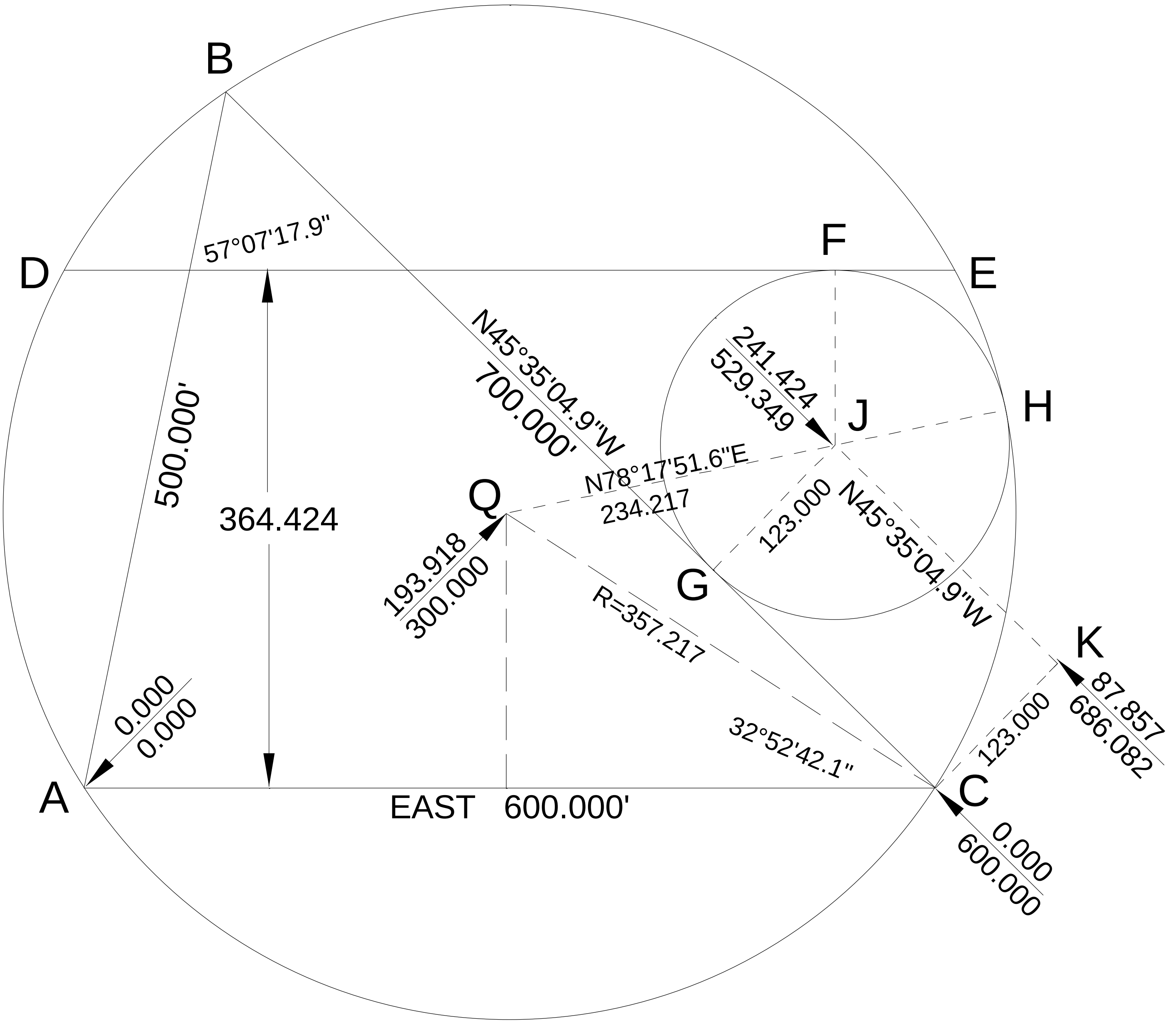

B
D
E
F
H
J
Q
G
K
A
C
57°07'17.9"
500.000'
364.424
N45°35'04.9"W
700.000'
241.424
529.349
N78°17'51.6"E
234.217
123.000
N45°35'04.9"W
193.918
300.000
R=357.217
32°52'42.1"
0.000
0.000
87.857
686.082
123.000
EAST
600.000'
0.000
600.000

Let Q be the center of the large circle, and J the center of the small circle.

Angle AQC is twice angle ABC.
Angle ABC can be solved for by the Law of Cosines:

$\frac{5^2+7^2-6^2}{2\cdot 5\cdot 7}=\cos ABC=0.542857143$, so angle ABC = 57°07'17.9"

and angle AQC = 114°14'35.8", thereby making angle ACQ = 32°52'42.1"

Angle ACB is also found by the Law of Cosines:

$\frac{6^2+7^2-5^2}{2\cdot 6\cdot 7}=\cos ACB=0.714285714$, and angle ACB = 44°24'55.1"

[Dividing the sides by 100 doesn't change the angle solutions]

The circumcircle radius is found easiest by $R=\frac{600}{2\cdot \sin 57^\circ 07'17.9"}=357.217$

Let point A = North 0.000, East 0.000 and AC = East
Then point C = North 0.000, East 600.000

Draw line JK parallel with BC through circle center J with point K perpendicular to BC.
Line JK bears N 45°35'04.9" W, so line CK bears N 44°24'55.1" E and is 123.000 long.
Point K is then North 87.857, East 686.082.

Point Q is N 57°07'17.9" W 357.217' from C, or North 193.918, East 300.000

Points Q, J, and H must be colinear.

A distance-bearing intersection from Q (distant 357.217–123.000) and K (bearing N 45°35'04.9" W) gives a coordinate value for J of North 241.424, East 529.349.
J is therefore 241.424 north of line AC and F is 123.000 farther, making the distance between lines AC and DE equal to 364.424'.