**Question:**

I have tried to run this criteria for the x-sect templates with no success. It will draw a full depth template at station 15+00 and some widening templates on some of the prior stations but it won't place the bridge or draw templates after 15+00. The alignment does have an equality but when I try to put region #'s in the criteria it won't read it at all. Also I really wanted to use config 1 on the widening template but the slopes were going up in the air. What would cause that?

**Answer:**

There are two particular problems with this Criteria run.

1) Station region improperly defined in Criteria Input.
2) Existing EOP define DGN statement improperly defined in Criteria Input.

For this particular TIP Project, a station equality is written in COGO as such:

```
          EQUATION;
-L- Sta 15+00.00 BK = -L- Sta 14+86.57 AH
```

This translates to region 1 having stations ranging from the beginning of project station to station 15+00.00. Region 2 will have stations ranging from station 14+86.57 (same as 15+00.00 region 1) to the end of the project station. Station regions are defined in two areas in a typical Criteria input file. Regions are defined in the Beginning and Ending Station statements and in the Side Slope "Where" station statements.
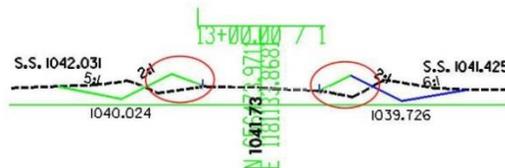
| Original Criteria Input | Corrected Criteria Input |
|---|---|
| PATTERN BY STATION<br>PATTERN SET<br>   JOB NUMBER = K01<br>   BASELINE = L<br>   HORIZ SCALE = 10<br>   VERT SCALE = 10<br>   BEGINNING STATION = 1300<br>   ENDING STATION = 1900<br>   EVEN = 50<br>   LT = 100<br>   RT = 100 | PATTERN BY STATION<br>PATTERN SET<br>   JOB NUMBER = K01<br>   BASELINE = L<br>   HORIZ SCALE = 10<br>   VERT SCALE = 10<br>   BEGINNING STATION = 1300 R 1<br>   ENDING STATION = 1900 R 2<br>   EVEN = 50<br>   LT = 100<br>   RT = 100 |

**Original Criteria Input**

```
criteria for shape cluster
shape cluster baseline = L
shape cluster profile = EXL
shape cluster tie = 0
     SIDE SLOPE LT WHERE (STATION >= 1300) and (STATION <= 1450)
        OR (STATION > 1740) and (STATION <= 1900)
     include L:\tmplt01.cri
     include L:\shld01.cri
     include L:\ldss01.cri

     SIDE SLOPE RT WHERE (STATION >= 1300) and (STATION <= 1450)
        OR (STATION > 1740) and (STATION <= 1900)
     include L:\tmplt01.cri
     include L:\shld01.cri
     include L:\ldss01.cri
```

**Corrected Criteria Input**

```
criteria for shape cluster
shape cluster baseline = L
shape cluster profile = EXL
shape cluster tie = 0
     SIDE SLOPE LT WHERE (STATION >= 1300 r 1) and (STATION <= 1450 r 1)
        OR (STATION > 1740 r 2) and (STATION <= 1900 r 2)
     include L:\tmplt01.cri
     include L:\shld01.cri
     include L:\ldss01.cri

     SIDE SLOPE RT WHERE (STATION >= 1300 r 1) and (STATION <= 1450 r 1)
        OR (STATION > 1740 r 2) and (STATION <= 1900 r 2)
     include L:\tmplt01.cri
     include L:\shld01.cri
     include L:\ldss01.cri
```

Note that Geopak Criteria will assume a region value of "1" if no region number is assigned after any stationing. However it is **_good practice_** to specify region 1 whenever possible and especially if more than one region exist.

The second problem deals with improper definition of the existing EOP elements. This can cause erratic shoulder and side slopes to be drawn or as mentioned "slopes were going up in the air". Template Configuration 1 is more susceptible to this condition than other Template Configurations.



| Original Criteria Input | Corrected Criteria Input |
|---|---|
| DEFINE_DGN "EXIST DGN EOP"\<br>   DGN = R:\Roadway\Proj\b4265_rdy_eop.dgn\ | DEFINE "EOP IN XSC" O<br><br>DEFINE_DGN "EXIST DGN EOP"\<br>   DGN = R:\Roadway\Proj\b4265_rdy_eop.dgn\<br>   lvname = Old_Level_3 |

By correcting these two problems in the Criteria input file, Criteria can now process successfully both regions for the entire length of the project.