HOW TO READ TRUE ELEVATION
FEET, TENTHS AND HUNDREDTHS

YELLOW BACKGROUND – BLACK NUMBERS

1. Set rod foot on a benchmark or hub with a known elevation; i.e. 2,525.25 elevation.

2. Run the laser receiver up or down the side of the rod and / or raise or lower front rod section until you get the "on grade" signal on your laser detector. If you are using an optical instrument, site to the rod and use the horizontal line as your grade reference.

3. Loosen the tape lock pin (lower knob) and disengage the tape pin from the grommet.

4. Roll the tape face until 5.25 is across from the pointer on the laser detector bracket, or the horizontal line on your optical instrument. You are using the last whole number and the decimal numbers of 2,525.25.

5. Lock the tape by engaging the tape lock pin into the nearest grommet. Then tighten the knob. You have now locked into the rod elevation (2,525.25). All future readings will be true elevation above or below 2,525.25 (5.25).

6. To find an elevation, simply set the rod foot at any location on the job within the range of your laser or optical instrument. Run the detector and / or front rod section up or down until you pick up the "on grade" signal from your detector. Read the number opposite the pointer. That number is your true elevation. If using an optical instrument, just read the number across the horizontal line. That number is your true elevation.

EXAMPLE:
Rod reading is 6.10 = 2,526.10 true elevation
Rod reading is 8.32 = 2,528.32 true elevation
Rod reading is 4.70 = 2,524.70 true elevation

Note: When using a GR1450 Series (15') rod, all reading between the 0 foot mark and 9.99 are read direct in true elevation.

See below example on how to read a 15' rod above 9.99 and below 0.00.

Rod Reading		Elevation	
11.25	11 = 16		16.25
12.25	12 = 17		17.25
13.25	13 = 18	25	18.25
14.25	14 = 19	25	19.25
0.25		252	0.25
1.25		252	1.25
2.25		252	2.25
3.25		252	3.25
4.25		252	4.25
5.25	(i.e., bench elevation)	252	5.25
6.25		252	6.25
7.25		252	7.25
8.25		252	8.25
9.25		252	9.25
10.25	10 = 30	2530	.25
11.25	11 = 31	2531	.25
12.25	12 = 32	32	.25
13.25	13 = 33	33	.25
14.25	14 = 34	34	.25