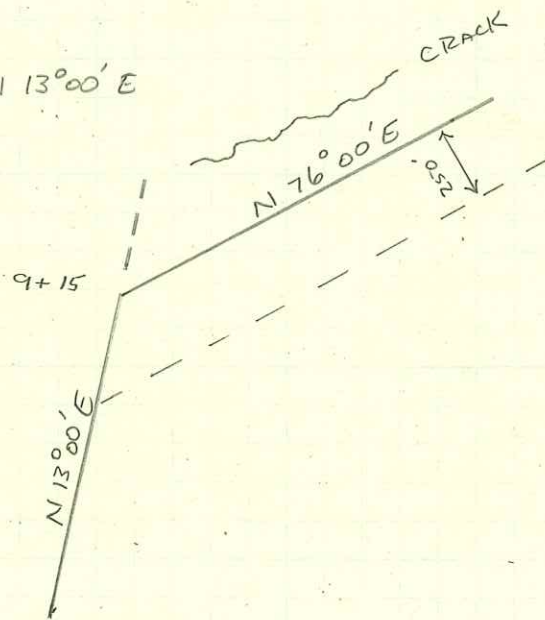


# HIGHWAY RE-ALIGNMENT PROBLEM

## PROBLEM STATEMENT

A HIGHWAY REALIGNMENT IS NECESSARY DUE TO A GEOLOGIC FAILURE CRACK. A SURVEY OF THE CURRENT ROAD YIELDS THE FOLLOWING:

<u>STA</u>	<u>HD</u>	<u>%</u>	<u>BREATH</u>
12+50°			
	335°	+2	
9+15°			N 76°00'E
	915°	+3	
0+00°			N 13°00'E



IT HAS BEEN DETERMINED THAT THE ROAD SECTION SHOWN MUST BE MOVED 250 FEET SOUTH AND PARALLEL TO THE EXISTING (DASHED LINE)

THE NEW ROAD WILL HAVE A CURVE RADIUS OF 250'

## REQUIRED

- CALCULATE THE NEW PI, PC, AND PT FOR THE CURVE
- 7 I-BEAM COLUMNS WILL BE SET AT EVEN SPACING BEGINNING WITH THE PC AND ENDING ON THE PT. CALCULATE THE BEARING AND CHORD DISTANCE TO THE 4<sup>TH</sup> COLUMN.