



SECTION 1 – SURVEY AND MAPPING DESIGN STANDARDS

These instructions have been developed to assist surveyors with their work on parks and trails built for public use and that will be maintained by the City of Bellingham Parks Department.

The surveyor is reminded that these Standards shall not to supersede City/State/Federal laws or codes or generally accepted design practices of professional consultants. These Standards are meant to be used on City of Bellingham Parks' projects only. In the event that public street right-of-ways are involved the surveyor shall comply with applicable City of Bellingham standards and procedures for public rights-of-way (reference Public Works Development Guidelines and Improvement Standards, latest edition). Bellingham Parks shall not be held responsible if these standards are used for other purposes.

The surveyor shall understand that most work designed on public property for public use requires that plans be prepared and stamped by an architect, engineer, landscape architect and/or land surveyor registered in the State of Washington (RCW 18.08, 18.43, or 18.96).

1. **Survey work intended as a Public Record of Survey (ROS):** Work intended to create a ROS shall incorporate the following general requirements:
 - a. All work shall be overseen by a licensed surveyor. Surveys shall be signed and sealed by a surveyor registered in the State of Washington.
 - b. Survey documents and procedures shall be meet City, State and Federal laws.
 - c. Survey drawings shall be prepared to meet the requirements of Park Design Standard No. 00000.04 to the greatest extent possible.
 - d. For all boundary surveys, park boundary markers shall be installed in accordance with Park Design Standard Detail 10430.07. Park boundary markers will be supplied by the Park Project Manager.
 - e. The surveyor shall call for a utility locate and incorporate utility locations on the final ROS. The Park Project Manager may provide any known information pertaining to as-built features or legal encumbrances.
 - f. The surveyor shall provide a hard copy of the draft ROS for review and comment by the Park Project Manager before the final survey is recorded.
 - g. The surveyor shall include 3 hard copies and one electronic copy (AutoCad2004 format) of the survey as a final deliverable to the Park Project Manager. Contours shall be embedded into the AutoCAD drawing file.
 - h. The survey shall include disclosure and depiction of pertinent legal encumbrances affecting physical use of the surveyed lands by Auditor's File Numbers, including but not limited to, covenants and easements.

- i. The survey shall include all surficial improvements and evidence of repeated ingress and egress, including but not limited to concrete surfaces, buildings, fences, walls, foundations, trails and established vehicle routes (whether by right or apparent encroachment) and existing survey monuments.
 - j. The survey shall include disclosure and depiction of boundaries of all public lands contained within the mapped area of the ROS.
 - k. Topographic or hydrographic information included in a ROS at the direction of the Parks Project Manager shall be in accordance with Section B of Design Standard No. 00000.03.
2. **Special Mapping Work**: Contracted work intended to create a graphic record (topographic, hydrographic, critical area, and landscape data) of as-built features and site conditions in reference to property lines and for use in project planning shall include the following unless instructed otherwise by the Park Project Manager.
- a. Land contours in horizontal intervals of 5 foot accuracy, unless directed otherwise by the Park Project Manager.
 - b. Vertical and horizontal labels shall be based on the City of Bellingham Datum. (Horizontal datum shall be NAD 83/98 and vertical datum shall be NAVD 88.)
 - c. Diameter of all trees that are 8" diameter or larger measured at 5 feet above adjacent ground surface. Witness type trees of distinct location, species and size should be labeled.
 - d. Thalwegs of creeks, streams or intermittent channels.
 - e. Ordinary High Water Marks of all water features
 - f. Flow lines
 - g. Wetland edges and buffers.
 - h. Large rocks and other notable physical land features including ruins of built features.
 - i. Toe and top of significant slopes and slopes defining or affecting critical area boundaries
 - j. Spot elevations on specific positions.
 - k. Horizontal and vertical control points used for the work, including existing monuments and benchmarks used.
 - l. Any additional landscape information specifically requested by the Park Project Manager.
 - m. All located utilities, including irrigation, both above and below ground including, but not limited to, pipes, valves, vaults/boxes, shut-offs, and other similar features.
 - n. Curb and gutter elevations.
 - o. Locations of all stormwater features including catch basins, grate inlets, and culverts, rim and invert elevations.
 - p. Property lines and parcel numbers.
 - q. Right-of-Way lines and easement boundaries or physical extent.
 - r. All surficial improvements and evidence of repeated use, including but not limited to, concrete surfaces, buildings, fences, walls, foundations, trails and vehicle passages (whether by right or encroachment) and existing survey monuments.
 - s. Pertinent legal information, including but not limited to, easement or covenant recording numbers.
 - t. Any additional built feature information specifically requested by the Park Project Manager.