Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

1000 Lt

AXIS OF ROTATION

-2.00% TW

-5.00% Lt Shld

-4.00% TW

+2.00% Rt Shld

-2.00% TW & Lt Shld

'SE' 534+83.635
1.5 Rt Beg Rt Shld
e=2.00%

'SE' 533+04.381
10.258 Lt Beg TW e=-2.00%
7.258 Lt Beg TW e=-5.00%

533+96.901
BC 534+04.401
534+19.401
534+39.395
EC 534+54.395
534+61.895
535+41.606
BB 535+71.606

SUPERELEVATION DIAGRAM
'SE' LINE

Beg 'SE' LINE 533+04.381 POT=
11.887 Rt 'SD-56' 18+22.709 POT
16.151
MATCH Exist

BVC 534+40.000
17.914

200 VC

+1.30%

+4.60%

PI 535+40.000
19.214

FG

OG

'SE' 536+01.140=
'ECR' 9+73.599

'ECR'
LINE

EVC 536+40.000
23.814

MATCH LINE STA 536+55 SEE SHEET P-2

25 20 15 10

Station 533+00 534+00 535+00 536+00

m^3 Exc
Emb

PROFILE
'SE' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-1

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:16 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb001_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

+11.00% TW & Lt Shld

220 Rt AXIS OF ROTATION

536+63.939

-11.00% Rt Shld

BC 537+65.757

538+05.757

MATCH LINE STA 536+55 SEE SHEET P-1

MATCH LINE STA 539+40 SEE SHEET P-3

SUPERELEVATION DIAGRAM
'SE' LINE

BVC 537+76.974
@ 30.114

FG

+4.60%

'WS' LINE

23.503

'NE' LINE

20.125

'CVS' LINE

'SE' 536+83.222=
'CVS' 543+16.717

'SE' 538+08.522=
'NE' 540+33.689

'SE' 538+50.763=
'WS' 540+90.786

'CVR' LINE

'SE' 539+24.610=
'CVR' 540+69.792

OG

PROFILE
'SE' LINE

35 30 25 20 15

Station: 537+00 538+00 539+00

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-2

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:02:18 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb002_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

+10%
0%
-10%

+11.00% TW & Lt Shld

220 Rt AXIS OF ROTATION 1650 Rt

-11.00% Rt Shld

541+59.573 PCC 541+89.573

SUPERELEVATION DIAGRAM
'SE' LINE

MATCH LINE STA 539+40 SEE SHEET P-2

MATCH LINE STA 542+25 SEE SHEET P-4

442.05 VC

FG

-4.30%

PRVC 542+19.026
30.778

'NT' LINE

'SD-5' LINE

'SD-5' ES

'CV-1' LINE

'SE' 539+93.868=
'CV-1' 540+21.757

'SE' 540+34.214=
'NT' 540+47.737

'SE' 540+94.347=
'SD-5' 540+99.590

'SE' 541+82.214

OG

35
30
25
20
15

Station
540+00 541+00 542+00

m³ Exc
Emb

PROFILE
'SE' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-3

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:19 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb003_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans Metric

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

MATCH LINE STA 542+25 SEE SHEET P-3

+2.00% TW & Lt Shld

AXIS OF ROTATION

-2.00% Rt Shld

-2.00% TW

542+47.755

EB 542+67

543+91.838

'SE' 544+06.838 EC
1.5 Rt END Rt Shld
e=-1.33%

544+81.838

'SE' 545+26.984
7.2 Lt END TW e=-2.00%
3.6 Lt END Lt Shld e=4.01%

SUPERELEVATION DIAGRAM
'SE' LINE

35
30
25
20

F.G.

220 VC

-4.30%

+3.20%

OG

+3.20%

PI 543+29.026
26.048

EVC 544+39.026
29.568

END 'SE' 545+26.984 POT=
25.2 Lt 'SD-5'
545+26.984 POT
32.382
MATCH Exist

PROFILE
'SE' LINE

Station	543+00	544+00	545+00
m^3 Exc			
m^3 Emb			

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-4

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:20 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb004_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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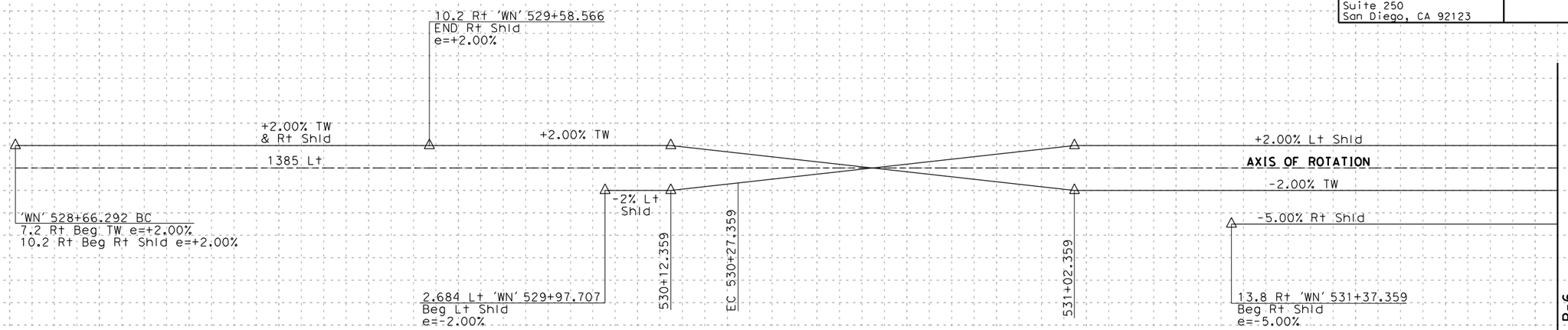
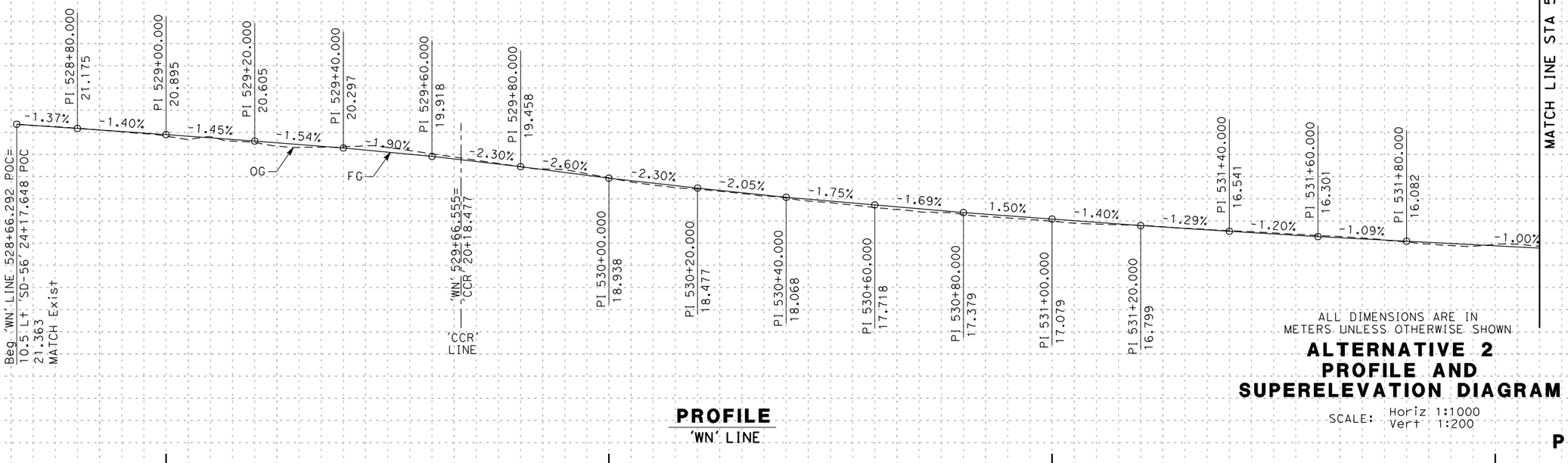
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans



SUPERELEVATION DIAGRAM

'WN' LINE



PROFILE

'WN' LINE

Station	529+00	530+00	531+00	532+00
m^3 Exc				
m^3 Emb				

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-5

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:21 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb005_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%
25
20
15
10

MATCH LINE STA 532+10 SEE SHEET P-5

MATCH LINE STA 535+65 SEE SHEET P-7

+2.00% Lt Shld

AXIS OF ROTATION

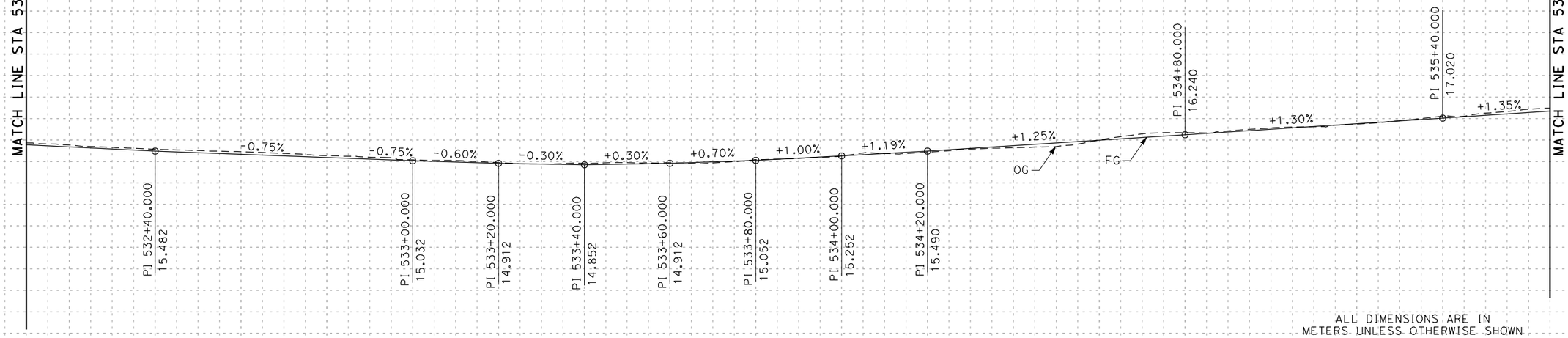
-2.00% TW

-5.00% Rt Shld

16.835 Rt 'WN' 534+77.903
END Rt Shld
e=-5.00%

10.2 Rt 'WN' 535+59.903
Beg Rt Shld
e=-5.00%

SUPERELEVATION DIAGRAM
'WN' LINE



PROFILE
'WN' LINE

Station
533+00
534+00
535+00

m^3 Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-6

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:22 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb006_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

