APPENDIX C – SITE SPECIFIC CALCULATIONS OF GEOTECHNICAL SLOPE STABILITY

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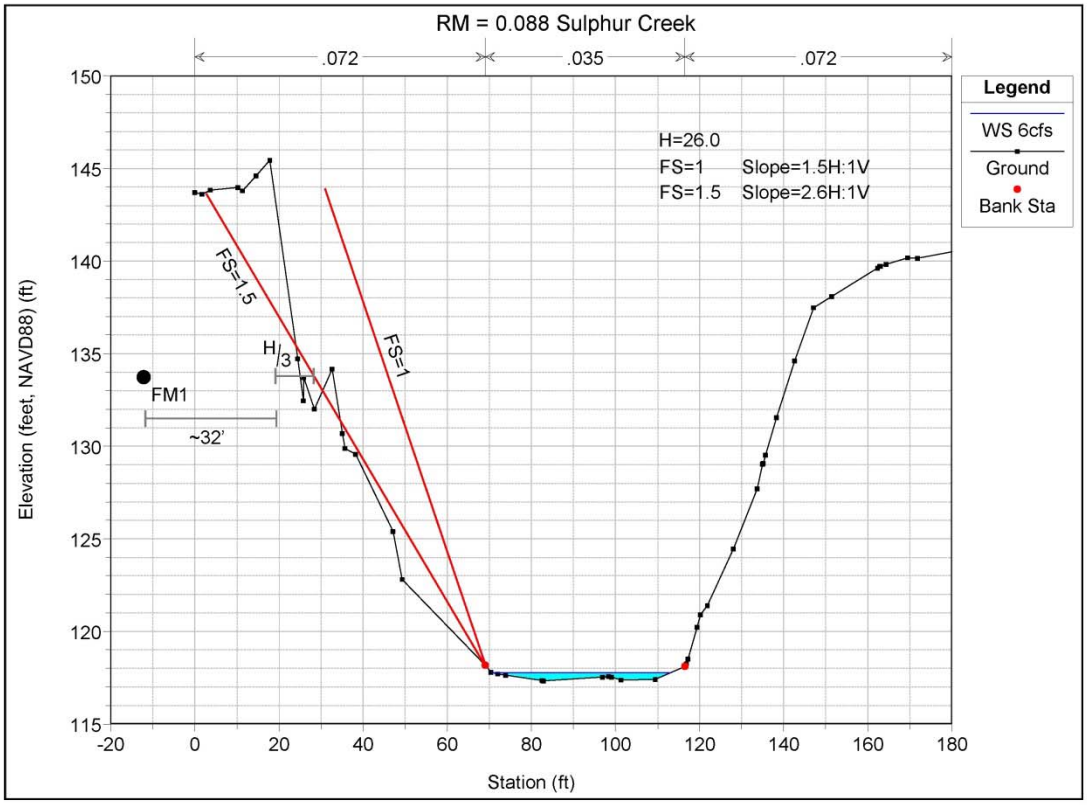
