

Locating a Benchmark for a MCDOT Project

IT IS STRONGLY ADVISED YOU CHECK WITH THE CLIENT/AGENCY YOU ARE WORKING FOR TO DETERMINE WHICH BENCHMARK(S), DATUM, AND ACCURACY THEY REQUIRE.

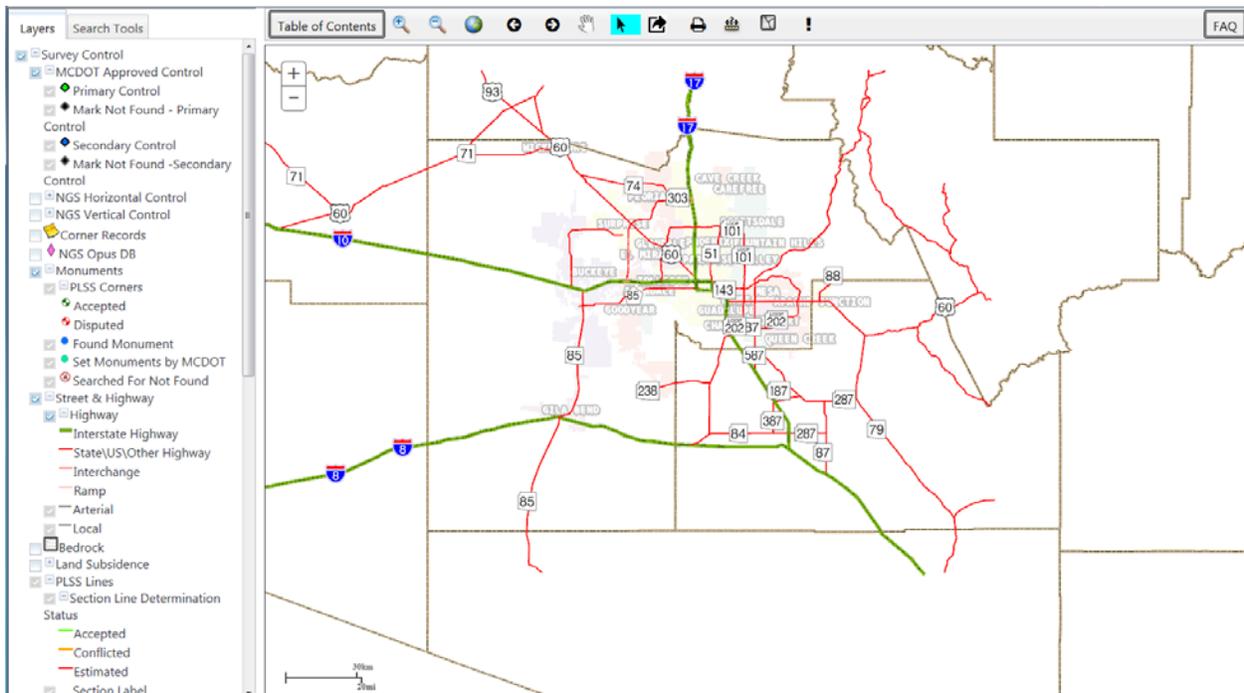
MCDOT uses the following list in order of Benchmark priority:

- NGS Publish Vertical Monument
- NGS Publish Horizontal Monument of A or B order only.
- A Section Corner or Quarter Corner as on the Interactive Map.
- Follow the guide below to access the information.

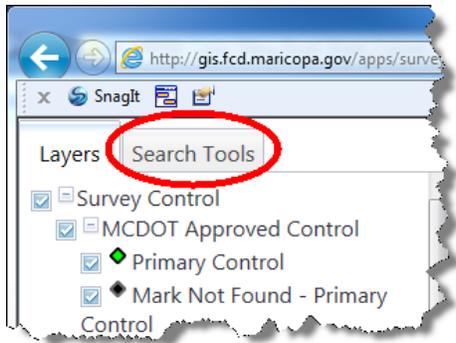
In the survey page, select the Interactive Map link.