25 20 15 10

MATCH LINE STA 535+65 SEE SHEET P-6

+2.00% Lt Shld

AXIS OF ROTATION

-2.00% TW

-5.00% Rt Shld

537+04.421

BB 537+31.421

EB 537+88.739

538+07.886

BB 538+52.701

BC 538+66.068

539+06.068

MATCH LINE STA 537+20 SEE SHEET P-8

SUPERELEVATION DIAGRAM
'WN' LINE

+1.35% +1.51% +1.80% +1.80% +3.00%

140 VC

PI 536+00.000
17.830

PI 536+60.000
18.734

BVC 537+10.000
19.634

FG

OG

'ECR' LINE

WN 537+59.181=
'ECR' 10+17.102

PI 537+80.000
20.894

EVC 538+50.000
22.994

Station: 536+00 535+00 536+00 537+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

PROFILE
'WN' LINE

P-7

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:23 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb007_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

+11.00% Lt Shld

210 Rt

AXIS OF ROTATION

-11.00% TW & Rt Shld

MATCH LINE STA 537+20 SEE SHEET P-7

MATCH LINE STA 542+75 SEE SHEET P-9

542+33.081

EC 542+73.081

PI 541+86.00
33.074

+3.00%

-2.40%

228 VC

FG

541+98.667
31.554

+3.00%

BVC 540+72.000
29.654

'NT' LINE

'WN' 542+13.512=
'NT' 542+13.790

OG

'CV-1' LINE

'WN' 541+67.245=
'CV1' 541+70.800

'CVR' LINE

'WN' 539+37.925=
'CVR' 542+06.761

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

30
25
20
15
10

Station
m^3 Exc
Emb

540+00
541+00
542+00

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-8

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:24 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb008_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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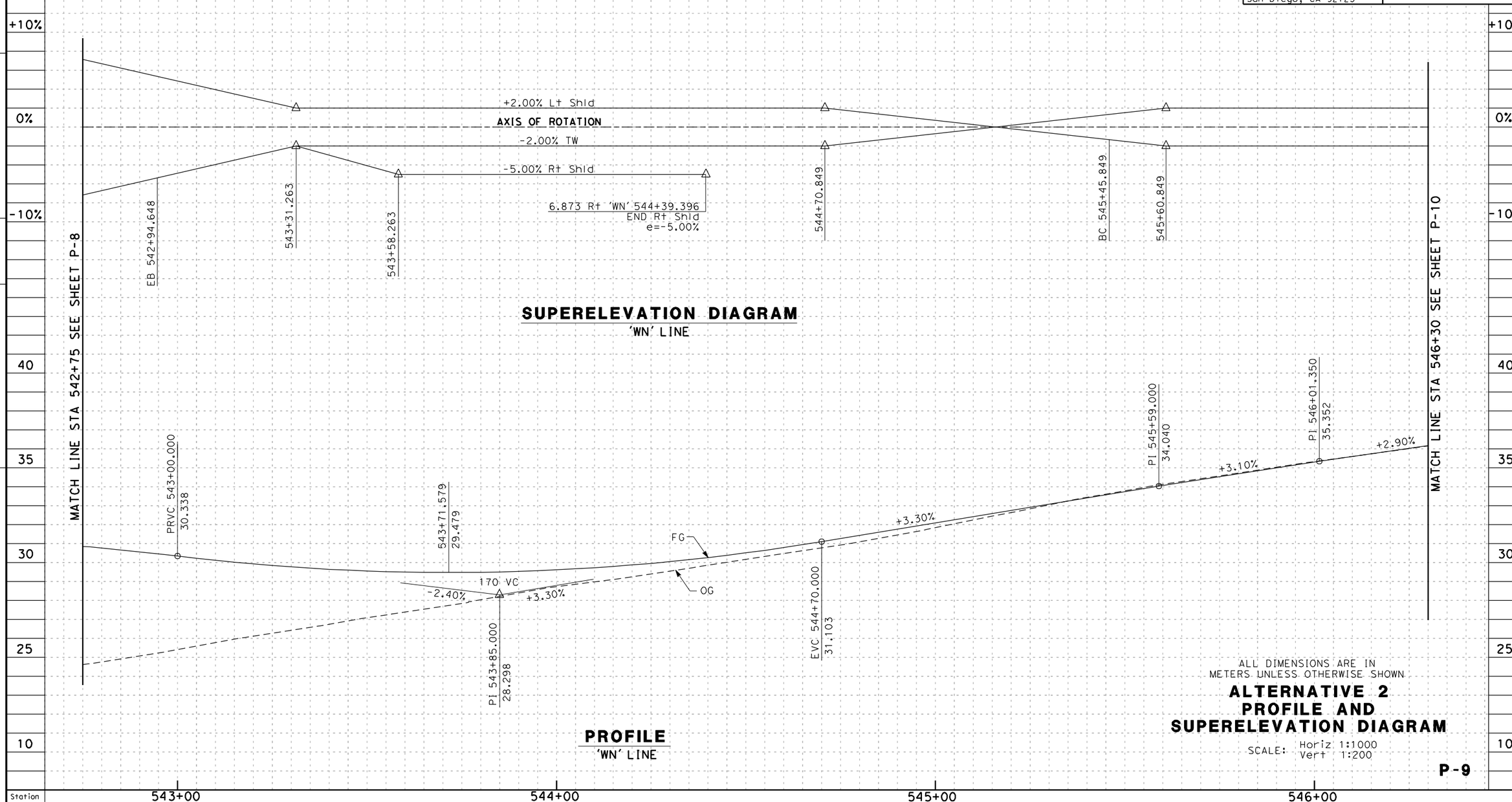

SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

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DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:25 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb009_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

+2.00% TW & Rt Shld
3080.406 Lt
-2.00% Lt Shld

MATCH LINE STA 546+30 SEE SHEET P-9

MATCH LINE STA 549+85 SEE SHEET P-11

548+26.278
EC 548+41.278
549+16.278
549+83.778

SUPERELEVATION DIAGRAM
'WN' LINE

'WN' 546+42.080 POT
MATCH Exist
36.534
+3.29%
PI 546+60.000
37.123
+3.52%
PI 546+80.000
37.827
+2.19%
PI 547+00.000
38.266
+3.21%
PI 547+20.000
38.908
+3.36%
PI 547+40.000
39.580
+3.38%
PI 547+60.000
40.257
+2.62%
PI 547+80.000
40.780
+2.86%
PI 548+00.000
41.351
+2.62%
PI 548+20.000
41.876
+2.73%
PI 548+40.000
42.422
+2.16%
PI 548+60.000
42.854
+2.16%
PI 548+80.000
43.286
+2.60%
PI 549+00.000
43.807
+2.44%
PI 549+20.000
44.294
+3.01%
PI 549+40.000
44.897
+2.67%
PI 549+60.000
45.431
+2.14%
PI 549+80.000
45.859

PROFILE
'WN' LINE

50
45
40
35
30

Station
547+00
548+00
549+00

m³ Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-10

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:26 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb010_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

MATCH LINE STA 549+85 SEE SHEET P-10

+2.00% Lt Shld
-2.00% TW
-5.00% Rt Shld

MATCH LINE STA 553+40 SEE SHEET P-12

SUPERELEVATION DIAGRAM
'WN' LINE

PI 550+00.000 46.372
+2.56%
PI 550+20.000 46.991
+3.09%
PI 550+40.000 47.557
+2.83%
PI 550+60.000 48.202
+3.23%
PI 550+80.000 48.919
+3.59%
PI 551+00.000 49.439
+2.60%
PI 551+20.000 50.016
+2.88%
PI 551+40.000 50.622
+3.03%
PI 551+60.000 51.212
+2.95%
PI 551+80.000 51.780
+2.84%
PI 552+00.000 52.355
+2.88%
PI 552+20.000 53.031
+3.38%
PI 552+40.000 53.676
+3.23%
PI 552+60.000 54.192
+2.58%
PI 552+80.000 54.815
+3.12%
PI 553+00.000 55.430
+3.08%
PI 553+20.000 56.036
+3.03%
PI 553+40.000 56.584
+2.74%

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-11

60 55 50 45 40

Station: 550+00 | 551+00 | 552+00 | 553+00

m³ Exc / Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:28 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb011_alt2.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

+10%
0%
-10%

MATCH LINE STA 553+40 SEE SHEET P-11

MATCH LINE STA 556+95 SEE SHEET P-13

10.8 Rt 'WN' 556+24.927
Beg Rt Shld
e=+1.19%

BC 556+27.904

556+42.902

+2.00% TW
& Rt Shld

3000 Lt

554+95.402

18.026 Rt 'WN' 555+42.607
END Rt Shld
e=-2.46%

555+52.902

3.0 Lt 'WN' 556+27.902
END Lt Shld
e=-1.33%

SUPERELEVATION DIAGRAM

'WN' LINE

PI 553+60.000 57.287
PI 553+80.000 57.830
PI 554+00.000 58.342
PI 554+20.000 58.875
PI 554+40.000 59.484
PI 554+60.000 60.157
PI 554+80.000 60.843
PI 555+00.000 61.371
PI 555+20.000 61.899
PI 555+40.000 62.534
PI 555+60.000 63.130
PI 555+80.000 63.734
PI 556+00.000 64.305
PI 556+20.000 64.952
PI 556+40.000 65.629
PI 556+60.000 66.174
PI 556+80.000 66.801