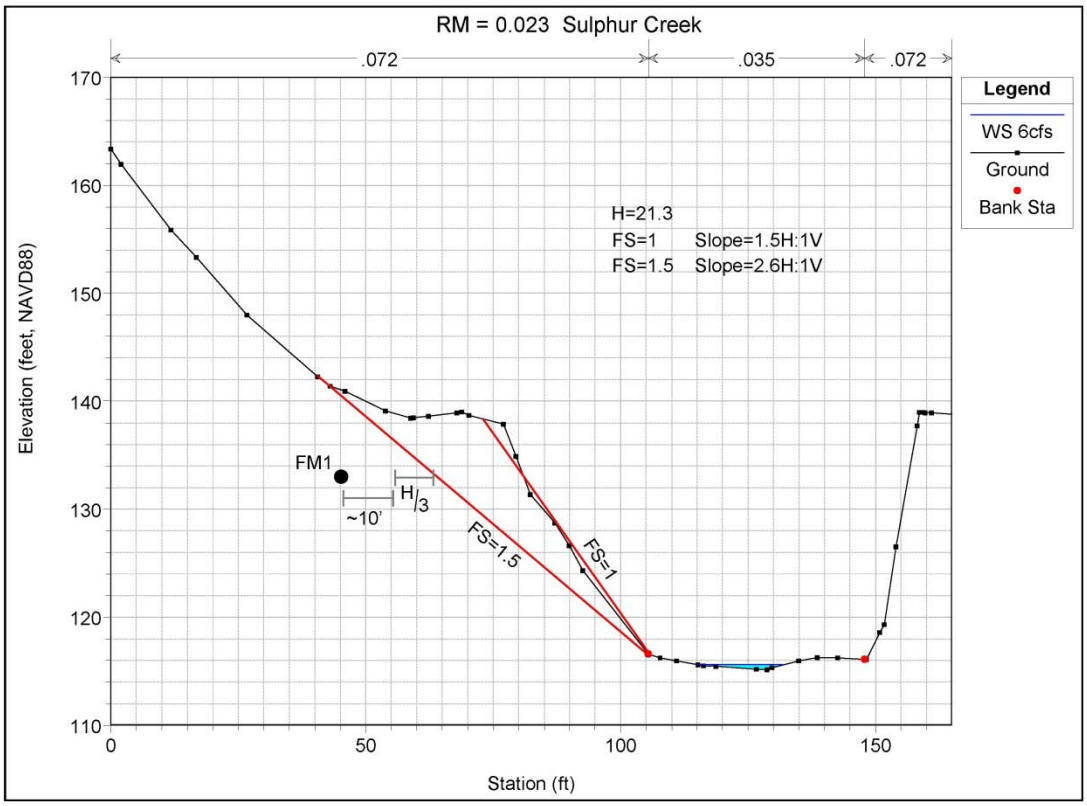
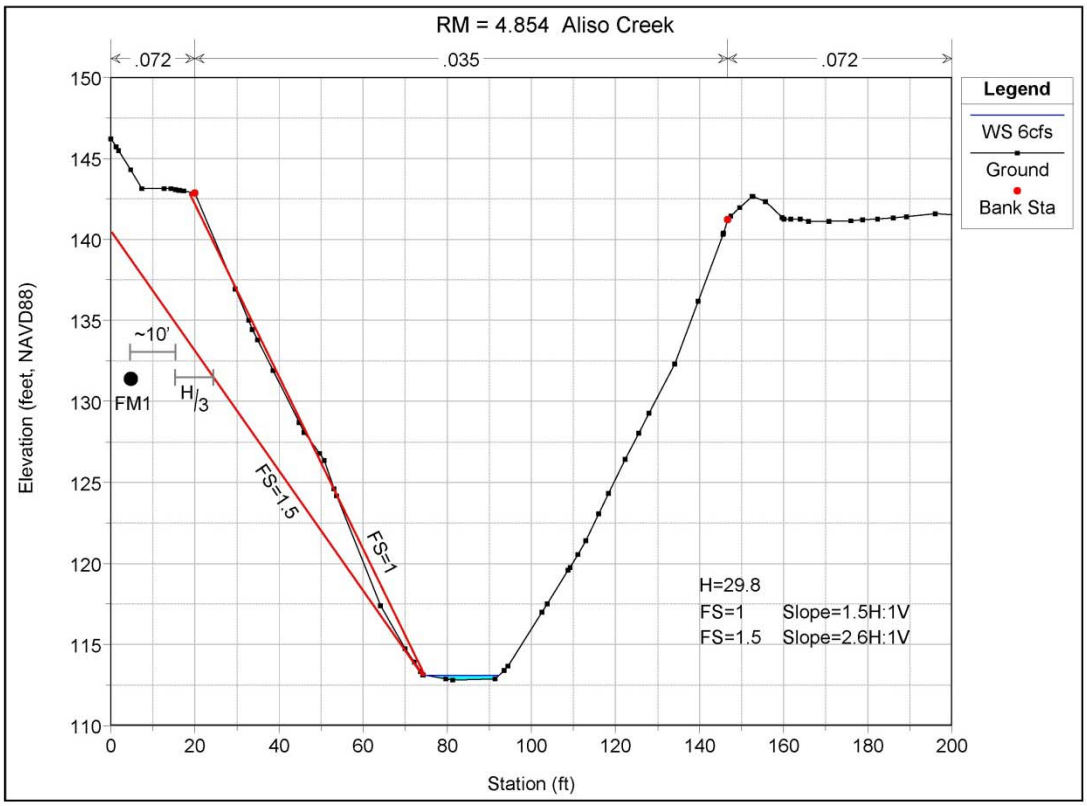
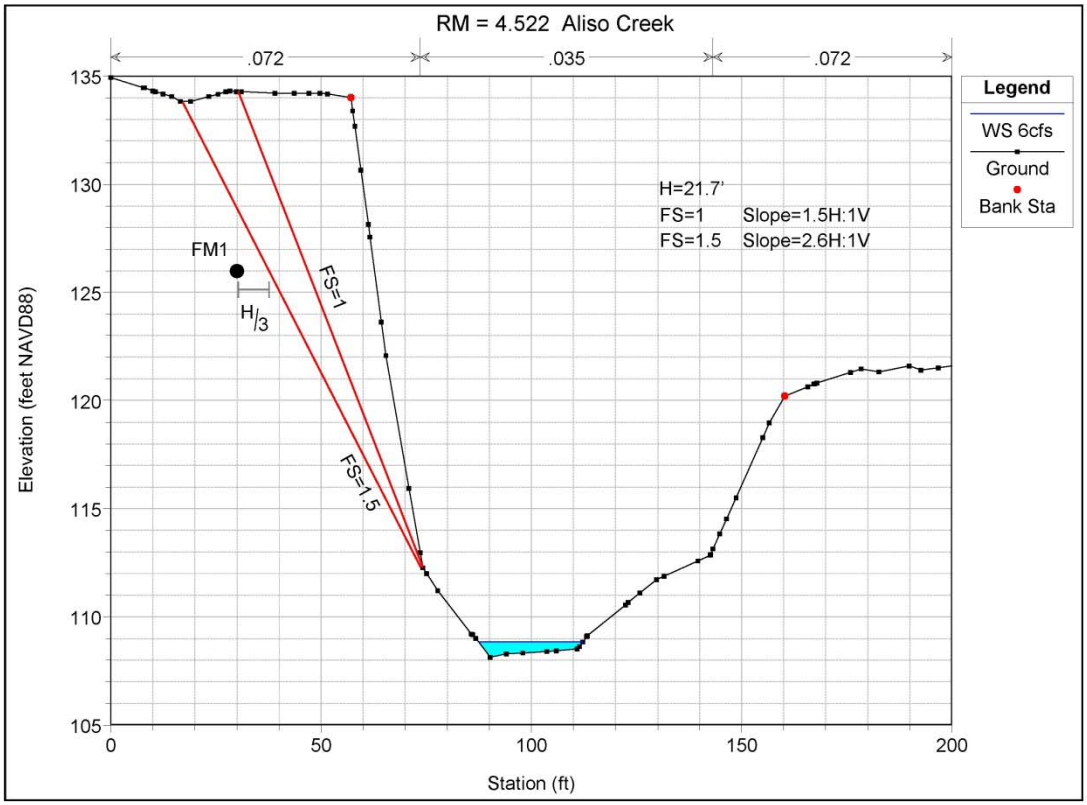
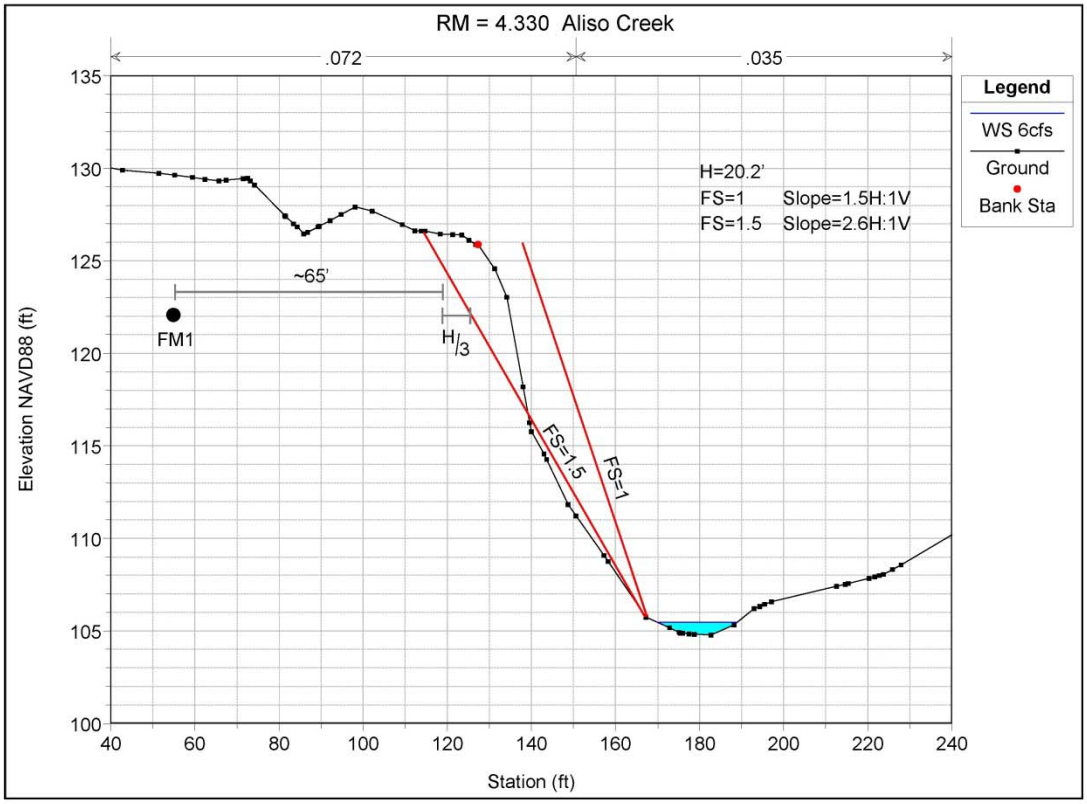
EAST (LEFT) BANK – PROPOSED FM 1 ALIGNMENT