The link will bring you to the MCDOT Survey Interactive Map:



When the ArcMap Interactive Map appears you can use search tools to find your area of interest with the Search Tools tab in the upper left corner of the map:



Your Search Options are then displayed along the left side of the map (see below). They are:

1. **Address or Streets Intersection**
2. **Parcel numbers**
3. **Township Range Section**
4. **NGS (PID) number**
5. **NGS Horizontal designation**
6. **Hybrid point number**
7. **Point name**

Search Options:

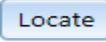
Layers Search Tools

Zoom to Address or Street Intersection
(e.g. Durango St & 27th Ave; or 2809 W Durango)
2809 W Durango
Locate Address

Zoom to Parcel(s)
Book
Map
Item
Locate Parcel

Zoom to Section
Township T1N
Range R1E
Section 1
Locate Section

Zoom to Survey Point
Select type of point
NGS Horiz. Control (PID) Select from list
NGS Horiz. Control (Designation) Select from list
Enter 'Hybrid Point Name' Locate
Enter Point Name Locate

Once you enter your criteria, select the corresponding  button. The map will then zoom into the area of interest.

Other common navigating tools are located in the toolbar along the top. These can be used to find your area of interest as well.

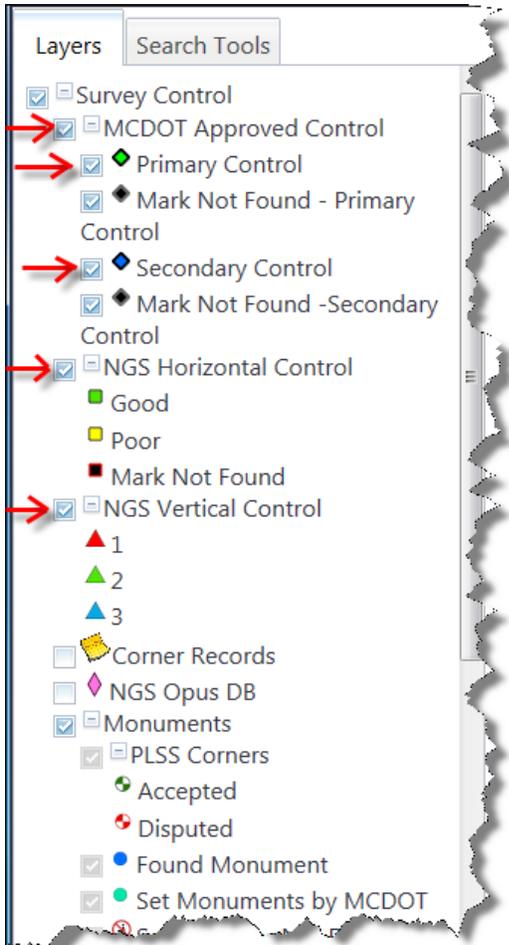


Zoom in on map using tool in upper left (the magnifying glass w/ plus sign) .

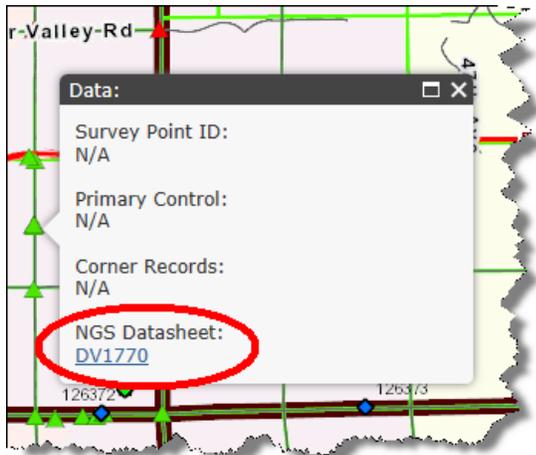
Zoom out on map using the magnifying glass with the minus sign) .

