

Monumentation Policy

The following policy document on monumenting ODOT properties will be implemented into the planned Geometronics Survey Policies and Procedures Manual. This revised policy is in effect as of this date.

This policy outlines the procedures for monumenting highway right of way, quarry sites, stockpile sites and other ODOT property boundaries.

Highway Right Of Way Boundaries

Delineate the newly defined right of way by either of two methods required by O.R.S. 209.155(2) and as outlined below.

Network Option

Establish a permanent survey control network that references the right of way center line and the right of way boundary.

- Include in this network at least two monuments from part of the original control network used to locate the monuments during the location survey.
- For the network “geodetic” control point monuments use brass disks set in concrete. For the remainder of the network control points use 5/8” x 30” iron rods or rebar with a 1-1/2” brass cap stabilized horizontally and vertically.
- Do not exceed 1000 feet for the distance between monuments.

Place a composite fiberglass post or steel guard post with a 6” x 18” white aluminum paddle within the highway right of way adjacent to each monument.

- Use salmon or orange for the color of the composite fiberglass guard post.

The composite fiberglass guard post and steel guard post with paddle shall be marked “Survey Marker”. (See Figure 1, Monuments, Guard Posts And Line Marking Standards)

Develop a Right Of Way Monumentation map and file with the County Surveyor.

- Identify on the map the final horizontal control network, the new right of way center line, and the new right of way boundary.
- File this map within 180 days of completion of construction.
- Comply with O.R.S. 209.250 for this map.

- The date of Second Notification constitutes the effective date of completion of construction.

Boundary Option

Monument, or reference with monuments, all right-of-way centerline control points and monument the right of way boundary at all angle points, points of curve, points of tangency, and at least every 1000 ft on long curves and tangents.

- A minimum of two reference monuments shall be set to reference each centerline control point.
- The boundary monuments shall be set at all the points of change in the actual right-of-way boundary regardless of its relationship to the centerline control points.
- The monuments set shall be 5/8" x 30" iron rods or rebar with caps marked "ODOT". Consultants contracted by ODOT, and monumenting ODOT boundaries shall use ODOT caps per this policy in lieu of caps with their PLS number.

Place a composite fiberglass or steel guard post with a 6" x 18" white aluminum paddle within the highway right of way adjacent to each reference monument 1 ft in from the right of way and 1 ft ahead on line.

- Use white for the color of the composite fiberglass guard post.

The composite fiberglass guard post and steel guard post with paddle shall be marked "Boundary". (See Figure 1, Monuments, Guard Posts And Line Marking Standards)

Leave the horizontal control network in place even after the right-of-way monumentation is complete.

Develop a Right-of-Way Monumentation map and file with the County Surveyor.

- On this map identify the final horizontal control network, the new right-of-way centerline, and the new right-of-way boundary.
- File this map within 180 days of completion of construction.
- Comply with ORS 209.250 for this map.
- The date of Second Notification constitutes the effective date of completion of construction.

Quarries And Stockpile Sites

Delineate the boundaries of ODOT quarries and stockpile sites as follows:

ODOT Owned Sites

Monument all corners of the property and mark the boundary lines. (See Monuments, Guard Posts and Line Marking Standards)

Develop a Boundary Monumentation map in compliance with O.R.S. 209.250 and file with the County Surveyor.

ODOT Controlled Sites Bounded By Government And Private Land

Monument all corners of quarry or stockpile sites lying within Federal or State Government land but bounded on one or more sides by private land and mark the boundary lines. (See Monuments, Guard Posts and Line Marking Standards)

Develop a Boundary Monumentation map in compliance with O.R.S. 209.250 and file with the County Surveyor.

ODOT Controlled Sites Bounded Entirely By Government Land

Permanent corner monuments are optional on quarry or stockpile sites held by easement and lying within and bounded entirely by Federal or State Government land.

Mark the calculated corner locations and easement lines. (See Monuments, Guard Posts and Line Marking Standards) The easement boundary may be determined by the use of the Bureau of Land Management's Geographic Coordinate Database Section (GCDB) coordinates if approved by the controlling State or Federal Agency.

Monuments, Guard Posts And Line Marking Standards

All boundary monuments set on quarry and stockpile sites shall be 5/8" x 30" iron rods or rebar with caps marked "ODOT". Consultants contracted by ODOT, and monumenting ODOT boundaries shall use ODOT caps per this policy in lieu of caps with their PLS number.

In addition to the corner monuments, each corner shall be referenced with a flat composite fiberglass guard post or a steel guard post with 6" x 18" Aluminum paddle within the property adjacent to the monument and 1 ft in from the boundary line. The composite fiberglass posts or the paddles shall be white in color and marked "BOUNDARY". (See Figure 1)

The boundary lines of all quarry and stockpile sites shall be marked with white fiberglass fence posts wrapped with 2 inch red reflective tape bands. (See Figure 1)

The markers will be placed intervisible along the line with a minimum spacing of 200 feet, a maximum spacing of 500 feet and shall extend approximately 5 feet above the ground. The markers shall be placed within the quarry property no more than 1 foot from the line. For non ODOT owned quarry and stockpile sites where permanent corner monuments will not be set, reference the calculated corner locations as set forth above.

If a property line between a quarry or stockpile site and the adjoining property is marked by an existing fence, or a boundary line is along a road or natural feature such as a river, then the line need not be marked as stated above. The feature marking the line shall be clearly identified on any survey filed or map submitted.

The intent of this marking standard is to place the line markers so as to be intervisible and clearly mark the boundary line. In some areas, a shorter spacing than 200 feet may be necessary. In other areas a greater spacing than 500 feet may be allowed. Heavy brush may require a greater height above the ground and longer posts be used. Use discretion and coordinate with Region Geologists for any major variation of this standard.

If requested by Region Geologists to mark excavation areas, stockpiles, setbacks and buffers within a quarry boundary, the markings shall be in compliance with Oregon Administrative Rule 632-030-0015(2b). Markers used must be approved by the Oregon Department Of Geology And Mineral Industries (DOGAMI), set to be clearly visible and of no more than 200 foot spacing on center.

Other properties

Properties other than highway right of way, quarry and stockpile sites shall be surveyed and boundary maps prepared in compliance with O.R.S. 209.250 and filed with the County Surveyor.