+3.52% +2.71% +2.56% +2.67% +3.04% +3.36% +3.43% +2.64% +2.64% +3.18% +2.98% +3.02% +2.85% +3.23% +3.39% +2.72% +3.14% +3.09%

PROFILE

'WN' LINE

70 65 60 55 50

Station: 554+00 555+00 556+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-12

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:29 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb012_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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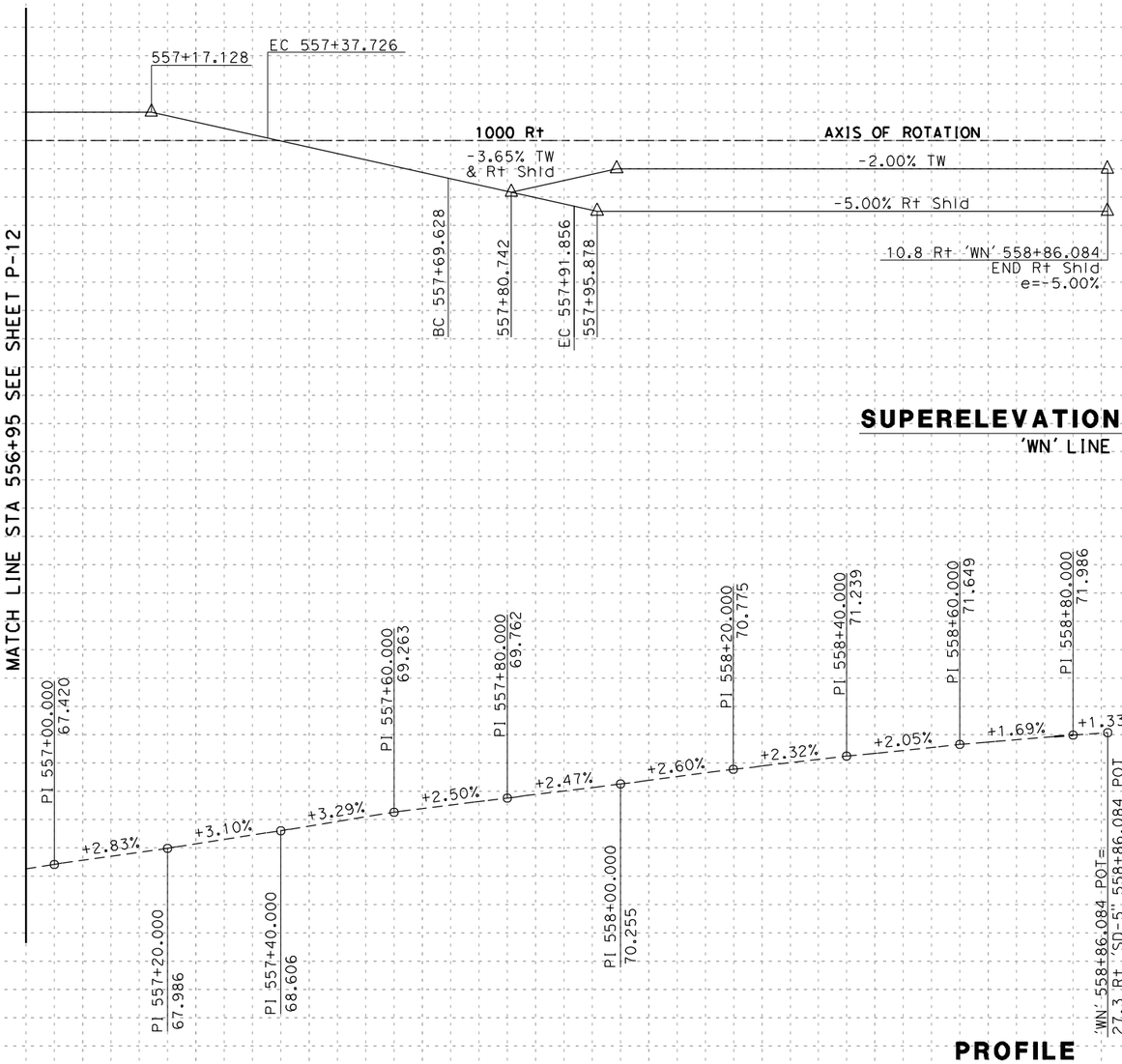
Caltrans



SUPERELEVATION DIAGRAM
'WN' LINE

PROFILE
'WN' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-13

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:30 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb013_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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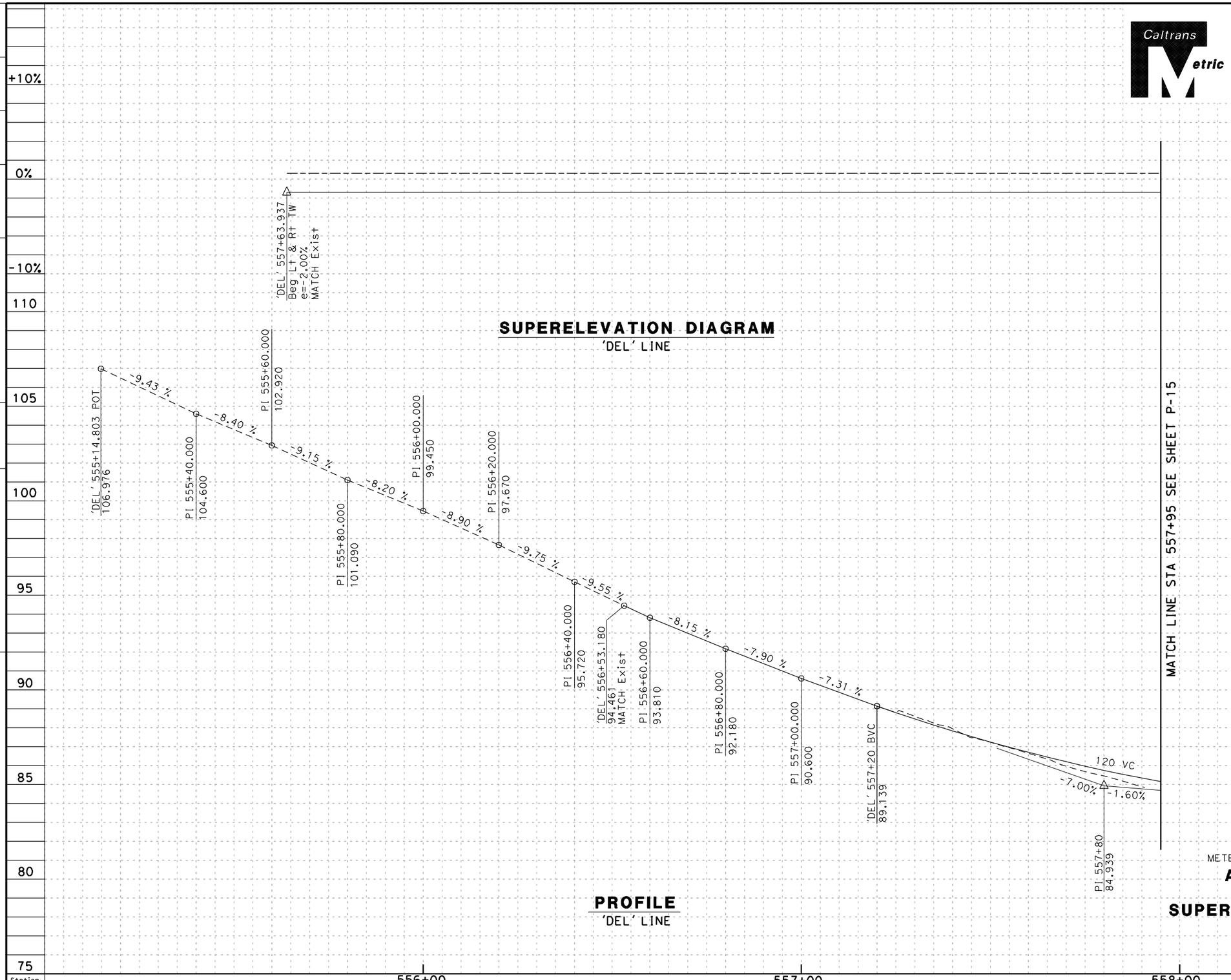
Caltrans Metric



SUPERELEVATION DIAGRAM
'DEL' LINE

PROFILE
'DEL' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:31 PM

LAST REVISION 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb014_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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Caltrans

+10% 0% -10%

AXIS OF ROTATION CENTER LINE 'DEL' LINE
-2% Lt & Rt TW

AXIS OF ROTATION CENTER LINE 'DEL' LINE
-2% Lt & Rt TW

MATCH LINE STA 557+95 SEE SHEET P-14

557+96.170 BB

559+46.222 EB

SUPERELEVATION DIAGRAM
'DEL' LINE

90 85 80 75

FG

EVC 558+40
83.979

BVC 558+95
83.099

PI 559+55
82.139

PRVC 560+15
80.579

LO 561+01.667
79.452

-1.60%

-1.60% -2.60%
120 VC

120 VC
-2.60% +1.00%

FG

+1.00% +1.00%

OG

OG

1:1.5 SLOPE PAVING

'SD-5' LINE

1:1.5 SLOPE PAVING

PI 560+75.00
79.019

EVC 561+35.00
79.619

'DEL' 561+55 POT
79.819
MATCH Exist

Station 558+00 559+00 560+00 561+00

m³ Exc Emb

PROFILE
'DEL' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-15

LAST REVISION | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:32 PM | 00-00-00

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb015_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%