Panning across the map using the hand tool  then clicking and dragging on the map with the left mouse button

As you zoom in the layers on the left hand sidebar of the screen will become available. Be sure all of the Survey control layers are checked on as seen in the following graphic. Turning the layers on will put the corresponding symbol at the monuments location on the map.

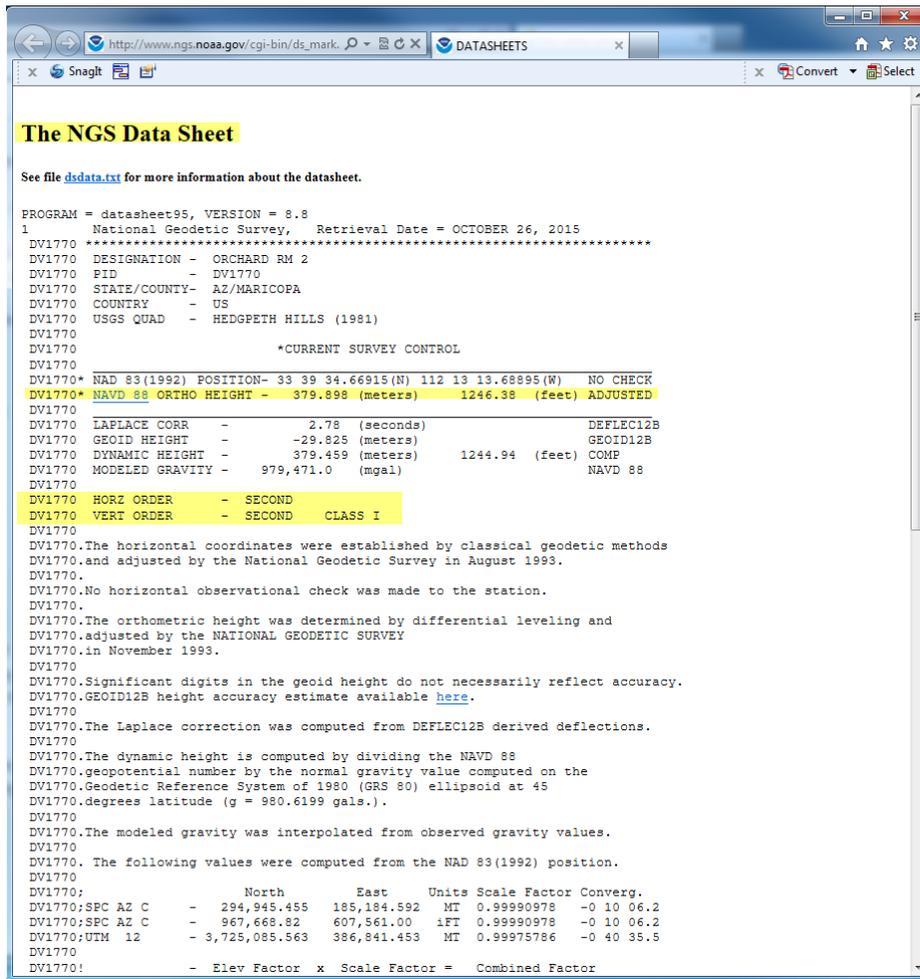


To find information on a specific Benchmark use the select tool  from the toolbar along the top. After picking the select tool then single click the particular symbol on the map for the Benchmark you are interested in. The map will display a pop-up dialog box similar to the one below:



By selecting the link just below NGS Datasheet you will be directed to the NGS datasheet for that Benchmark:

This is what the **NGS Data Sheet** looks like. It has all of the National Geodetic Survey data about this particular monument.



To convert the information from NAVD88 or NGVD29 to NAVD88 or NGVD 29: Go to the [NGS Website](#) under "tools", select the VERTCON program