CROSS SECTION BY PATTERN LINES

5/23/07

The following are guidelines and recommendations of the location where cross sections should to be cut on a project to provide the minimum information necessary to produce a surface model and/or a proposed TIN of the design. Cross sections locations should be established by the placing of *Pattern Lines* and not by station increments as is the current practice. These additional X-sections will provide the necessary information in the transition period required for a complete rewrite of the design criteria files. Upon completion of the new criteria files, the cross section location guidelines and procedure will be reevaluated.

Cross Sections

1. Draw Pattern Lines by Station Range: Even 50' Sta. Increments or station increment as determined by project situation. (evaluate for relevance after the placement of the recommended additional X-sections.

Additional X-Sections pattern lines:

2. All Pavement Transition Points: Basically any place the pavement widens, narrows, tapers in or out or has a width transition should be picked up with an additional pattern line for a x-section.

3. Retaining walls:(Begin, end, angle & transition points)

4. Horizontal Control Points (ST, TS, PT, PC, etc.)

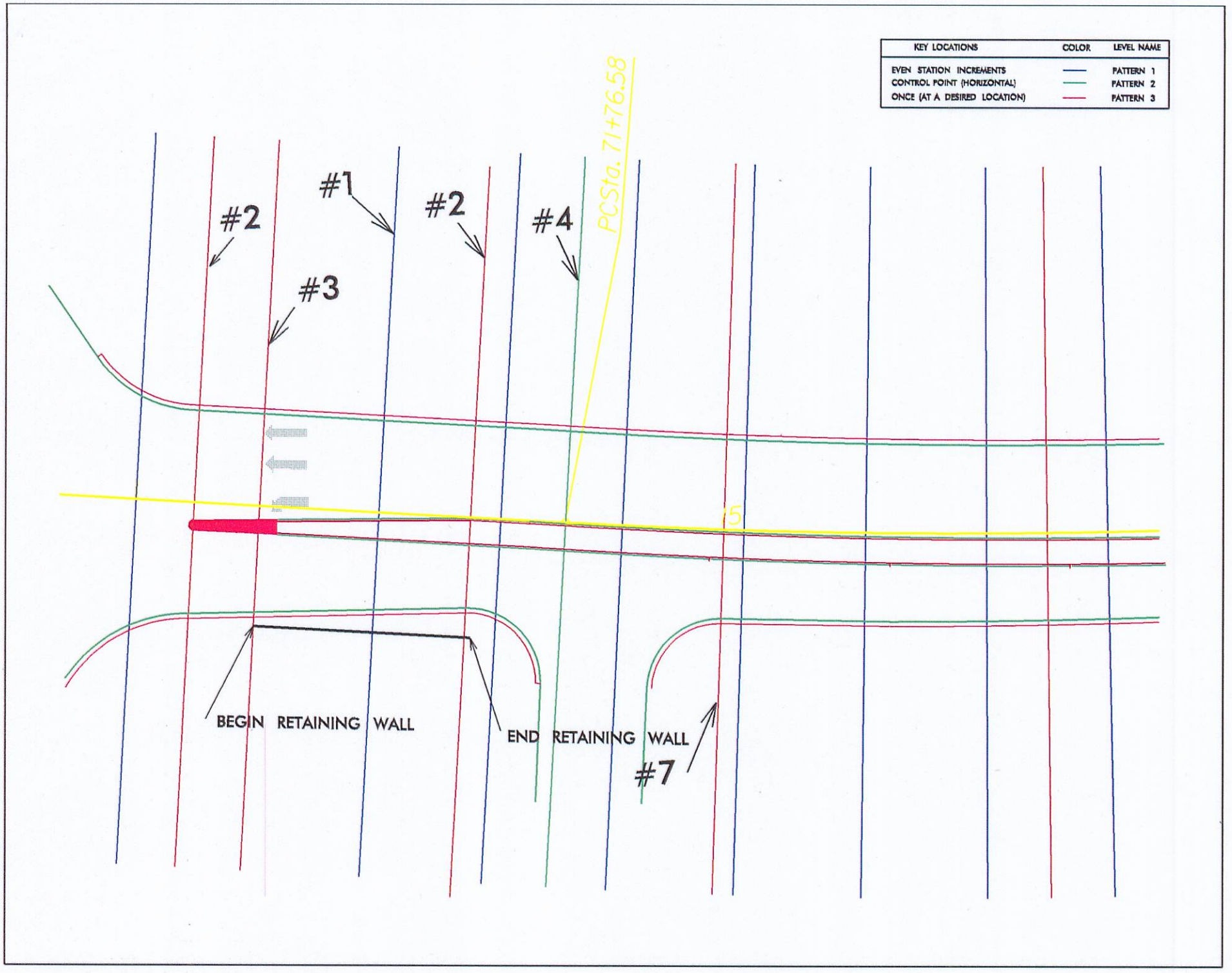
5. Centerline of Box culverts or large streams