0%

-10%

'DEL-1' 559+29.847
1.2 Lt Beg Lt Shld
e=+2.00%

+2% Lt Shld

+10% Lt Shld

'DEL-1' 561+30.642
1.2 Lt End Lt Shld
e=+2.00%

+2% Lt Shld

260 Rt

AXIS OF ROTATION Lt ETW 'DEL-1' LINE

100 Rt

-2% TW & Rt Shld

'DEL-1' 559+40.244
10.8 Rt Beg TW e=-2.00%
13.2 Rt Beg Rt Shld e=-2.00%

559+42+098

BC 559+77.098

-10% TW & Rt Shld

560+02.098

560+25.988

EC 560+50.988

560+63.488

560+85.988

-2% TW

-5% Rt Shld

561+62.486

BC 561+69.986

561+84.986

-4% TW

562+04.980

EC 562+19.980

562+27.480

SUPERELEVATION DIAGRAM
'DEL-1' LINE

85 80 75 70 65

Beg 'DEL-1' LINE 559+02.060 POT=
'DEL' 559+77.968 POT
81.484

-2.00%

BVC 559+30.00
80.926

PI 559+60.00
80.326

-2.00% -6.80%
60 VC

EVC 559+90.00
78.286

-6.80%

BVC 560+06.570
77.159

OG

FG

160 VC

-6.80% -1.70%

PI 560+86.570
71.719

PRVC 561+66.570
70.359

PI 562+30.00
69.280

-1.70% -3.00%
126.86 VC

MATCH LINE STA 562+55 SEE SHEET P-17

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-16

PROFILE
'DEL-1' LINE

Station: 559+00 | 560+00 | 561+00 | 562+00

m^3 Exc
Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1102:33 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb016_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10%
0%
-10%

80
75
70
65

AXIS OF ROTATION Lt ETW 'DEL-1' LINE
-2% TW
-5% Rt Shld
'DEL-1' 563+20
3.6 Rt END TW e=-2.00%
6.6 Rt END Rt Shld e=-5.00%

SUPERELEVATION DIAGRAM
'DEL-1' LINE

MATCH LINE STA 562+55 SEE SHEET P-16

EVC 562+93.430
67.378
-3.00%
FG
OG
END 'DEL-1' 563+20 POT=
38.1 Rt 'SD-5' 563+20 POT
66.580
MATCH Exist

PROFILE
'DEL-1' LINE

Station
563+00

m³ Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-17

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:34 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb017_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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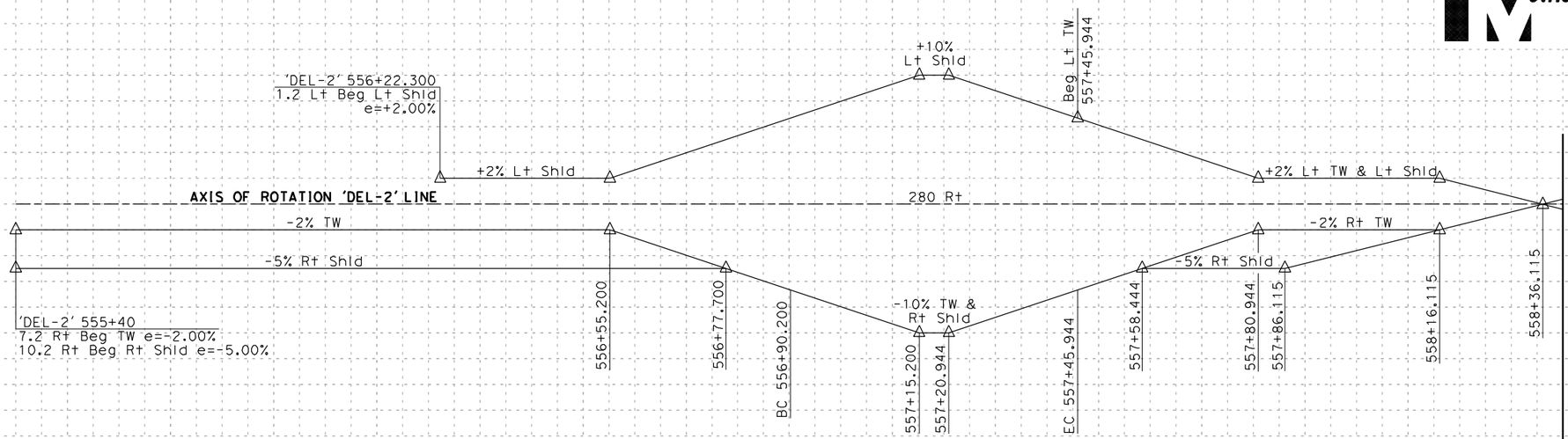
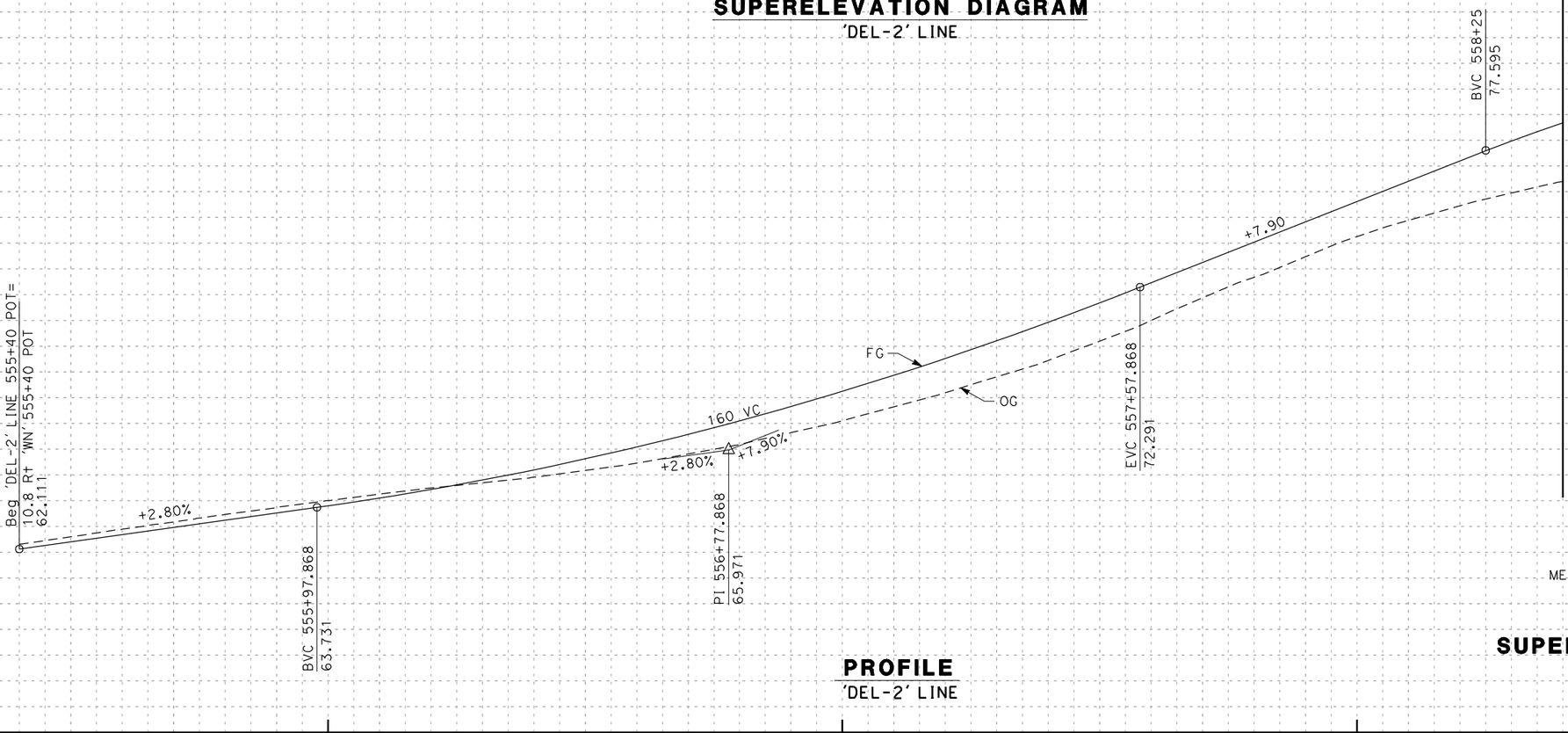
Caltrans

SUPERELEVATION DIAGRAM
'DEL-2' LINE





PROFILE
'DEL-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-18

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BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb018_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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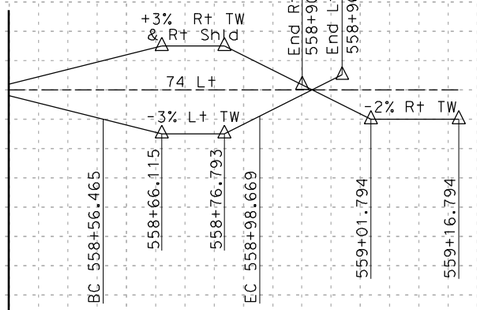
Caltrans

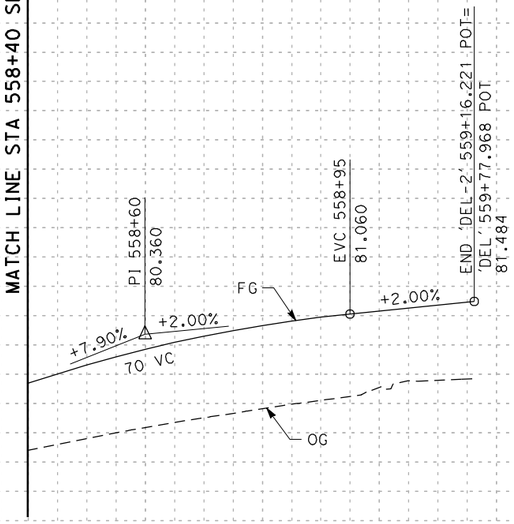
+10% 0% -10%



MATCH LINE STA 558+40 SEE SHEET P-18

SUPERELEVATION DIAGRAM

'DEL-2' LINE



PROFILE

'DEL-2' LINE

85 80 75 70

Station 559+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-19

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1102:36 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad DGN FILE => ...\1643fb019_alt2.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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Caltrans

