New York State Center of Population Dedication Ceremony

Greetings! Thank you all for coming here today to help celebrate this dedication of a new piece of New York history!

My name is Paul C. Sevik, Jr. I am Secretary of the Delaware-Hudson Land Surveyors Association and Chairman of the New York State Center of Population Monument Committee.

Please welcome our many dignitaries;

Kenneth Ringler, Commissioner of the New York State Office of General Services, representing Gov. George Pataki.
Wayne Decker, Legislator of the O.C. 13th Legislative District.
Robert Smith, L.S., President of the New York State Association of Professional Land Surveyors
Frank Hoens, L.S., President of the Delaware-Hudson Land Surveyors Association

Thank you ladies and gentlemen.

Surveying has been around a lot longer than most people realize and is referenced in both the old and new testaments of the Bible numerous times.
One bible verse that comes to mind is Deuteronomy 19:14: “You shall not remove your neighbor’s landmark, which the men of old have set, in your inheritance which you will inherit in the land that the Lord your God is giving you to possess.” Since before biblical times to our own national history, surveying has served civilization.

George Washington, John Adams, Thomas Jefferson and Abraham Lincoln were Surveyors. Explorers Lewis and Clark surveyed their way across the Louisiana Purchase. British surveyors Mason & Dixon, surveyed the boundary between Pennsylvania and Maryland almost 100 years prior to the Civil War.

Thomas Jefferson knew the importance of surveying and wrote these instructions: “Your observations are to be taken with great pains and accuracy, to be entered distinctly and intelligibly for others as well as yourself, to comprehend all the elements necessary, with the aid of the usual tables, to fix the latitude and longitude of the places at which they were taken....’

The famous monument Mount Rushmore and is known in the surveying community as “3 Surveyors and the other guy”.

Many people think of a surveyor as the guy standing on the side of the road behind the weird camera. There is so much more to surveying. Surveying is a combination of professions:
**Mathematician**: Surveyors use algebra, geometry, trigonometry, coordinate geometry, statistics, and other forms of higher math on a daily basis from the simplest boundary survey to GPS surveys.

**Historian**: Much of surveying is “following in the footsteps” of the previous surveyors and researching ancient deeds and maps. We recover original monuments sometimes set over 100 years ago.

**Legal Expert**: We perform deed research prior to the field survey and prepare new or updated deeds. We trace the deeds for the properties back to when they were originally created sometimes back to the colonial days.

**Artist**: Maps often had a lot of the personal touch of the person drafting it, Up to the last 10 years, they were drawn by hand, however, most mapping today is produced using computer programs, often utilizing styles in keeping with the older way of mapping.

Most people are unaware of the requirements for becoming licensed as a Surveyor, the requirements are stringent:
- a minimum of 8 years of responsible experience
- An extremely difficult three part, sixteen hour exam
- Beginning in 2004, continuing education to maintain the high standards of the profession.

Surveyors also go places most people do not. We traverse up remote rugged mountains, through briars 15 feet tall, through chest deep tick and snake laden swamps, over grassy plains, on the busiest of city streets and even the most hellish of places no matter the weather.
At the **WTC site**, we were the 1\textsuperscript{st} line of defense for the safety of the workers. Surveyors worked around the clock alongside firemen, policemen and construction workers, our job was to mark out covered elevator shafts and stairwells assisting in the recovery efforts and monitoring surrounding structures, hanging debris and the slurry wall for possible failure.

At the **Pennsylvania coal mine rescue**: it was from the expertise of a surveyor, merging map data of the mines with GPS, that they were able to drill the airshaft so close to the trapped miners.

When we survey a parcel, we are not just surveying that one parcel, rather all the parcels adjoining that parcel to ensure that each parcel is where it should be with no overlaps or gaps. So next time you see surveyors walking around your yard, give them a break and offer any assistance you may be able to provide, they are only doing their job.

The basics of surveying has transcended time, and technology has improved with the times, making the surveyor’s job easier but more importantly even more accurate. Back during Biblical times, surveyors used flaxen ropes and rods and they measured in cubits.

In colonial times, a solar compass for measuring bearings, a 16’ long rod and/or a 66’ metal chain were used to measure distance.