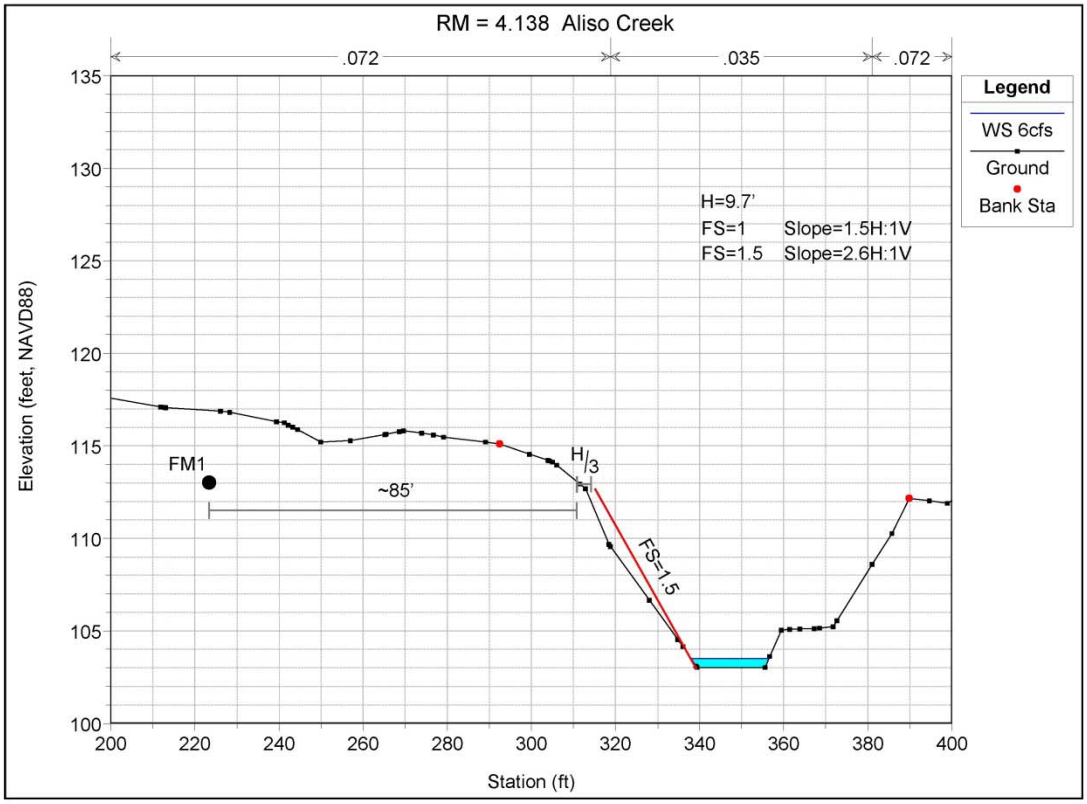


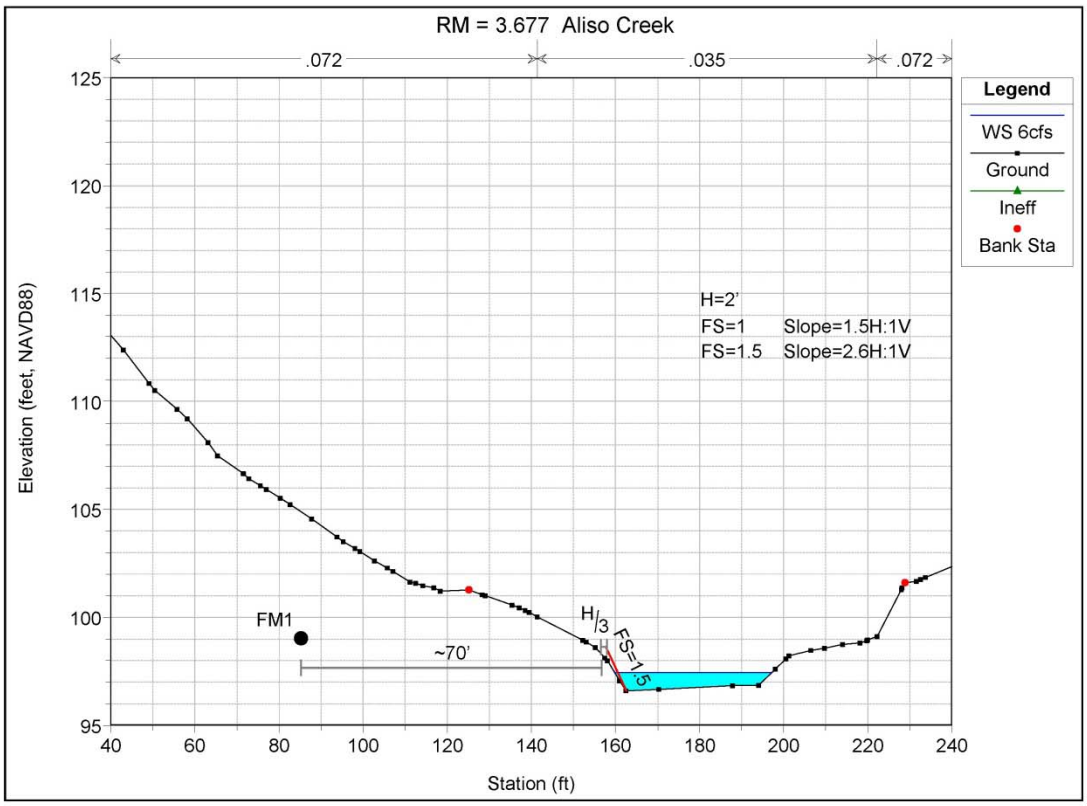


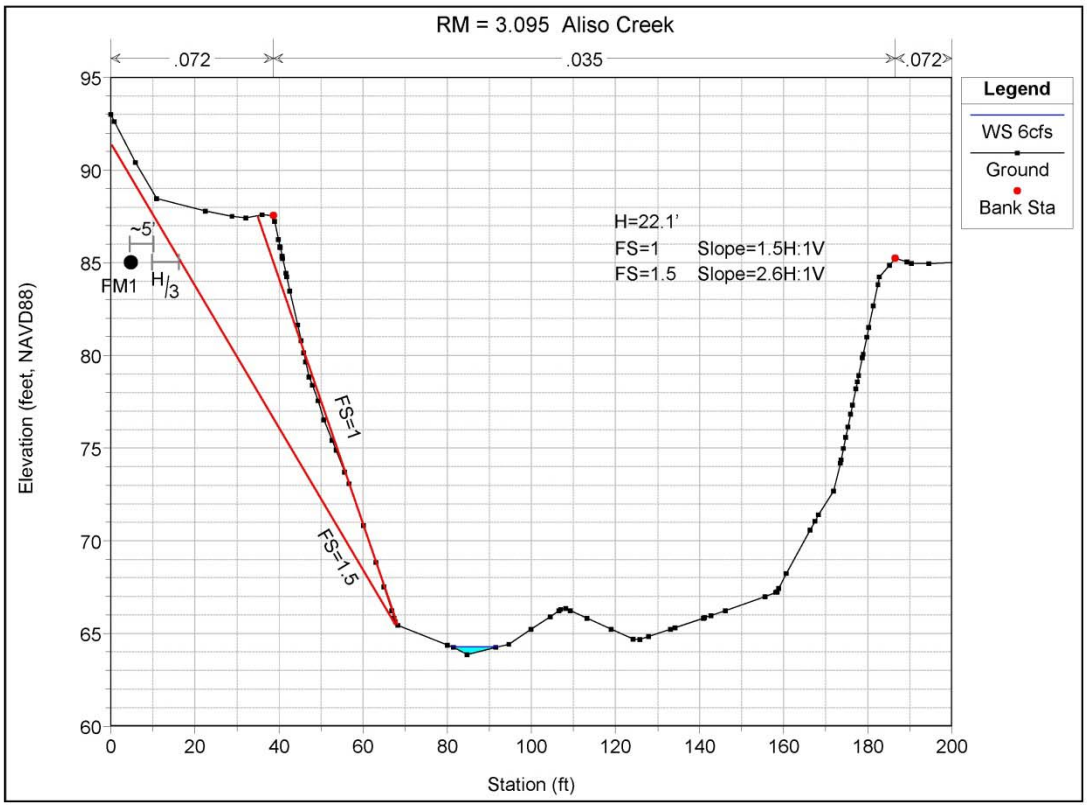

RM = 4.854 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
Elevation (feet, NAVD88)
Station (ft)
~10'
FM1
H/3
FS=1.5
FS=1
H=29.8
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V