+10% 0% -10%

'DEL-3' 555+35.986
1.2 Rt Beg Rt Shld
e=+2.00%

+2% Rt Shld

AXIS OF ROTATION Rt ETW 'DEL-3' LINE — 100 Lt — AXIS OF ROTATION Rt ETW 'DEL-3' LINE

-2% TW | -4% TW | -2% TW

-5% Lt Shld | -5% Lt Shld

'DEL-3' 553+46.629
3.6 Lt Beg TW e=-2.00%
6.6 Lt Beg Lt Shld e=-5.00%

554+39.149 | BC 554+46.649 | 554+61.649 | 554+81.643 | EC 554+96.643 | 555+04.143 | 556+63.947 | 556+86.447 | 56+98.947

MATCH LINE STA 557+00 SEE SHEET P-21

SUPERELEVATION DIAGRAM
'DEL-3' LINE

75 70 65 60 55

Beg 'DEL-3' LINE 553+46.629 POT=
10.8 Lt 'ST' 553+46.629 POT
56.210

+2.80%

OG

FG

BVC 554+84.000
60.057

226 VC
+2.80%
+10.30%

PI 555+97.000
63.221

PROFILE
'DEL-3' LINE

Station: 554+00 | 555+00 | 556+00 | 557+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-20

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:37 PM

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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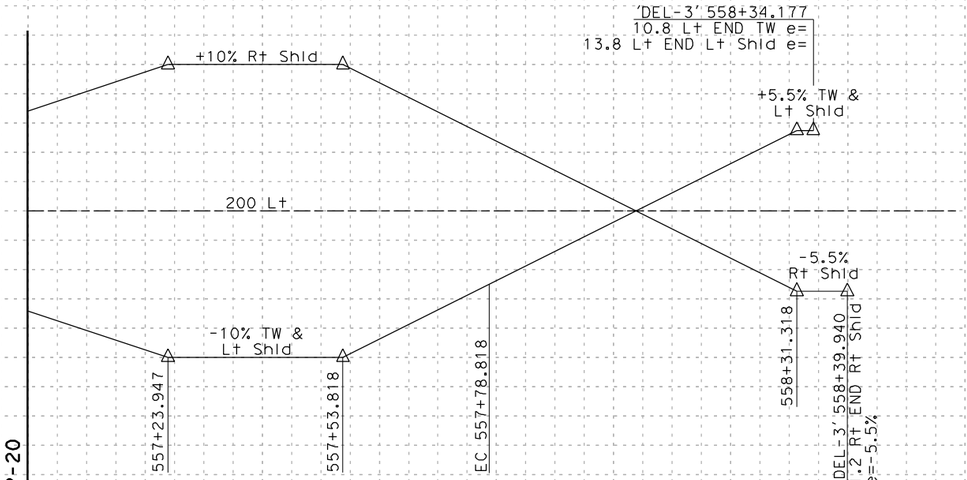
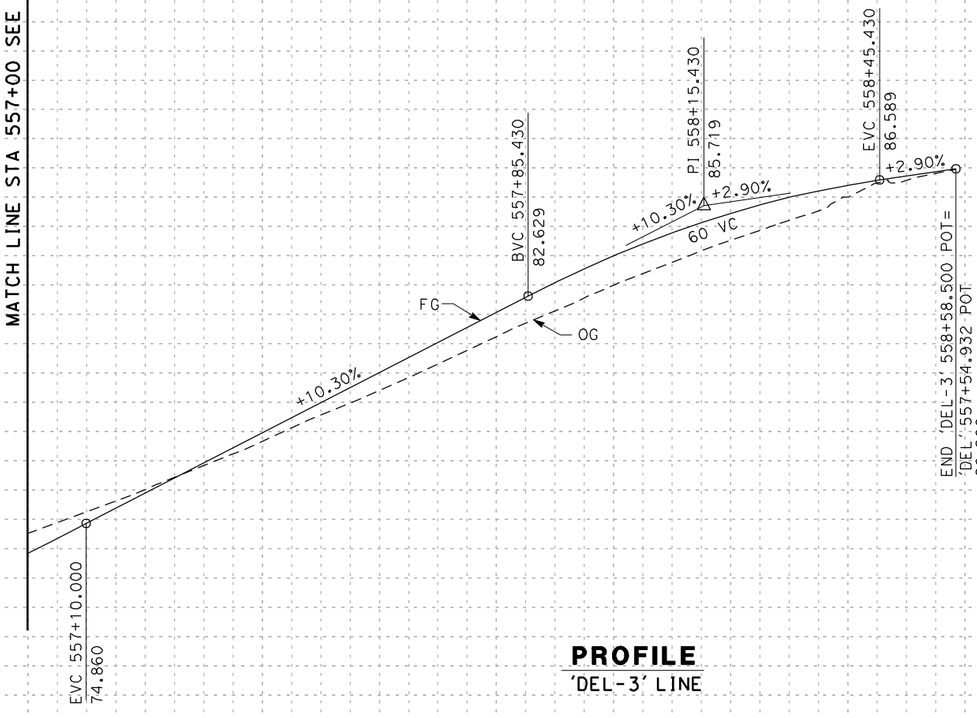


SUPERELEVATION DIAGRAM
'DEL-3' LINE



PROFILE
'DEL-3' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-21

+10% 0% -10%

85 80 75 70

Station 558+00

m^3 Exc Emb

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Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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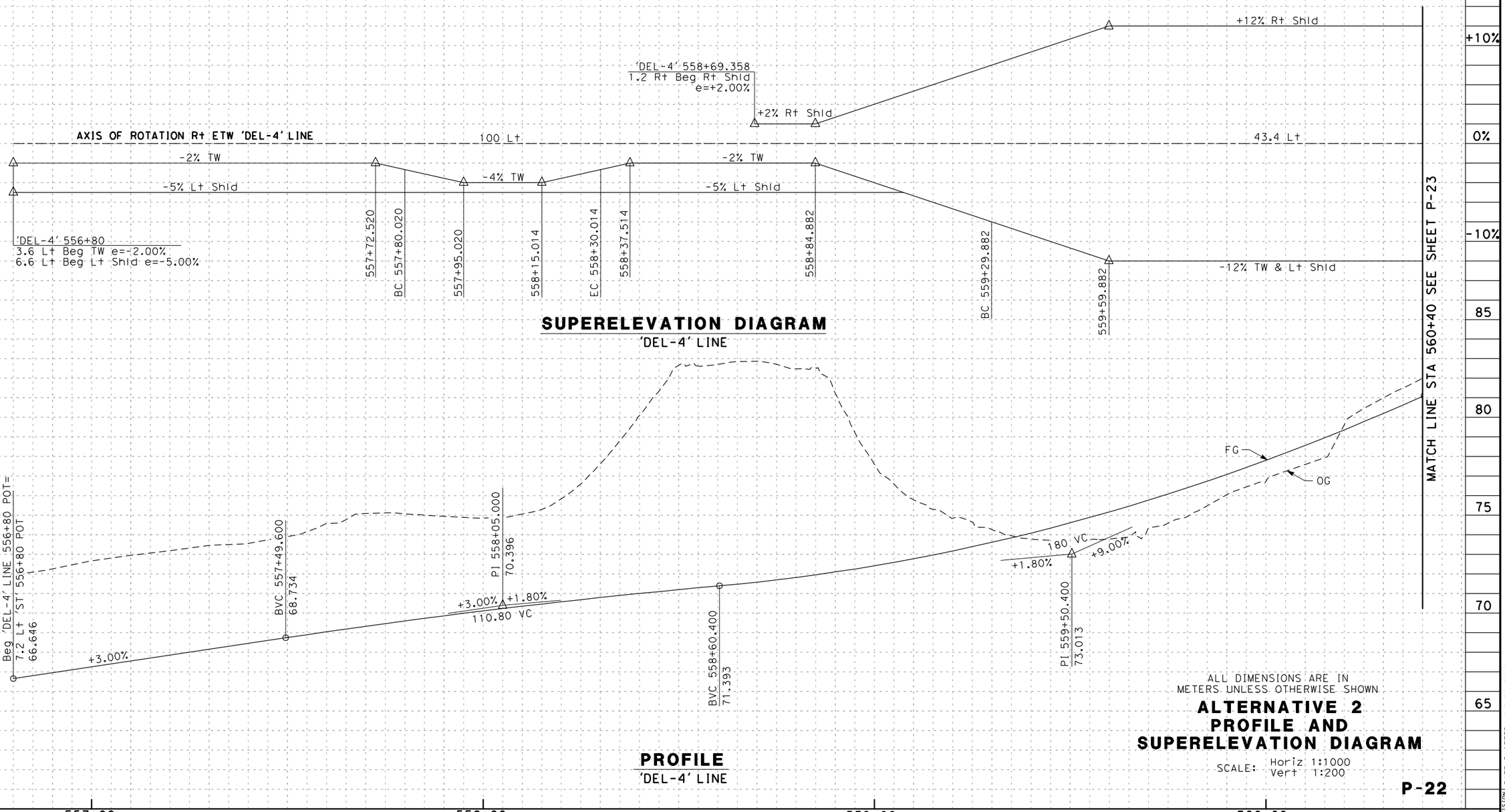
Caltrans

