Given the sketch as shown on page 2, and the additional information included here, please answer the questions listed below.

## FOR FULL CREDIT ....

You must submit a complete documentation of all calculations.

Please show... All formulae used Any necessary algebraic rearrangement of formulae Substitution of known values into formulae, and finally... The <u>ANSWERS</u>.

## **GIVENS:**

CURVE #1	- RADIUS = 358.42'
	- LONG CHORD = 97.02'

- CURVE #2 DEGREE OF CURVATURE BY THE ARC DEFINITION = 29.307° (DD°)
- CURVE #3 TANGENT = 147.37' - LONG CHORD = 231.92'
- CURVE #4 DEGREE OF CURVATURE BY THE CHORD DEFINITION = 28°51'44" - LONG CHORD BEARING = S 22°55'46" E

## FINDS:

CURVE #1	- MIDDLE ORDINATE = - LONG CHORD BEARING = - PT STATION =
CURVE #2	- EXTERNAL SECANT = - LONG CHORD BEARING = - DEGREE OF CURVATURE BY THE CHORD DEFINITION =
CURVE #3	- BEARING OF FORWARD TANGENT = - LONG CHORD BEARING = - PC STATION =
CURVE #4	- MIDDLE ORDINATE = - LONG CHORD LENGTH =

- END OF ROAD STATION = \_\_\_\_\_