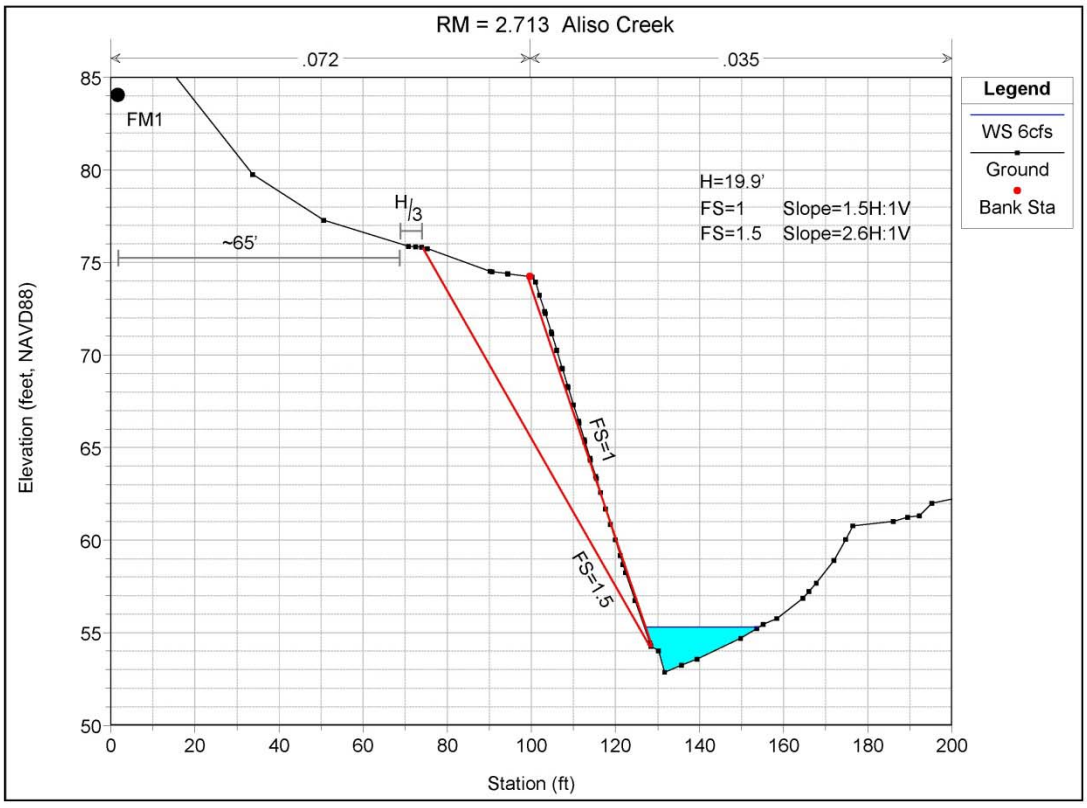

RM = 4.522 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
Elevation (feet NAVD88)
Station (ft)
FM1
H/3
FS=1
FS=1.5
H=21.7'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V

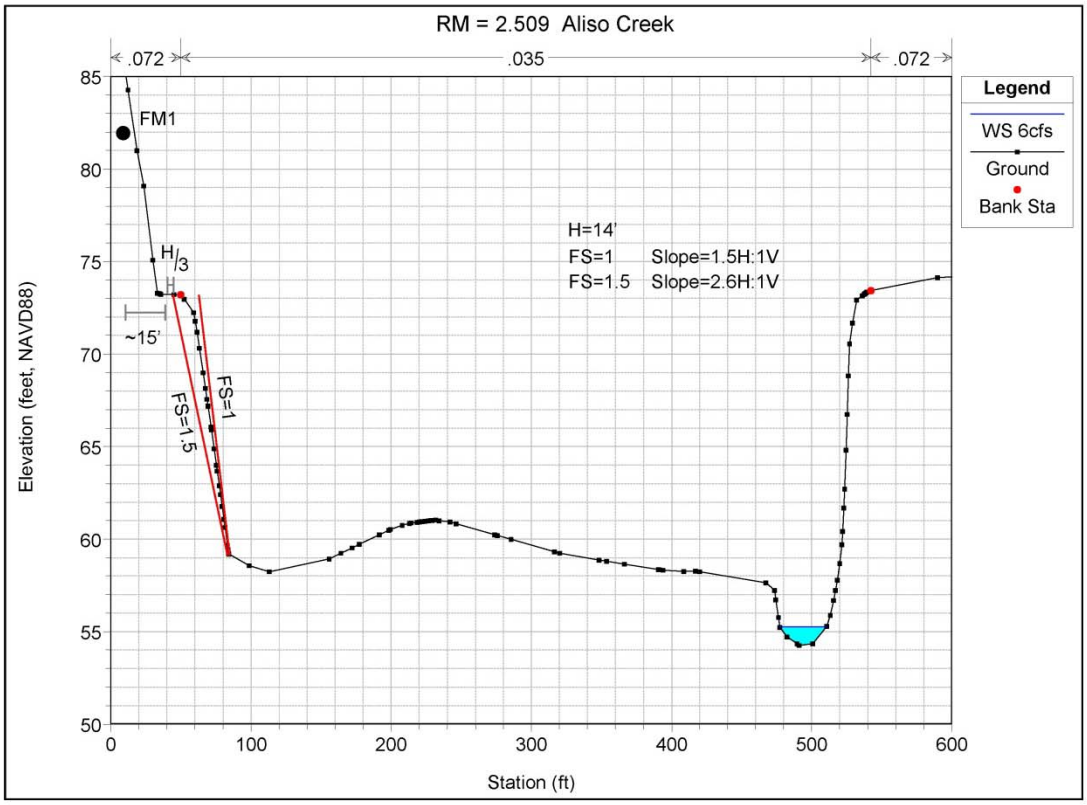

RM = 4.330 Aliso Creek
.072
.035
Legend
WS 6cfs
Ground
Bank Sta
H=20.2'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
~65'
FM1
H/3
FS=1.5
FS=1
Elevation NAVD88 (ft)
Station (ft)
135
130
125
120
115
110
105
100
40
60
80
100
120
140
160
180
200
220
240