SUPERELEVATION DIAGRAM
'DEL-4' LINE



PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-22

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:40 PM

BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb022_alt2.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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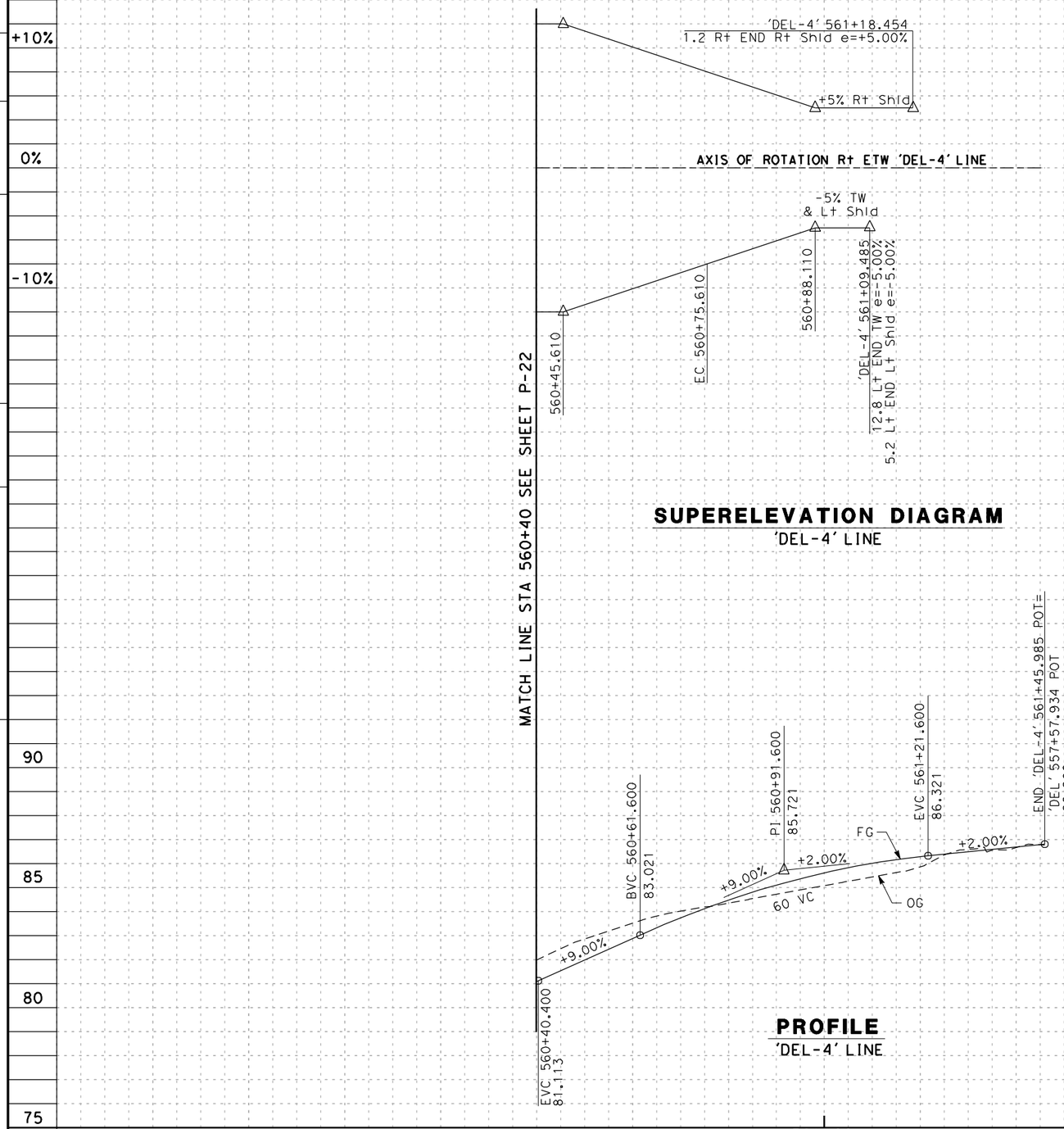

SUPERELEVATION DIAGRAM
'DEL-4' LINE

PROFILE
'DEL-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-23

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

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Station | m³ Exc | Emb

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:41 PM

LAST REVISION 00-00-00

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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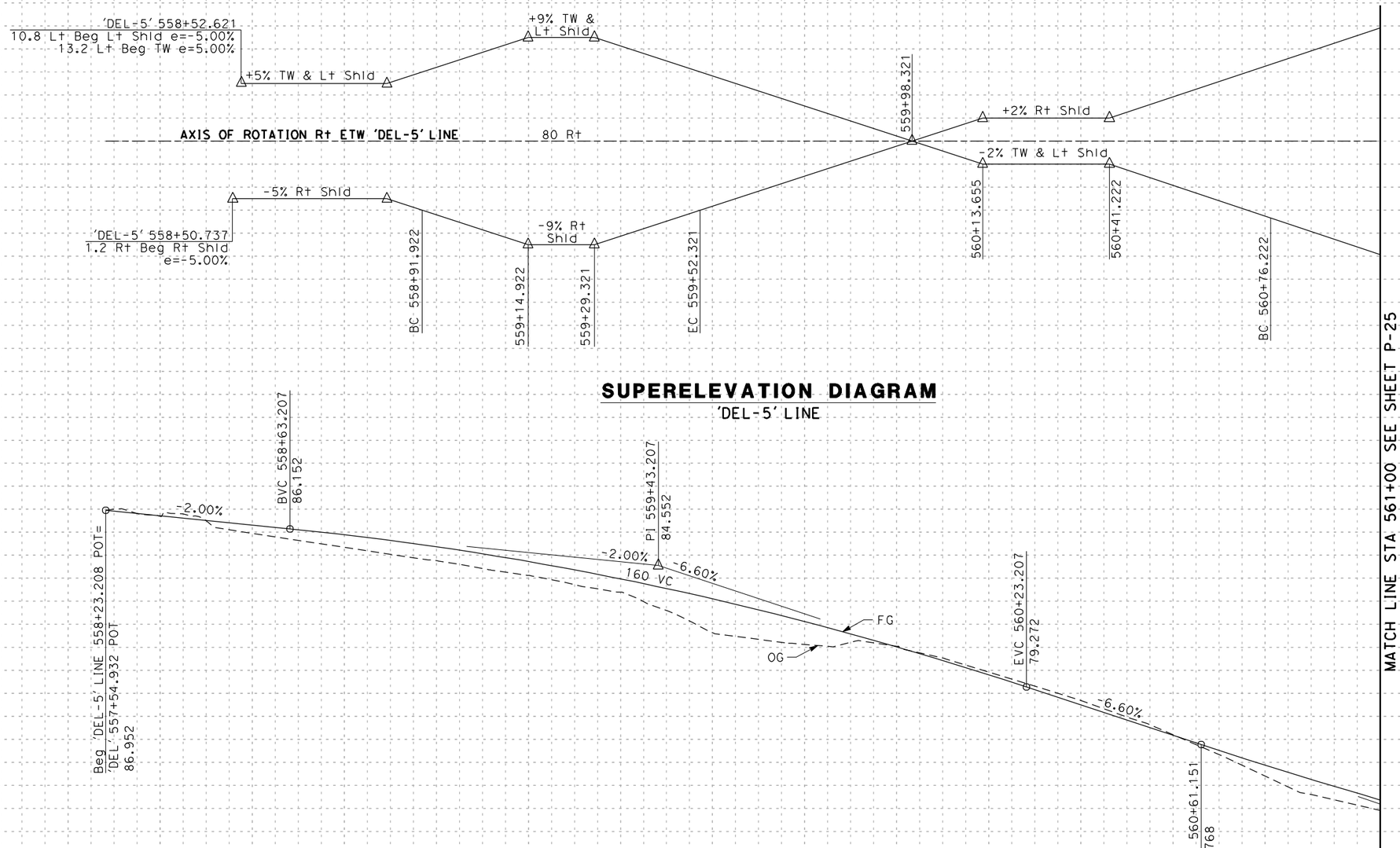
Caltrans

SUPERELEVATION DIAGRAM
'DEL-5' LINE



PROFILE
'DEL-5' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-24

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:42 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb024_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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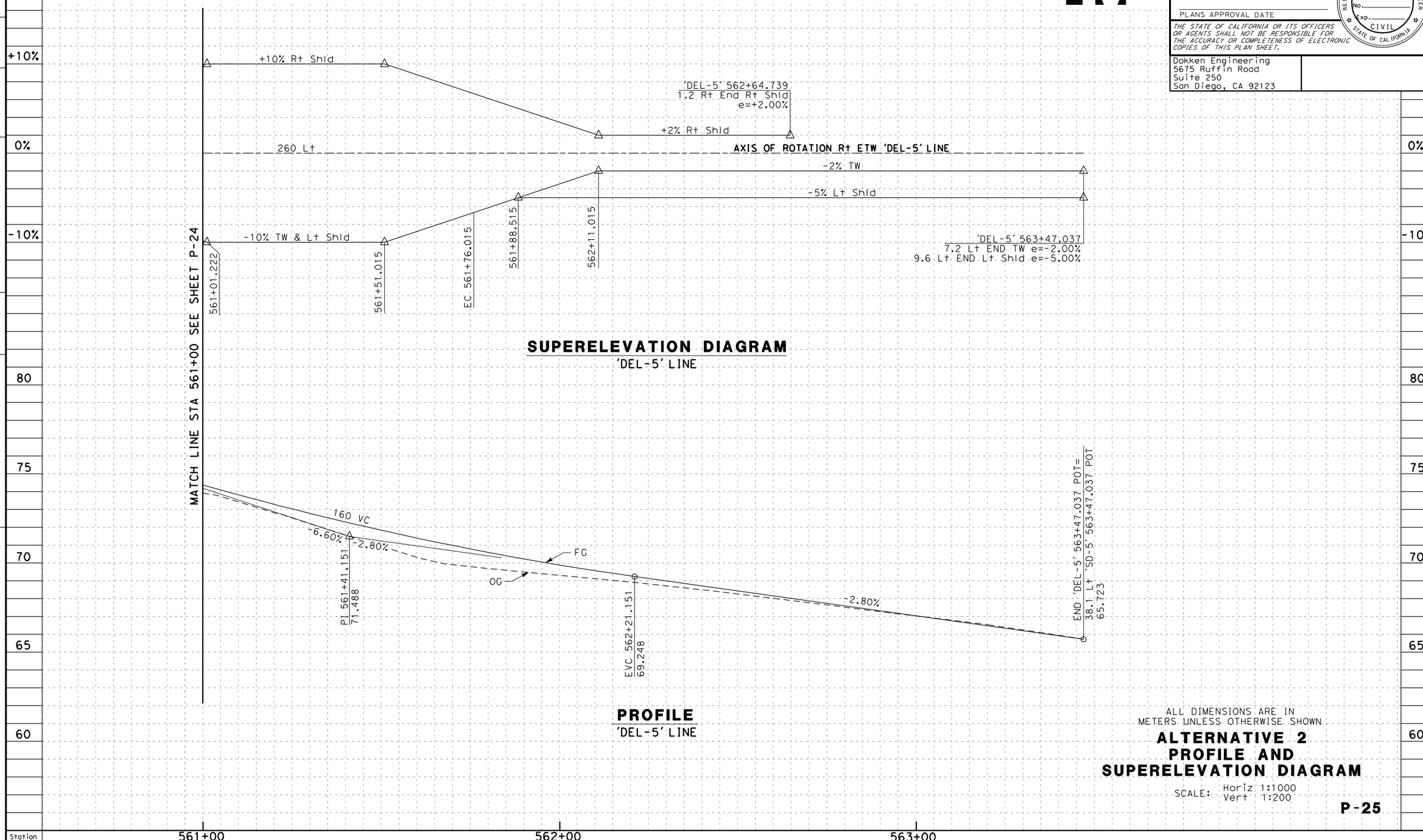