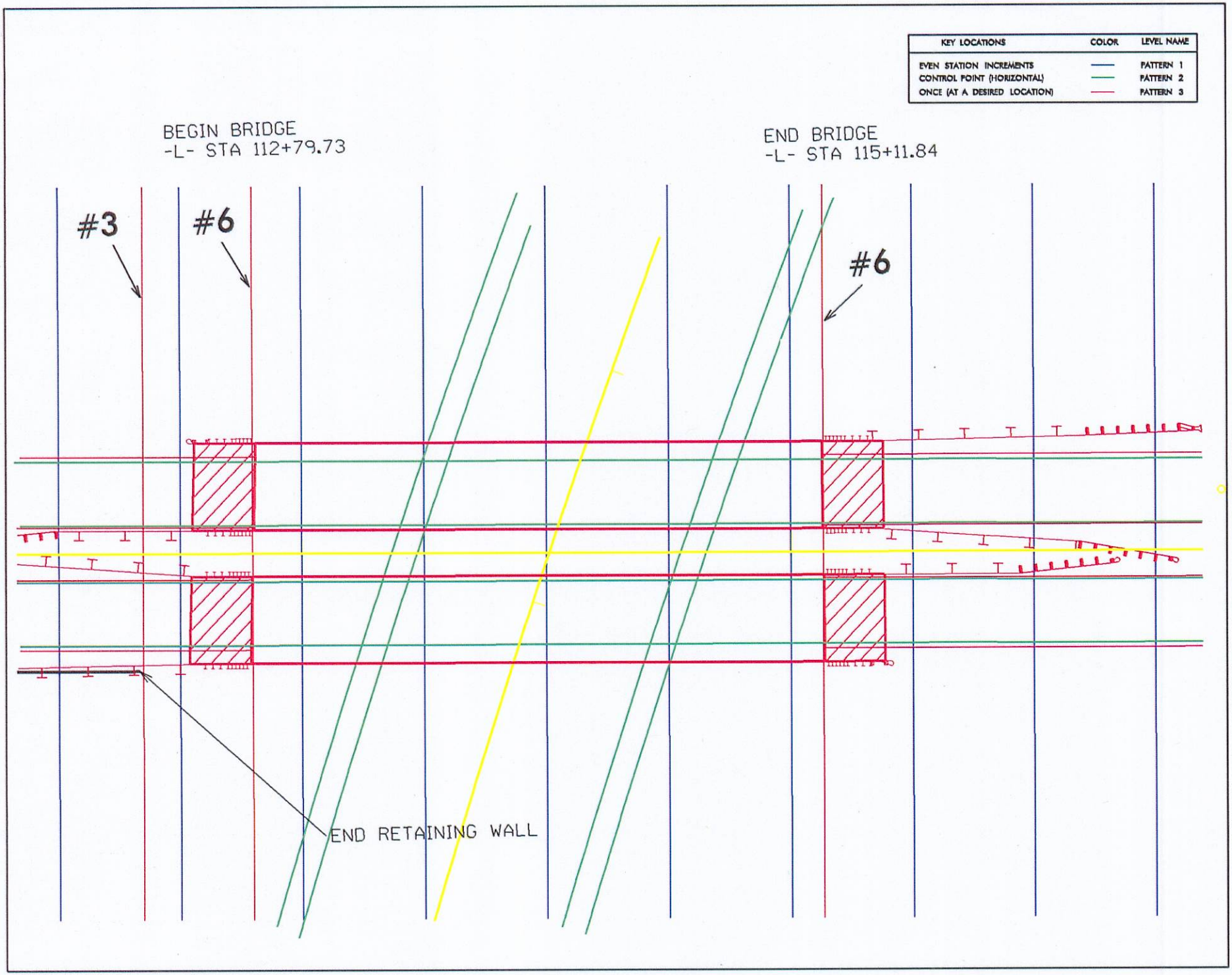
6. Bridge Ends

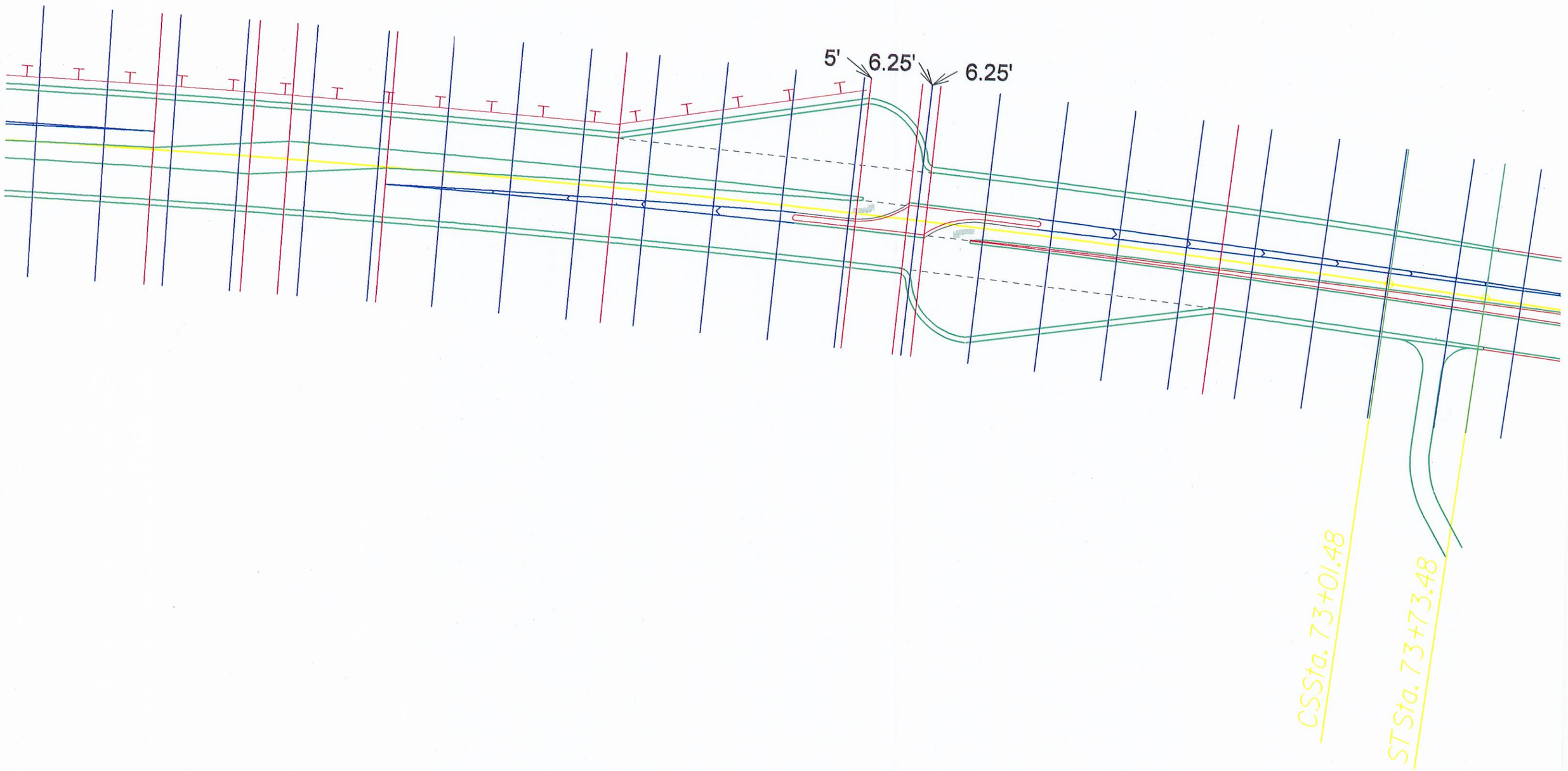
7. Ends of Radius at Intersections : At both -L- and -Y- Lines.

