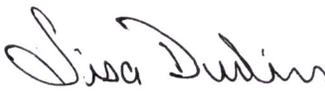


 <p>Montana Department of Transportation</p> <p>CONSTRUCTION MEMO</p>	Date Issued: February 21, 2008
	Date Effective: February 21, 2008
	Related Specifications: 105.08.1
Subject: Use of Contractor Survey Equipment	

To: Distribution

From: Lisa Durbin, P.E., 
Construction Administration Services Engineer

The Standard Specifications allow the contractor to use GPS type machine grade control, and some contractors regularly use GPS survey equipment while constructing MDT projects. There have been cases when MDT personnel utilize readings taken from the contractor's GPS equipment for use as grade checks. This practice is expressly prohibited.

There are two key issues. The first is that, under federal regulation, MDT cannot use contractor tests or measurements for determination of payment. Under the scenario described above, that is essentially what is happening. Regarding GPS technology, there are periods during each day when the satellite coverage (geoid model) over Montana and the entire Rocky Mountain region, prevents accurate readings. The second issue is that by using this practice, MDT is not performing what is considered an independent grade check, and may be relying on inaccurate information. Therefore, independent measurements must be obtained by department personnel using department furnished survey instruments.

Recently, MDT has made large monetary investments in survey equipment, including data collectors and robotic total stations. Crews have demonstrated increased efficiencies with this equipment, so department caused delays while performing grade checks should not be an issue. Each district will be getting one additional robotic total stations in the immediate future, and the Survey Issues Committee is working towards the goal of obtaining additional robotic total stations and GPS survey equipment.

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