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-25

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR

CALCULATED-DESIGNED BY

CHECKED BY

REVISED BY

DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:43 PM

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

'CV-1' 539+89.749
1.2 Lt Beg Lt Shld
e=+2.00%
MATCH Exist

+6% Lt Shld

541+20.283

+2% Lt Shld

580 Rt

AXIS OF ROTATION Lt ETW 'CV-1' LINE

-2% TW

-5% Rt Shld

-6% TW & Rt Shld

'CV-1' 540+04.756
7.2 Rt Beg TW
10.2 Rt Beg Rt Shld
e=-2.98%
MATCH Exist

BC 540+16.172

540+31.172

540+80.283

540+90.783

EC 541+05.283

541+99.870

MATCH LINE STA 542+35 SEE SHEET P-27

SUPERELEVATION DIAGRAM
'CV-1' LINE

Beg 'CV-1' LINE 539+60.741 POT=
'CVR' 540+09.568 POT
8.746
MATCH Exist

PI 539+80.741
8.657

PI 540+00.741
8.906

PI 540+20.741
9.590

'CV-1' 540+40.741 PI
10.762
MATCH Exist

BVC 540+59.524
11.889

PI 541+37.524
16.569

EVC 542+15.524
19.533

-0.45 % +1.25 % +3.42 % +5.86 % +6.00 % +6.00 % +3.80 %

156 VC

OG

FG

25 20 15 10 5

Station 540+00 541+00 542+00

m³ Exc Emb

PROFILE
'CV-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-26

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:44 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb026_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

1.2 Lt 'CV-1' 542+41.431
END Lt Shld
e=+2.00%

BC 543+42.370

543+57.370

'CV-1' 544+28.983 EC
3.6 Rt END TW
6.6 Rt END Rt Shld
e=+2.00%

+2% TW & Rt Shld

AXIS OF ROTATION Lt ETW 'CV-1' LINE

1507.2 Lt

542+67.370

SUPERELEVATION DIAGRAM
'CV-1' LINE

MATCH LINE STA 542+35 SEE SHEET P-26

PRVC 543+42.212
25.051

PI 543+74.212
26.971

EVC 544+06.212
28.475

+4.70 %

+6.00 %

64 VC

FG

OG

+3.80 %

+6.00 %

64 VC

END 'CV-1' 544+28.983 EC=
7.2 Rt 'NT' 544+28.983 EC
29.546

BVC 542+78.212
21.915

PI 543+10.212
23.131

30 25 20 15 10

Station
m^3 Exc
Emb

543+00 544+00

PROFILE
'CV-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-27

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:45 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb027_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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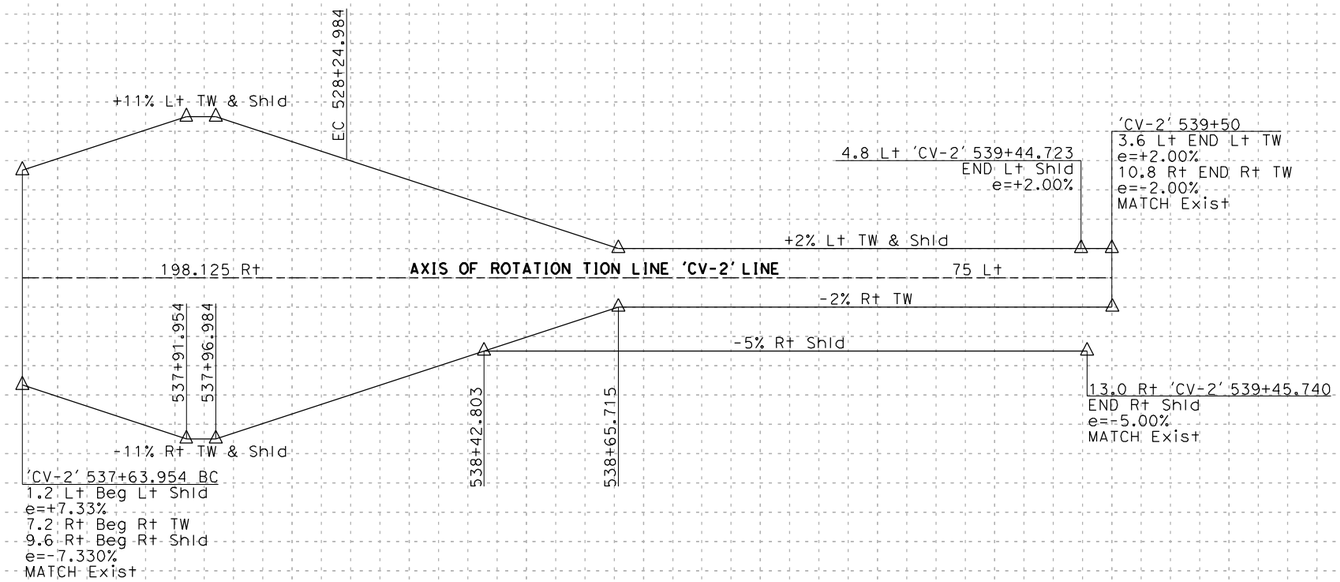
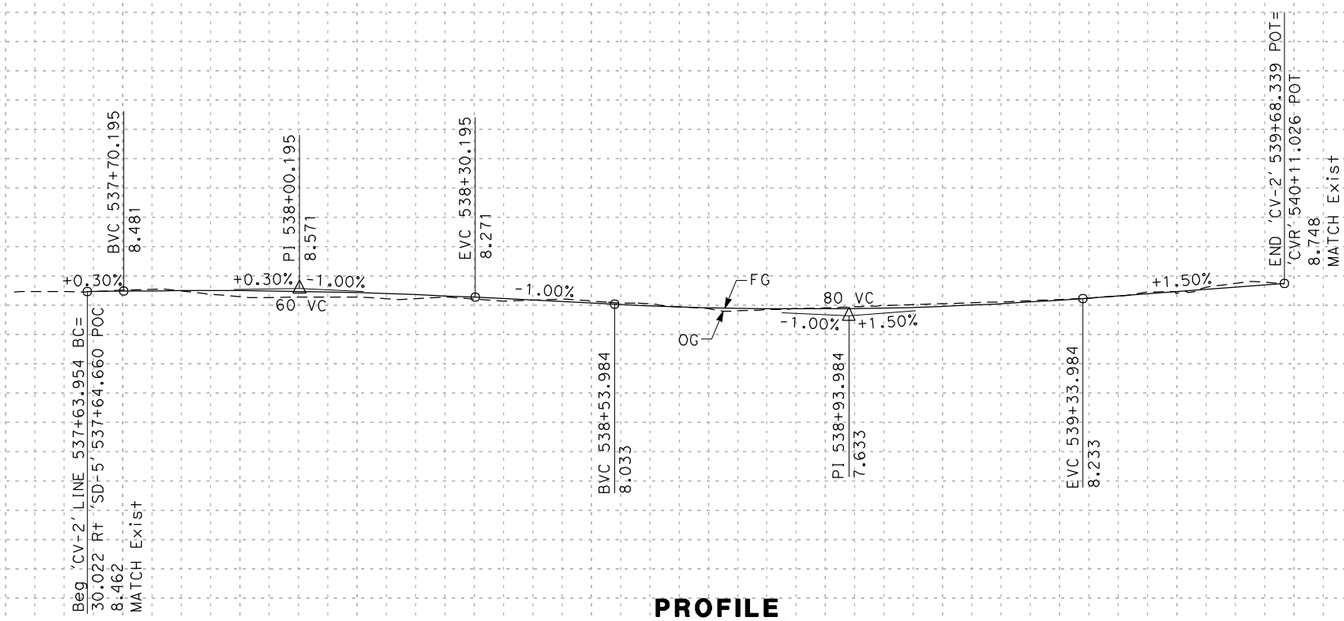