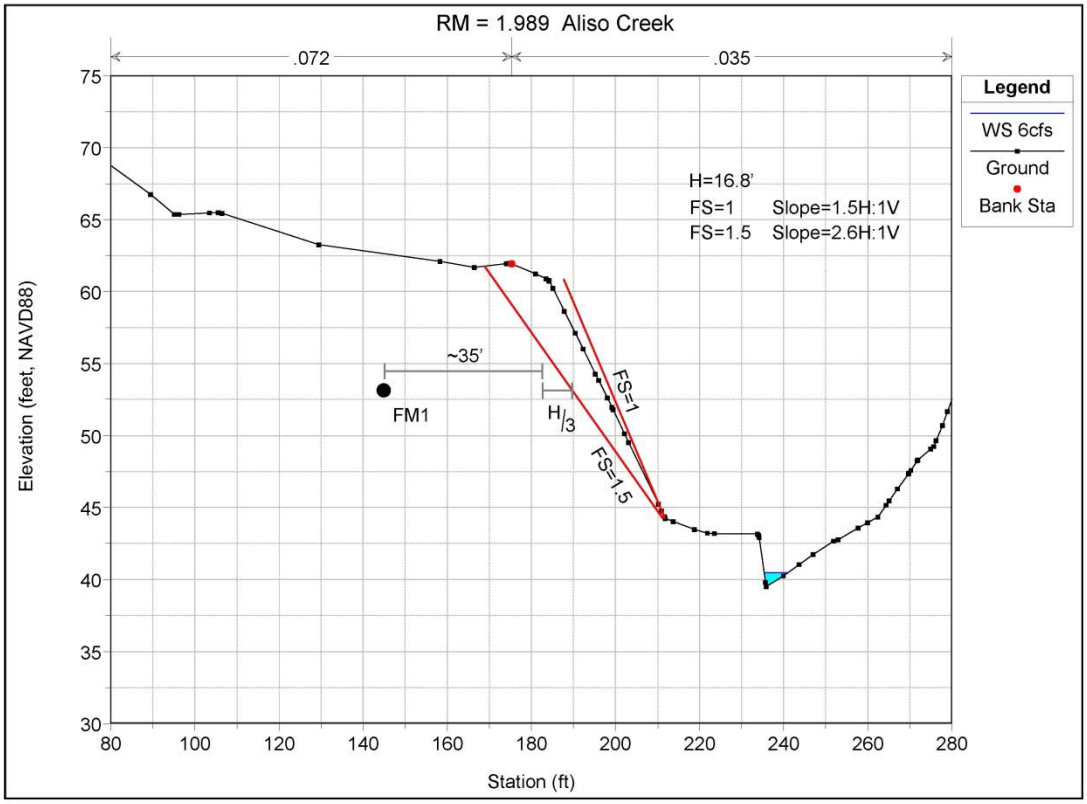

RM = 4.138 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=9.7'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FM1
~85'
H/3
FS=1.5
Elevation (feet, NAVD88)
Station (ft)
135
130
125
120
115
110
105
100
200
220
240
260
280
300
320
340
360
380
400

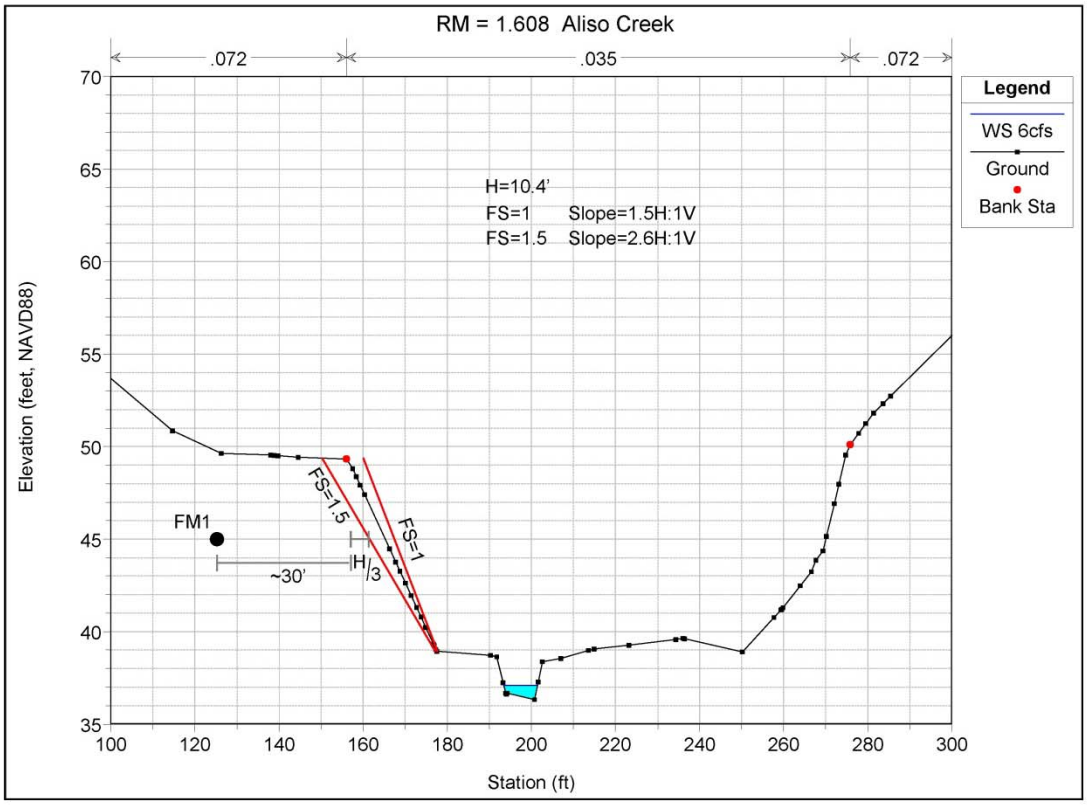

RM = 3.677 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Ineff
Bank Sta
H=2'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FM1
~70'
H/3
FS=1.5
Elevation (feet, NAVD88)
Station (ft)

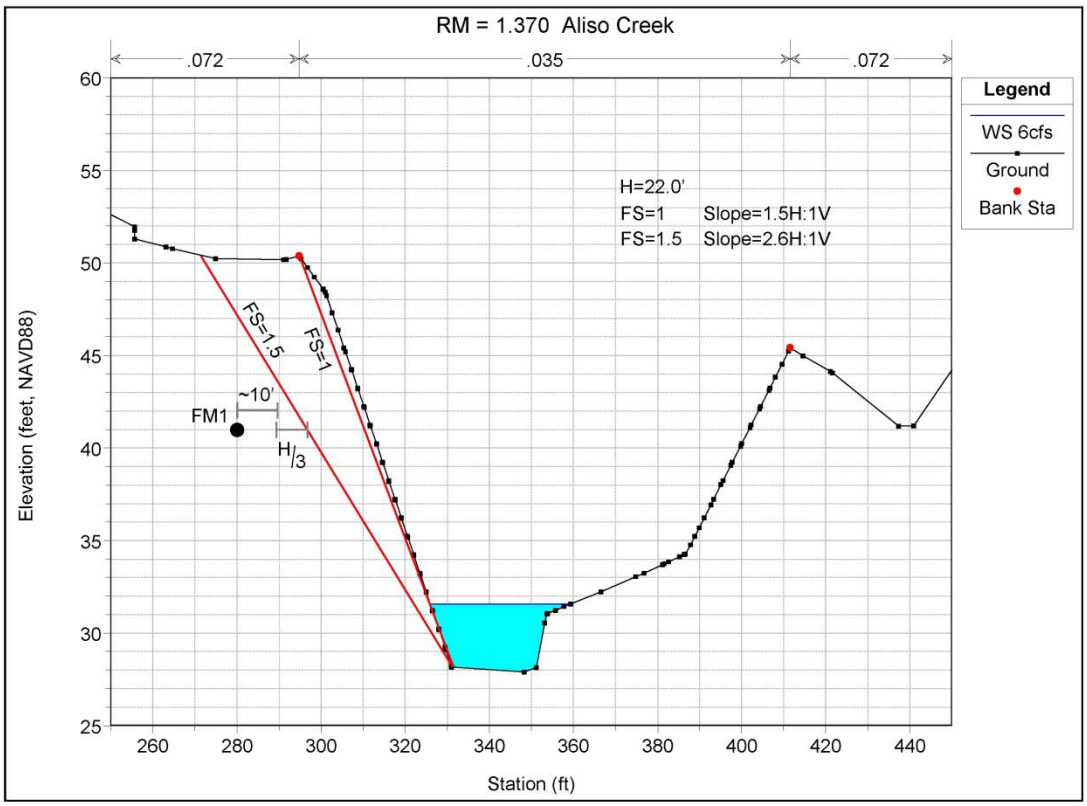

RM = 3.095 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=22.1'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
~5'
FM1
H/3
FS=1
FS=1.5
Elevation (feet, NAVD88)
Station (ft)


