette Meridian (Latitude, 45°31’11” N; Longitude, 122°44’34” W) runs north through Puget Sound to the Canadian border and south to the California border. Its baseline runs east to the Idaho border and west to the Pacific Ocean.

Similar three-foot obelisks continue as milepost markers along what began as Baseline Road (built in 1854 along the established Willamette baseline) and which is now SE Stark Street in Portland. Many of these original 15 obelisks are still in place. Yet little did those who built this road that runs due east from downtown Portland realize that their markers would inspire the creation of still another obelisk 113 years later.

This occurred in September 1998, when a modern-day surveying monument was placed at Latitude 42°15’24” and Longitude 121°47’08” in Klamath Falls to honor the advancement of professional surveying by the Oregon Institute of Technology (OIT). The brainchild of alumni Tim Kent, this

By Karla Powell and Tim Kent, LS

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A Principal Meridian Stays Protected in Willamette Stone State Park

Oregon’s first Surveyor General, John B. Preston, was charged with marking the principal meridian and baseline from which originated all land surveys in both Oregon and Washington. “Upon my arrival in Oregon, but little was known of the topography of the Country between the pacific coast and the summit of the Cascade Mountains,” recounted Preston in his first report to General Land Office Commissioner Justin Butterfield. That would soon change when, in 1851, Preston placed a cedar post at his determined intersection of the baseline and meridian. The cedar post was replaced in 1888 with an obelisk marker, which has not always rested in peace.

In 1951, 1967, and 1987, vandals repeatedly defaced the stone marker, bronze plaques, or both. This primal piece of surveying history was rededicated at a ceremony in 1988. A stainless steel marker, set into the original obelisk, was supplied by Hofland Survey Monuments, and the duplicate bronze plaque was sponsored by professional surveyor associations and government agencies. The site has also been honored by the citizens of Oregon—as a Heritage Site—in what is now a 1.54-acre state park. To get there, visitors wind down a fairly steep 500’ macadam path through a thick grove of trees just west of Portland’s city limits.

seven-foot OIT obelisk featured largely in commemorations at a 50th class reunion for OIT’s surveying program (now called geomatics). Kent, who is currently Cadastral Survey Section Chief with the Bureau of Land Management in Oregon, arranged to have the obelisk inscribed with the names of all who taught and all who learned, since OIT began its program in 1951. This numbered close to one thousand graduates, along with former instructors.

Together with contractor Dick Hofland of Hofland Survey Monuments, Kent envisioned the OIT obelisk as mirroring the proportions of those historical mileposts marking Baseline Road. They determined that a height of seven feet would lend a duly impressive air.

From a grey granite block quarried in West Virginia, it was carved by Elite Marble in Hillsboro, Oregon, using an automated process of diamond saws and water lubrication. Its creation took about 120 days and was funded entirely by alumni donations. For balance Hofland incorporated a three-foot cube of concrete as its base. Four boring rods went into this base, and the obelisk was additionally anchored at its foot.

A Virtual Who’s Who
With so many names to document, the inscription demanded state-of-the-art technology. “The process is similar to a huge dot-matrix printer,” says Hofland. After first covering the entire obelisk with a rubber template, a machine gently blasted out the imprint of names, plus insignias. Of the three insignias atop the OIT obelisk, one commemorates the 50th anniversary of the school itself, another its surveying program, and the third the Willamette Meridian. Although the graphics and names were created with a digital file for ease of proofreading and alphabetizing, the final step was
manual. Handheld tweezers were used to remove what remained of the lettering, Hofland recalls.

Similar painstaking human effort was also evident at this surveying monument’s inception with Kent’s eight-month odyssey to track down those to be honored. Working beside OIT staff and faculty, he laboriously pored over yearbooks, commencement programs, transcripts and other sources. Lauded as a “super alum” by former OIT alumni director Kara Johnston, Kent’s driving purpose was to transform what otherwise would have been a standard reunion into an event of substance and meaning. Indeed, the surveying monument’s unveiling has played a lasting part in OIT’s geomatics program.

The obelisk at OIT also speaks to current and future students who seek in professional surveying a life, as well as a career. Says the man who first imagined this symbol for his alma mater: “Just as an obelisk represents timeless achievement, so, too, does surveying. For even with advancements in technology, high standards and integrity remain the lasting marks of surveying professionals.”

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