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Filename: ALIGNMENT

Lbl 0↵

Deg: "INITIAL NORTHING"?→N: "INITIAL EASTING"?→E: "END NORTHING"?→H:
"END EASTING"?→K↵

H-N→X: K-E→Y↵

Fix 3↵

"HZ DIST(M)" = $\sqrt{X^2 + Y^2}$ → J↵

"BEARING" = $\text{Cos}^{-1}(X \div J)$ → B: Y < 0 ⇒ 360 - B → B: B↵

"NO OF POINT"? → Z↵

0 → S↵

Lbl 1↵

"REQ DISTANCE"? → D↵

D Cos B → F: D Sin B → J↵

Fix 3↵

"REQ NORTHING" = N + F → N↵

"REQ EASTING" = E + J → E↵

Isz S: S ≠ Z ⇒ Goto 1↵

Filename: DEFLECTION ANGLE

Lbl 0↵

Deg: "B.C CHAINAGE"?→A: "E.C CHAINAGE"?→B: "INTERSECTION ANGLE"?→C↵

B-A→D: (C÷2)→E↵

((D÷2)÷Sin(C))→F↵

"LONG CORD=":D▲

"RADIUS=":F▲

(sin⁻¹ ((D÷2)÷F)×2)→G↵

"TANGENT LENGTH=": ((D÷2)÷cos (G÷2))▲

"CURVE LENGTH=": (((F×2)×π)÷360)×G▲

Lbl 1↵

"REQ CHAINAGE"?→H↵

H-A→I↵

Sin⁻¹ (I÷(2×F))→J↵

"DEFLECTION ANGLE=":J▲

If H≤B:Then Goto 1:Else Stop: Goto 0:IfEnd↵

Goto 1↵

Filename:PILE OFFSET

Lbl 0↵

Deg:"PIER CENTRE EASTING"?→A:" PIER CENTRE NORTHING"?→B:"PIER DIAMET
ER(M)"?→C↵

Lbl 1↵

"DIRECTION": "[1] RIGHT » [2] LEFT » [3] BACK » [4] FRONT » [5] RETU
RN"?→P↵

If P=1:Then Goto 2:IfEnd↵

If P=2:Then Goto 3:IfEnd↵

If P=3:Then Goto 4:IfEnd↵

If P=4:Then Goto 5:IfEnd↵

If P=5:Then Goto 0:IfEnd↵

Lbl 2↵

"REQ OFFSET"?→D↵

"REQ EASTING=" :A+((C÷2)+D)Sin90°↵

"REQ NORTHING=" :B+(C÷2)+D)Cos90°↵

Goto 1↵

Lbl 3↵

"REQ OFFSET"?→D↵

"REQ EASTING=" :A+((C÷2)+D)Sin270°↵

"REQ NORTHING=" :B+(C÷2)+D)Cos270°↵

Goto 1↵

Lbl 4↵

"REQ OFFSET"?→D↵

"REQ EASTING=" :A+((C÷2)+D)Sin180°↵

"REQ NORTHING=" :B+(C÷2)+D)Cos180°↵

Goto 1↵

Lbl 5↵

"REQ OFFSET"?→D↵

"REQ EASTING=" :A+((C÷2)+D)Sin0°↵

"REQ NORTHING=" :B+(C÷2)+D)Cos0°↵

Goto 1↵