RM = 2.713 Aliso Creek
.072
.035
FM1
H/3
~65'
H=19.9'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FS=1
FS=1.5
Legend
WS 6cfs
Ground
Bank Sta
Elevation (feet, NAVD88)
Station (ft)
85
80
75
70
65
60
55
50
0
20
40
60
80
100
120
140
160
180
200

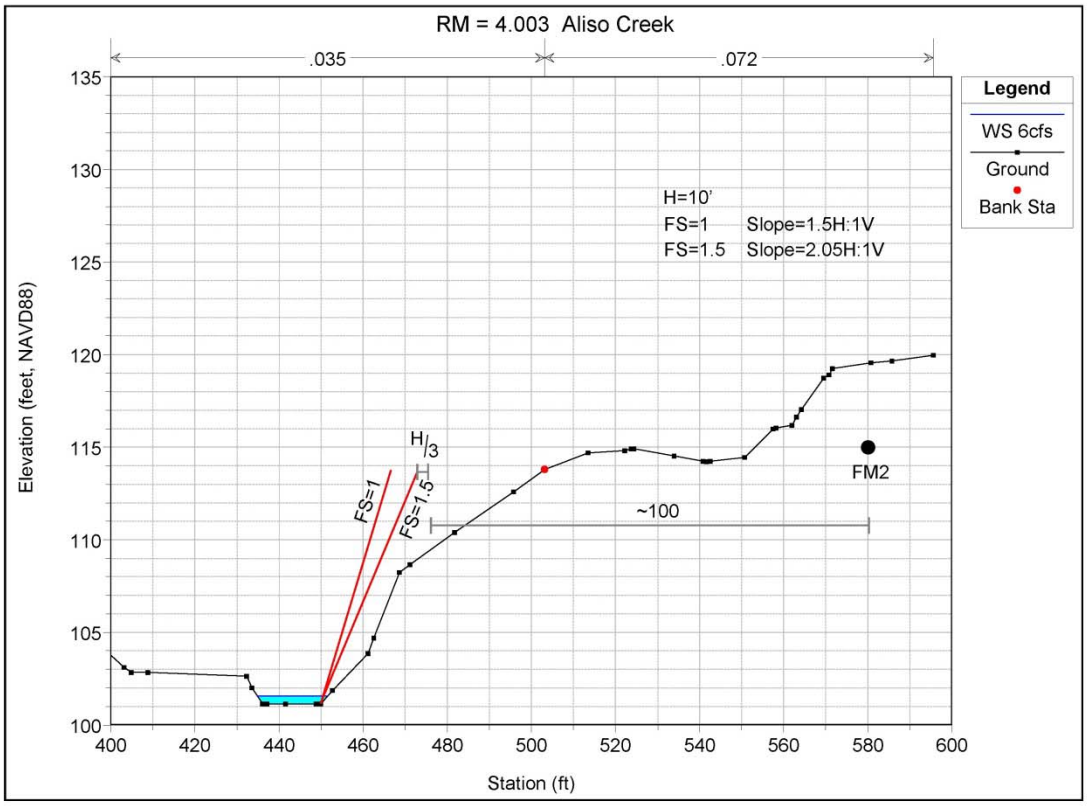

RM = 2.509 Aliso Creek
.072
.035
.072
FM1
H/3
~15'
H=14'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FS=1
FS=1.5
Legend
WS 6cfs
Ground
Bank Sta
Elevation (feet, NAVD88)
Station (ft)
85
80
75
70
65
60
55
50
0
100
200
300
400
500
600

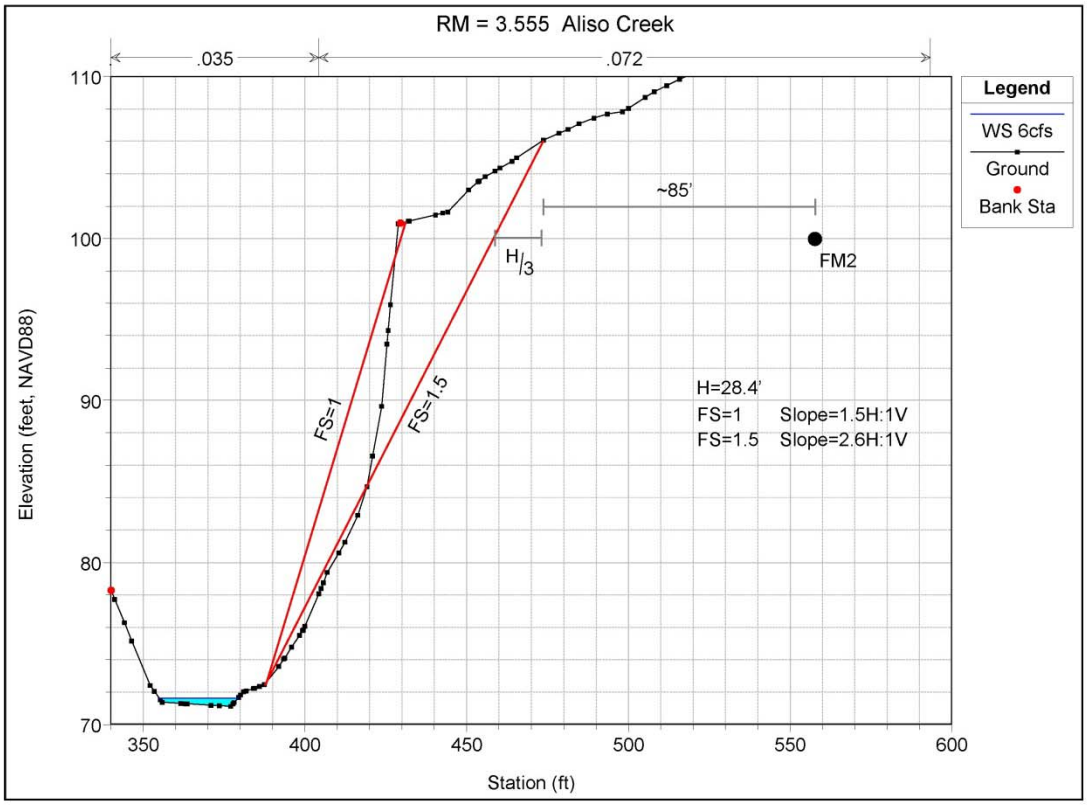

RM = 1.989 Aliso Creek
.072
.035
Legend
WS 6cfs
Ground
Bank Sta
H=16.8'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
~35'
FM1
H/3
FS=1
FS=1.5
Elevation (feet, NAVD88)
Station (ft)