In the 19\textsuperscript{th} century, transits with both horizontal and vertical verniers were used to measure horizontal and vertical angles.
The 20th century witnessed the largest changes in technology, transits were replaced by theodolites, the 66’ metal chain was replaced by the steel tape, which was replaced by the electronic distance meter (EDM). Then the theodolites and EDM’s were combined into total stations. Hand written field notes of angles and distances were replaced by data collectors, hooked up to and now built into total stations, virtually eliminating a wrong angle or distance.

The time it now takes for a total station to measure a mile, down to a hundredth of a foot, is only a few seconds versus the hours it used to take with the steel tape. Now surveyors have the Global Positioning System (GPS), which uses satellites. With GPS we can compute the position of just about any point on the face of the earth with unbelievable accuracy.

Currently the DHLSA is undertaking a GPS survey of this monument, and once the computations are complete, the coordinates will be published on the NGS website. Then this monument will be part of the High Accuracy Reference Network (HARN), and a useful GPS reference mark for Surveyors in the future.

This brings me to this day which was a long time in coming, and would never have come, had it not been for the hard work and assistance from members of the NYSCOPMON Committee (point out members). Thank you all for your help.

December, 2001 - the DHLSA was asked by NYSAPLS to undertake this project, since it is within our regional boundary, we gladly accepted.

January, 2002 - I was asked to chair the committee to set this monument. At first, I thought
this project would be fairly simple and quick, but as I began gathering the information on this project I realized that this was not at all simple and quick, the more research I did, the bigger the project became.

We had to find a suitable location that fit the criteria set by the NGS, a public place for accessibility, a GPS friendly site (clear of obstructions).

We looked at the actual location; about 4 miles to the northwest of here in Oakland Valley, but it did not fit the criteria set forth by the NGS. We considered several sites, but found this site to be best. What better than a historical park to set a small piece of history? Plus we thought the name of the park was more than appropriate, the D & H Canal Park.

Next was to design the artwork for the brass disk. With some examples of what other states had designed in hand, we went to work. The original design was on an 8” brass disk, which was submitted and approved by the committee, then sent to NYSAPLS for the board of directors’ approval.

With final approval, we placed the order with Bernsten International; they made the national monument for NGS and agreed to make one for each state.

Did I say final approval? Not so fast. Bernsten suggested we use a 10” or 12” disk because the artwork would be too crowded on an 8” disk. After approval from NYSAPLS the disk was ordered and 3 weeks later it was delivered. With the disk in hand, our next step was to set the monument. We wanted people to be able to find this monument so a bronze plaque design was then chosen and approved.
Finally, we could set a date for setting the monument, that date was July 13. This monument also had to be set to certain criteria, below the frost line (for this area about 42” in depth), certain types of concrete could only be used, and the use of a sonotube was decided on for frost reasons.

The final steps of this project were in sight; mount the plaque, perform the GPS survey, and finally this ceremony. We are grateful to all of you who are here today.

So here we are at the completed center of population for the State of New York.

At this time, I would like to introduce Kenneth Ringler, Commissioner of the NYSOGS, who is representing Gov. Pataki.

Please welcome Warren Payton, the NGS Geodetic Advisor NJ, who is representing the NGS.

Please welcome Wayne Decker, Legislator for the 13th District of Orange County.

Please welcome Paula Gorton, Sr. Administrative Assistant to the Commissioner of O.C. Dept. of Parks, Recreation & Conservation, Graham M. Skea.

Please welcome Kathleen Ludgate, representing Arthur Dukakis, U.S. Census Bureau Regional director for upstate New York.

Please welcome Robert Smith, L.S., President of the NYSAPLS.
Please welcome Frank Hoens, L.S., President of the DHLSA.

I would like to thank Peggy Hillriegel, Josh Bush, John Bezyuen and Norm Peachey for all their hard work setting the monument on July 13.

I would also like to thank Ted Haines for his work on the form for the base of the plaque.

I also would like to thank Mike Lacey of Tectonic Engineering & Surveying and John Loch of Loch Engineering & Surveying for donating not only their time but also for the use of their GPS equipment.

Last I would like to thank the DHLSA for the opportunity to chair this project and NYSAPLS for their support, it has been an education for me, it is my privilege to present this to you all.

Thank you all for coming and please feel free to look at the equipment displays and ask as many questions as you would like.