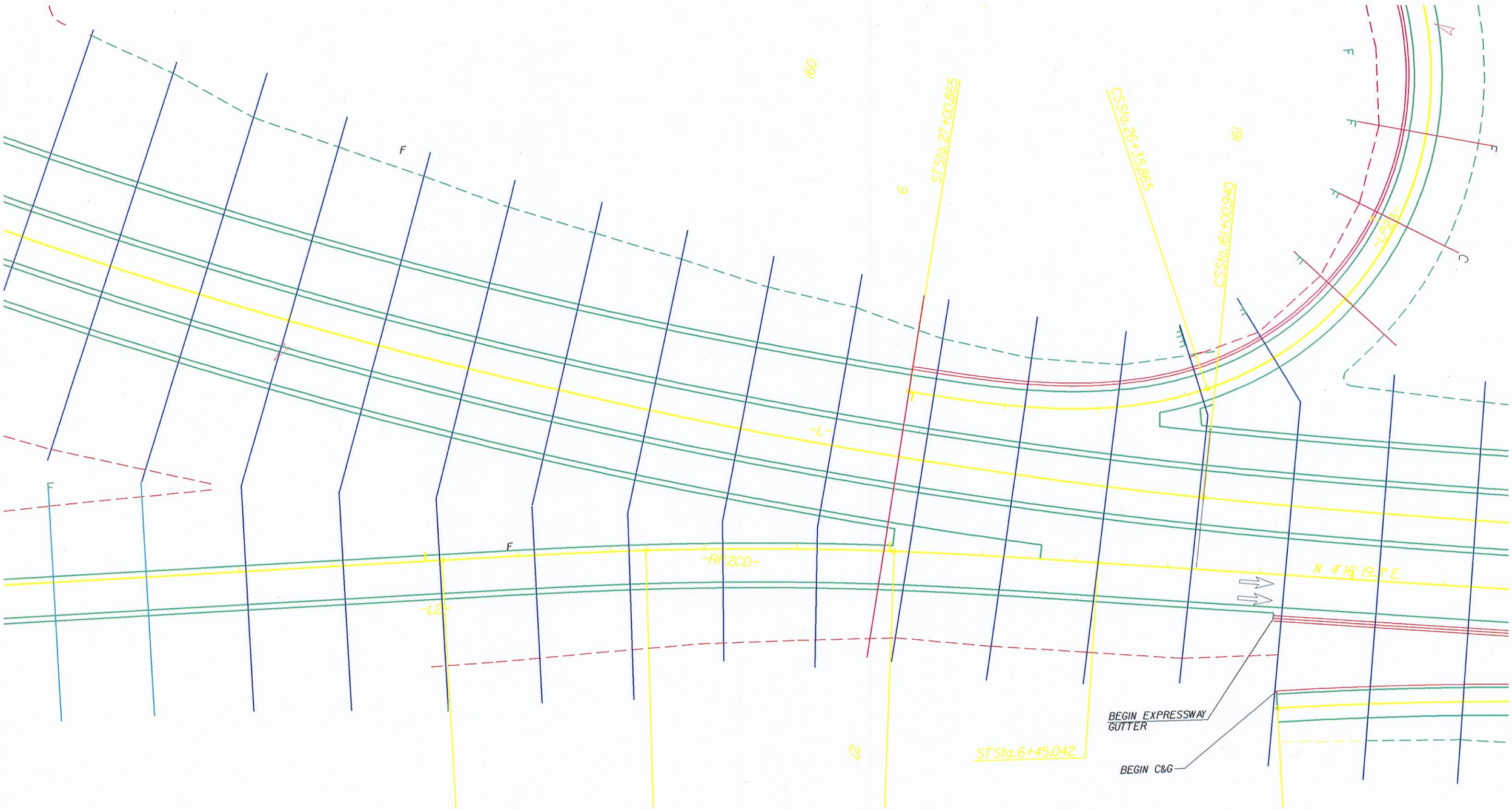
8. -L- line & Ramp gore areas (cross section perpendicular to both).

After the additional X-sections pattern lines have been placed, the pattern lines placed by station range should be evaluated for proximity to the additional pattern lines. If the station range pattern line is within 10'+/- of an additional pattern line, then the station range pattern line may be eliminated. The additional pattern line info should always take preference.


KEY LOCATIONS
COLOR
LEVEL NAME
EVEN STATION INCREMENTS
PATTERN 1
CONTROL POINT (HORIZONTAL)
PATTERN 2
ONCE (AT A DESIRED LOCATION)
PATTERN 3
PCSta. 71+76.58
#1
#2
#2
#3
#4
#7
BEGIN RETAINING WALL
END RETAINING WALL


KEY LOCATIONS
COLOR
LEVEL NAME
EVEN STATION INCREMENTS
PATTERN 1
CONTROL POINT (HORIZONTAL)
PATTERN 2
ONCE (AT A DESIRED LOCATION)
PATTERN 3
BEGIN BRIDGE
-L- STA 112+79.73
END BRIDGE
-L- STA 115+11.84
#3
#6
#6
END RETAINING WALL


5'
6.25'
6.25'
CSSta. 73+01.48
STSta. 73+73.48



160
6
STSta.27+00.865
CSSta.26+35.865
161
CSSta.161+00.940
-LP2A-
-L-
-RP2CD-
-L2-
N 4°16'19.3" E
BEGIN EXPRESSWAY GUTTER
BEGIN C&G
STSta.6+45.042
27