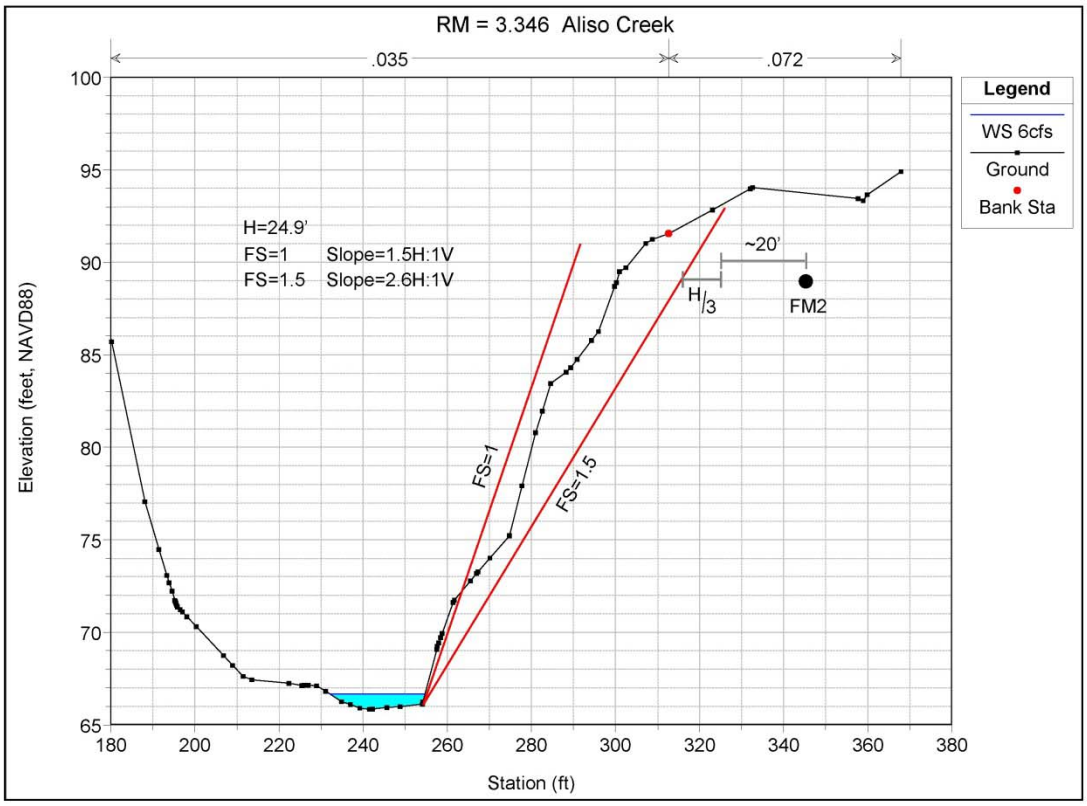

RM = 1.608 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=10.4'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FM1
FS=1.5
FS=1
~30'
H/3
Elevation (feet, NAVD88)
Station (ft)

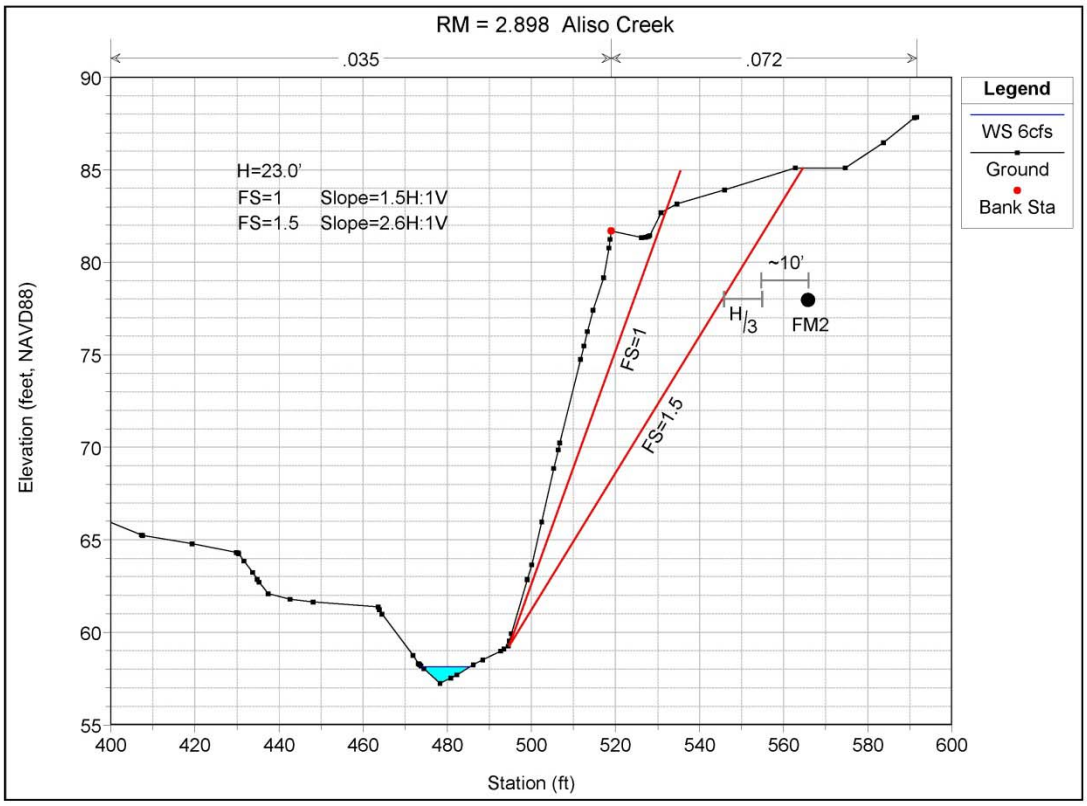

RM = 1.370 Aliso Creek
.072
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=22.0'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
FS=1.5
FS=1
~10'
FM1
H/3
Elevation (feet, NAVD88)
Station (ft)
60
55
50
45
40
35
30
25
260
280
300
320
340
360
380
400
420
440

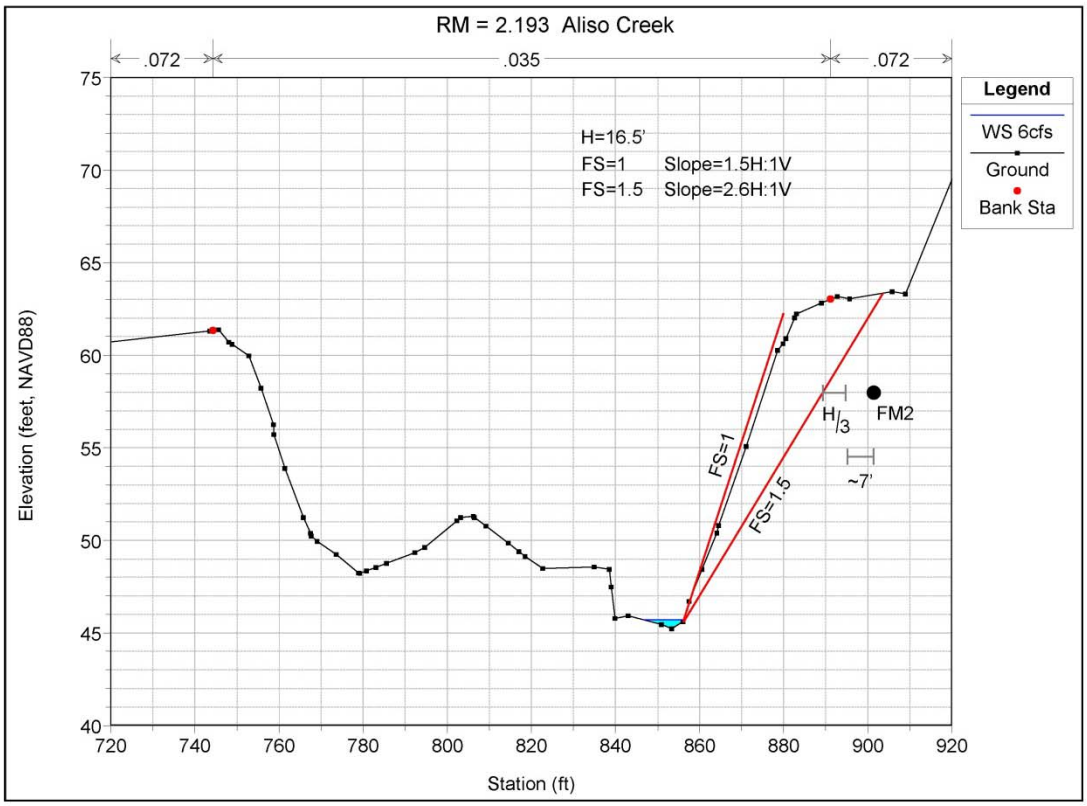
WEST (RIGHT) BANK – PROPOSED FM 2 ALIGNMENT

