

**STATE OF ALASKA**

Department of Transportation and Public Facilities

Division of Design and Engineering Services

Right of Way Engineering - Survey Section

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| **To:** | **FHWA Preventative Maint. 1R August 2013 Project Managers** | **Date:**  **AKSAS:** | September 4, 2013 |
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| **From:** | **Bob Keiner, P.L.S.** Survey Manager Central Region | **Tel No:**  **Subject:** | 269-0556  **1R Pavement Pres. Projects: Survey Requests** |

In an effort to alleviate some confusion and duplicated efforts I wanted to put together and outline of Survey needs that may or may not be identified on these individual 1R projects. This memo is mostly to alert you to the level of survey that may be required for specific tasks, and to introduce a revised Survey Request Form.

**All Projects –** For any project that required field survey, there will need to be control recovered and/or established as part of that project. Since several of these 1R projects span great lengths of roadway throughout our region, we would like to take this opportunity to densify and/or replace missing control monuments that form a network of control to use for future projects.

**ADA Ramps –** For any project that will include ADA ramp work, you will need some level of ROW Surveying and ROW Base Mapping in order to determine limits of ownership. Topographic survey data is also typically collected in these areas to determine the existing ramp conditions.

**Encroachments –** We will need to know if any encroachments are known to exist that will need to be located as part of this project, or if we will need to determine if any exist as part of the survey.

**Monuments in the road –** For any project that contains monuments set in the roadway we will need to reference their locations to off-site control in case they happen to be disturbed during construction activities. Once we have referenced these monuments, we will also need to revisit the site after construction in order to replace these monuments, or to set reference monuments outside of the travelled way.

**Vertical Control -** Most projects will require vertical control to be established, either directly or indirectly. We will need to know if there are any elevation-critical features that you need located, and which datum you need them referenced to.

**Culverts & Drainage -** While the majority of these projects are being called “shave & pave’s”, there are almost always areas where the drainage necessitates some excavation of the road embankment, culvert replacement, or slope stabilization. These areas usually require some level of topographic survey, as well as ROW survey and limited ROW Base Mapping to define the project area limits.

**Schedules -** We understand that most of these projects are intended to be advertised ASAP next spring for construction in summer 2014. Some of these projects have limited or no survey or ROW data currently available. This schedule doesn’t allow much time for survey and ROW tasks, especially considering several of these areas are in large snowfall regions. We would like to discuss schedules with you to try and come up with a solution that best fits all parties involved.

**Survey Plan –** We would like to take several of these projects and use them to densify and replace control monuments that have been destroyed over the years from past projects. Our plan would be to establish horizontal control monument pairs at intervals of about 1-2 miles that would serve to constrain the projects and connect with other existing networks.

We would also recover any existing vertical control to determine the amount of work necessary to connect the level lines that historically ran along our highways. If possible, this level work would be included as part of the closeout survey work done after construction to ensure their survival for future projects.

Together, this horizontal and vertical control would be shown on Survey Control Diagrams recorded as Record of Surveys that would allow the Public access to our control network for any future survey needs along our corridors.

**Exhibits –** The best way to ensure that your project doesn’t get bogged down in Surveys is to make sure that you have sufficient exhibits showing exactly what & where you would like surveyed.

Depending on the task and area this could involve existing ROW Mapping or previous project as-builts marked up with limits, etc. It could also include Google Earth .KMZ or even ArcGIS shape files showing points or polygons of areas of interest.

Along with these visual representations of the work area, a clear written scope of the survey work to be done is also a great benefit. We are more than willing to assist you when putting your exhibits/requests together, but the more you can do up-front, the quicker we can get your request in place.