From: Dan Miller

Sent: 11-26-04

Subject: Reference centerline on R/W plans for new R/W station & offset calculations

This email is to explain the R/W Plans Section's general policy concerning the above subject.

For the majority of R/W plans projects, it is desirable and achievable to only use one centerline as the reference line for the station and offset labels on the new R/W corners.

The decision as to what centerline is to be used largely depends on the nature of the design and the extent of the new R/W that is needed. Below are the 4 primary types of general scenarios and which centerline we would typically use.

Scenario 1 - The new design is for a brand new alignment, such as the Red Mountain and Santan Freeways. In this scenario, a survey centerline is typically developed in the early stages of R/W development and is used as the reference centerline. Also note that this is generally the only example where we would use the label of "survey centerline".

Scenario 2A - An existing highway is to undergo extensive widening on 1 or both sides of the highway, with a more or less continuous strip of new R/W being acquired. The new construction centerline(s) has a significantly different geometry and is in a significantly different location than the existing R/W centerline. In this scenario, the new construction centerline(s) will be used as the reference centerline, as it will be the "dominant" centerline controlling the new R/W alignment and the intent of the new R/W.

Scenario 2B - Same as 2A above, except the new construction centerline is graphically and geometrically very close to the existing R/W centerline. This typically is the result of the construction centerline being developed from as-builts and/or a best-fit location of the pavement. In this scenario, the new R/W will usually be modified to be parallel to the existing R/W where applicable, and the existing R/W centerline will be used as the reference centerline.

Scenario 3 - The extent and size of the new R/W areas are minor and/or the nature of the new R/W areas are small squares or rectangles for culvert extensions. In this scenario the existing R/W centerline will be used as the reference centerline.

In scenarios 1 and 2A, the existing centerline will no longer control the corridor and may only be of record or historical importance. The construction centerline(s) will become the existing R/W centerline(s) in the future.

In scenarios 2B and 3, the existing centerline will remain as the existing R/W centerline, and will also be the "dominant" centerline in regards to present and future R/W matters.

While the 4 scenarios above will represent most projects, there are projects that will not fit neatly into one of them, and/or represent a mixture of them. There are also some projects that have an extensive design and may require multiple reference centerlines. For these projects, a decision as to which centerline(s) will be the reference centerline will be made on a project-by-project basis. There will also be some projects where no decision is necessary, such as when the existing R/W centerline is determined prior to design and is adopted by the Design Consultant to also be used as the construction centerline.

Daniel N. Miller, RLS R/W Plans Technical Leader/Project Manager 205 S. 17th Ave, MD 612E Phoenix, Az. 85007 602-712-6174 DnMiller@azdot.gov