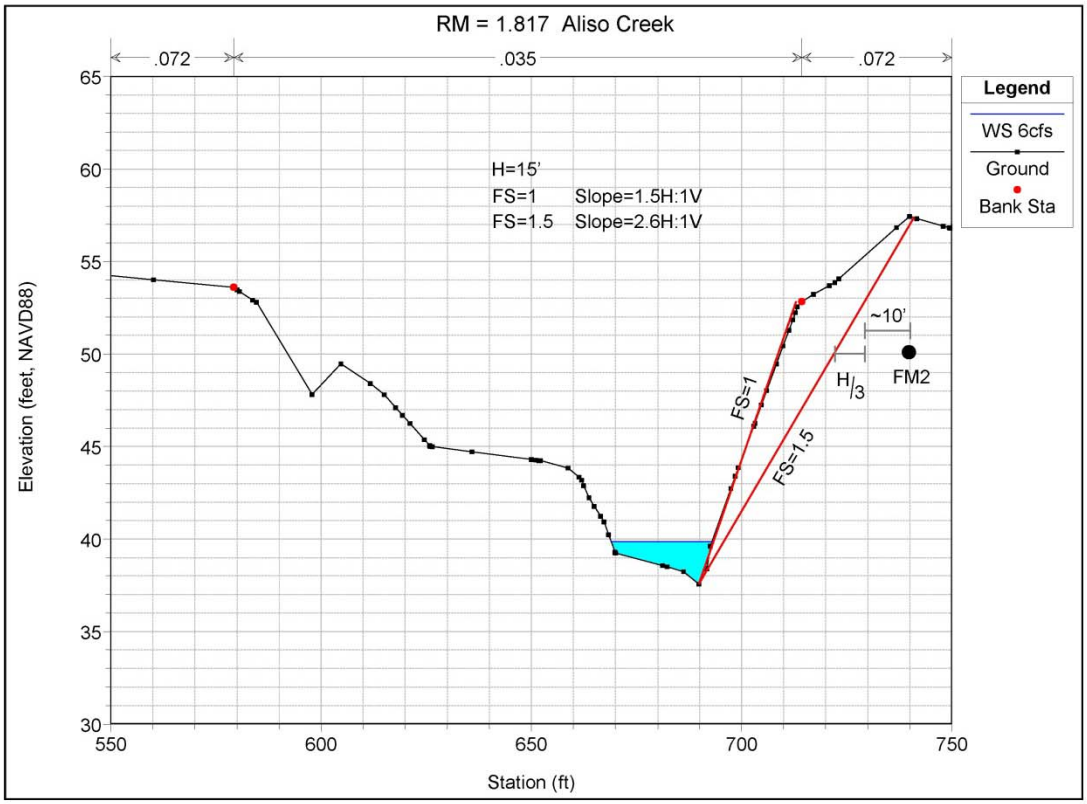


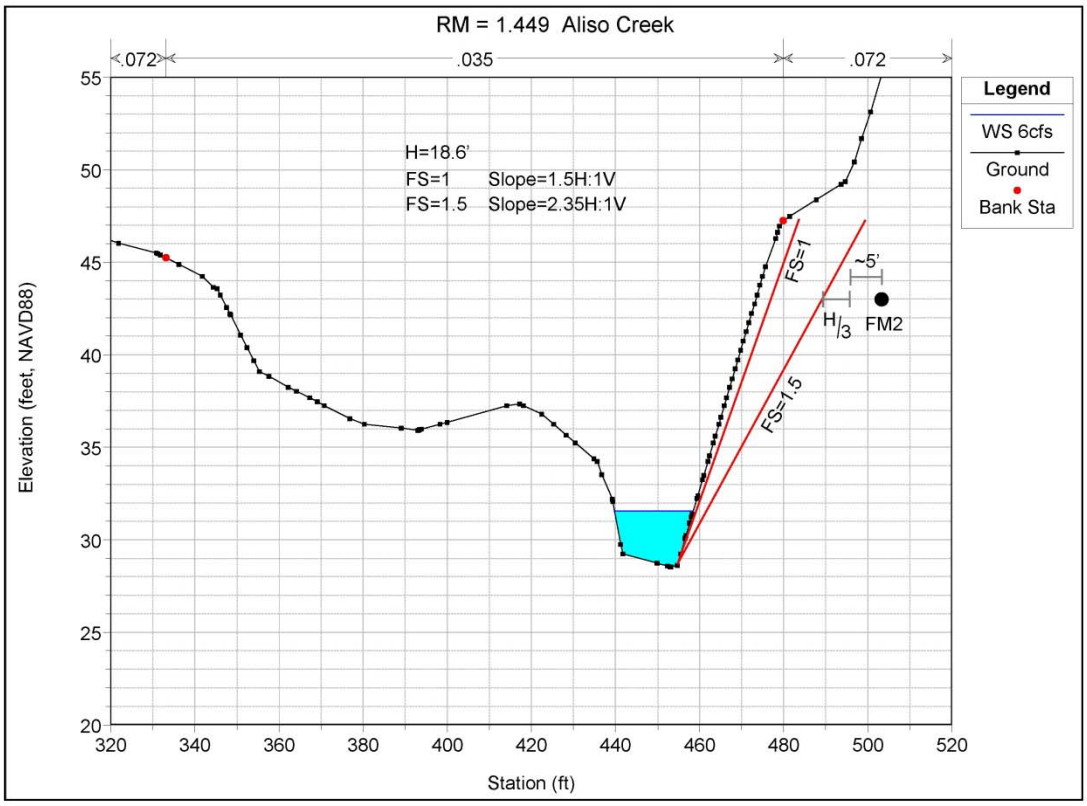



RM = 3.346 Aliso Creek
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=24.9'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
~20'
H/3
FM2
FS=1
FS=1.5
Elevation (feet, NAVD88)
Station (ft)
100
95
90
85
80
75
70
65
180
200
220
240
260
280
300
320
340
360
380


RM = 2.898 Aliso Creek
.035
.072
Legend
WS 6cfs
Ground
Bank Sta
H=23.0'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
~10'
H/3
FM2
FS=1
FS=1.5
Elevation (feet, NAVD88)
Station (ft)
90
85
80
75
70
65
60
55
400
420
440
460
480
500
520
540
560
580
600


RM = 2.193 Aliso Creek
.072
.035
.072
H=16.5'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
Legend
WS 6cfs
Ground
Bank Sta
FS=1
FS=1.5
H/3
FM2
~7'
Elevation (feet, NAVD88)
Station (ft)
75
70
65
60
55
50
45
40
720
740
760
780
800
820
840
860
880
900
920


RM = 1.817 Aliso Creek
.072
.035
.072
H=15'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.6H:1V
Legend
WS 6cfs
Ground
Bank Sta
FS=1
FS=1.5
H/3
FM2
~10'
Elevation (feet, NAVD88)
Station (ft)
65
60
55
50
45
40
35
30
550
600
650
700
750


RM = 1.449 Aliso Creek
.072
.035
.072
H=18.6'
FS=1 Slope=1.5H:1V
FS=1.5 Slope=2.35H:1V
FS=1
FS=1.5
~5'
H/3
FM2
Legend
WS 6cfs
Ground
Bank Sta
Elevation (feet, NAVD88)
Station (ft)
55
50
45
40
35
30
25
20
320
340
360
380
400
420
440
460
480
500
520