



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

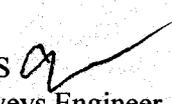
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DAVID McCOY
SECRETARY

1/05/2000

MEMORANDUM TO: L&S Group Leaders
Private Engineering Firms w/ Limited Service Contracts to L&S
L&S Area Engineers

FROM: Charlie Brown, PE, PLS 
State Location and Surveys Engineer

SUBJECT: Incorporating the HARN network into TIP Projects

Effective 01/01/2000 Location and Surveys will begin utilizing the High Accuracy Reference Network (HARN) to establish controls for TIP Projects. The Horizontal Datum for this network is NAD 1983/95 and the Vertical Datum is NAVD88. Although these will be the preferred datums, it may be necessary to use existing monumentation with NAD83 and NGVD29 in order to keep consistency with previously controlled Projects or with Standalone Projects such as Bridge jobs. It will be the responsibility of the Locating Engineer and the Area Locating Engineer to determine the datum(s) to be utilized on a case by case basis.

To aid in this change Location and Surveys has developed GPS Survey Guidelines. These Guidelines have been attached and are located on the web at the following address:

<http://www.doh.dot.state.nc.us/preconstruct/highway/location/support/Manuals.htm>

The following steps have been taken to simplify this transition:

- 1.) A database of GPS vectors will be made available. This database will have vectors, which have been previously processed and can be incorporated into your "new" network. This will increase redundancy whenever possible without increasing field time. This database which is named .ssf solution retriever can be found on the web at:
<http://www.doh.dot.state.nc.us/preconstruct/highway/location/project/>
- 2.) A Microstation design file will be provided showing the HARN network in relation to the TIP projects. This should aid in determining the monuments to be utilized when controlling a project. This is located on the same web page as the .ssf solution retriever.

If there are any questions or comments regarding these changes, please contact the Project Data Support Group at (919) 250-4116.

CWB:egk

Cc: Debbie Barbour, PE
PROC 2000-1