

COLLIN COUNTY

OFFICE OF THE SHERIFF 4300 Community Avenue McKinney, Texas 75071

Jim Skinner, Sheriff

Date: January 18, 2017

To: Shannon Poe, Collin County Purchasing

Cc: Lt. P. Cundiff, CIS

From: Inv. A. J. Jumper #231

Re: FARO 3D Laser Scanner

Shannon, I have been reviewing the Laser Scanners for the past 9 years and within the past 5 years I have attended demonstrations conducted by different vendors regarding the 3D Laser Scanners. As well as spoken with people who have tested various scanners and photogrammetry equipment.

Scene sketching is currently conducted by hand. An Investigator or Criminalist will make a crude drawing of the scene and then using a measuring device acquire distance measurements of certain areas and of various items/objects. This process even with assistance can take anywhere from 2 to 4 hours, or more depending upon the type of scene. 3D laser scanning is a non-contact, non-destructive technology that digitally captures the shape of physical objects using a line of laser light. 3D laser scanning is a way to capture a physical object's exact size and shape into the computer world as a digital 3-dimensional representation (a million points per second). 3D laser scanning is ideally suited to the measurement and inspection of contoured surfaces and complex geometries which require massive amounts of data for their accurate description and where doing this is impractical with the use of traditional measurement methods or a touch probe.

Our decision to go with the FARO 3D Laser was due to:

- Equipment Size The total weight of the instrument and tripod is less than 15lbs.

 The Leica scanner weighs 3 times that not including the tripod.
- Portability and Flexibility.
- Scene set up (easy for tight indoor areas to outdoors).
- It is the only scanner that doesn't have to be level to use. It can be mounted sideways or upside down and still scan. This cannot be done with any other scanner or even a total station.
- It can be removed from the tripod and sat on the floor so you can scan under things.
- Operation.
- Software options for reconstruction.
- End product result.
- Continued client relationship after purchase.
- Regional usage this will facilitate ongoing training opportunities.