## 14_08 DDE Criteria with Template Configuration

### Question:

Why do I get this error message "DDE CLOSURE ERROR ON EW LINE" when processing the DDE Criteria for cross sections drawn with Template Configuration 1 ( DEFINE "TM01 CONFIG" 1 )?

### Answer:

"TM01 CONFIG" 1 is a widening typical template which disregard the Geopak shape profile, but uses only the Geopak shape superelevation rate and offset values. When proposed cross sections are drawn with this Template Configuration, the finish grade pavement surface (blue line) and the subgrade earthwork line (pink line) are not drawn across from the centerline to the proposed EOT (or outside edge of Geopak shape).

Therefore, when the DDE Criteria is processed afterward, its first attempt is to start at the Centerline (PGL) and trace the DEFINE XS Elements to natural ground. In theory, this is the slope stake point. Below is a typical DEFINE XS Element statement which Criteria uses to trace back to natural ground.

```
DEFINE_DGN "DD PROPOSED EARTHWORK ELEMENTS"\
      DGN = U2007_RDY_XSC_Y14.DGN\
      TYPE = LINE,LINE_STRING,ARC\
      LVNAME = PROP XS FINISH GRADE EARTHWORK, PROP XS SUBGRADE EARTHWORK
```

Since the subgrade earthwork level lines is not drawn across the proposed pavement (Geopak shape) with "TMO1 CONFIG" 1, DDE Criteria will flagged the cross section with the mentioned error message.
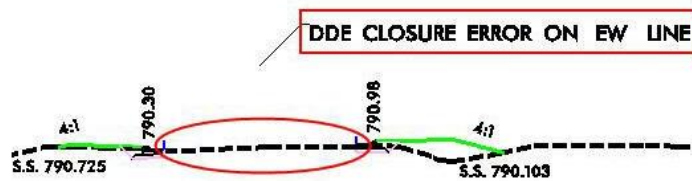


To remedy the problem, I have modified the DDE Criteria to **ALWAYS** start one foot outside of the proposed EOT (or outside edge of the Geopak shape), instead of starting from the Centerline (PGL). This will prove to be more efficient and the probability of locating one of the earthwork level lines are high at this offset distance. This technique will also work for all Template Configurations, 0 through 3. With the modified DDE Criteria, the cross section below depicts a successful tracing of the earthwork level lines back to natural ground (slope stake point) and a successful completion of a typical drainage ditch.