SUPERELEVATION DIAGRAM
'CV-2' LINE



PROFILE
'CV-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-28

Station 538+00 539+00 540+00

m³ Exc Emb

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR

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DATE REVISED

LAST REVISION 00-00-00

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:46 PM

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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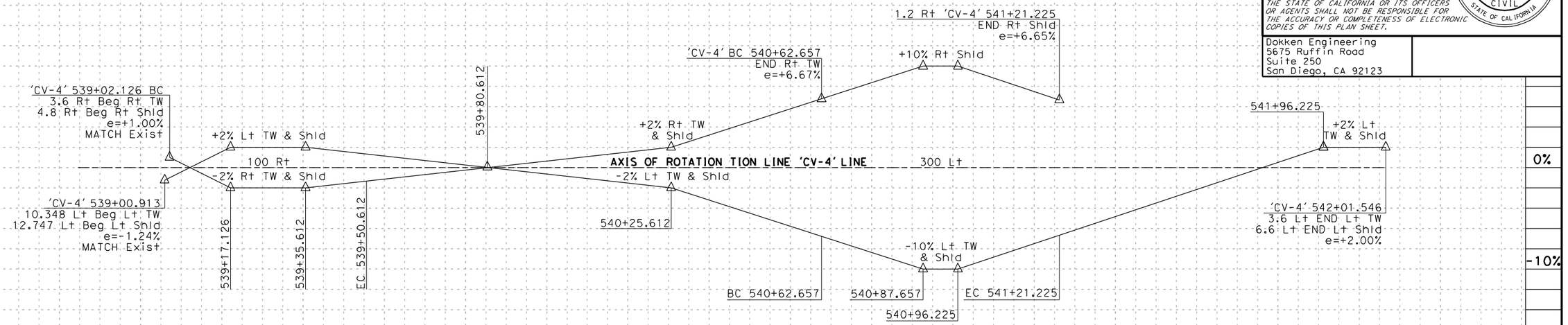
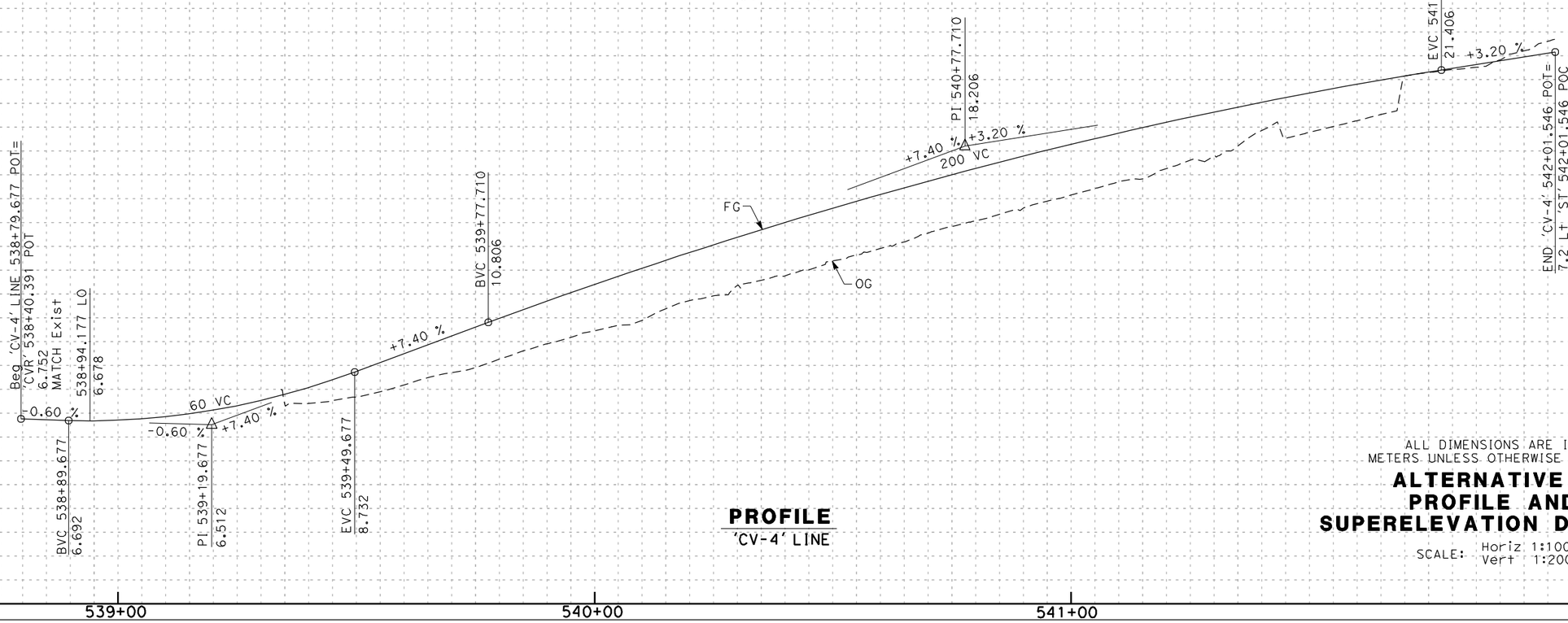
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans



SUPERELEVATION DIAGRAM
'CV-4' LINE



PROFILE
'CV-4' LINE

Station	539+00	540+00	541+00
m^3 Exc			
m^3 Emb			

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-29

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:02:47 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb029_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

'NT' 539+80.097
1.5 Lt Beg Lt Shld
7.2 Rt Beg TW
10.2 Rt Beg Rt Shld
e=+0.00%
MATCH Exist

+9% Lt Shld

AXIS OF ROTATION Lt ETW 'NT' LINE 350 Rt

-9% TW & Rt Shld

10.2 Rt 'NT' 542+42.800
END Rt Shld
e=+2.00%

+2% TW & Rt Shld

1500 Lt

-2% Lt Shld

BC 540+00.740

540+33.740

540+93.378

EC 541+26.378

541+92.917

BC 542+22.918

542+37.918

MATCH LINE STA 543+20 SEE SHEET P-31

+10%
0%
-10%

SUPERELEVATION DIAGRAM
'NT' LINE

Beg 'NT' LINE 539+80.097 POT=
51.654 Rt 'SD-5' 539+85.501 POC
16.916
MATCH Exist

+2.00 %

BVC 540+13.927
17.593

PI 540+63.927
18.593

+2.00 %
+0.30 %
100 VC

OG

FG

EVC 541+13.927
18.743

+0.30 %

BVC 541+54.927
18.866

OG

FG

172 VC
+0.30 %
+6.00 %

PI 542+40.927
19.124

30
25
20
15
10

Station
540+00
541+00
542+00
543+00

m³ Exc
Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PROFILE
'NT' LINE

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-30

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:49 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb030_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

MATCH LINE STA 543+20 SEE SHEET P-30

10.8 Rt 'NT' EC 544+28.983
Beg Rt Shld
e=+1.33%

544+68.982
544+71.982

'NT' 546+42.080
10.8 Rt END TW
13.8 Rt END Rt Shld
e=+2.00%

+2% TW & Rt Shld

AXIS OF ROTATION Lt ETW 'NT'LINE

200 Rt
-2% TW &
Rt Shld

1.5 Lt 'NT' 544+39.240
END Lt Shld
e=-0.87%

544+13.983 | EC 544+28.983 | BC 544+91.983 | 545+03.983 | 545+03.983 | EC 545+36.573 | 546+11.573

SUPERELEVATION DIAGRAM
'NT' LINE

PVRC 543+26.927
24.284

PI 544+09.927
29.264

+6.00 % +3.10 %
166 VC

FG

OG

EVC 544+92.927
31.837

+3.10 % +3.50 % +3.30 % +2.90 %

PI 545+54.493
33.906

PI 545+94.493
35.226

PI 545+14.492
32.506

END 'NT' 546+42.080 POT=
3.6 Rt 'WN' 546+42.080 POT
36.606

PROFILE
'NT' LINE

Station: 544+00 | 545+00 | 546+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-31

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:50 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb031_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

'ST' BC 539+47.763
1.5 Rt Beg Rt Shld
e=+2.00%
7.2 Lt Beg TW
e=-2.00%
10.2 Lt Beg Lt Shld
e=-2.00%
MATCH Exist

+3% Rt Shld
AXIS OF ROTATION Rt ETW 'ST' LINE 1200 Lt
-3% TW
-5% Lt Shld

539+62.763
539+92.763
540+71.632
541+01.632
EC 541+16.632
10.211 Lt 'ST' 541+21.654
END Lt Shld
e=-1.67%
BC 541+76.654
541+46.633
541+76.633

13.8 Lt 'ST' 542+01.546
Beg Lt Shld
e=+2.00%
+2% TW
AXIS OF ROTATION Rt ETW 'ST' LINE 1663.8 Rt

SUPERELEVATION DIAGRAM
'ST' LINE

'ST' 539+47.763 POC =
32.342 Lt 'SD-5' 539+46.168 POC
17.050
MATCH Exist

-0.46% -0.38% +1.01% +2.02% +2.46% +2.30% +2.32% +1.93% +2.95% +2.50% +2.81% +2.43% +2.66% +2.93% +2.53% +2.44% +2.79%

PI 539+65.000 16.971
PI 539+80.000 16.914
PI 540+00.000 17.116
PI 540+20.000 17.520
PI 540+40.000 18.012
PI 540+60.000 18.473
PI 540+80.000 18.936
PI 541+00.000 19.323
PI 541+20.000 19.913
PI 541+40.000 20.414
PI 541+60.000 20.977
PI 541+80.000 21.462
PI 542+00.000 21.994
PI 542+20.000 22.580
PI 542+40.000 23.086
PI 542+60.000 23.574
PI 542+80.000 24.133

FG
OG

MATCH LINE STA 542+80 SEE SHEET P-33

PROFILE
'ST' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-32

Station: 540+00 | 541+00 | 542+00

m^3 Exc
m^3 Emb

LAST REVISION 00-00-00
DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:51 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb032_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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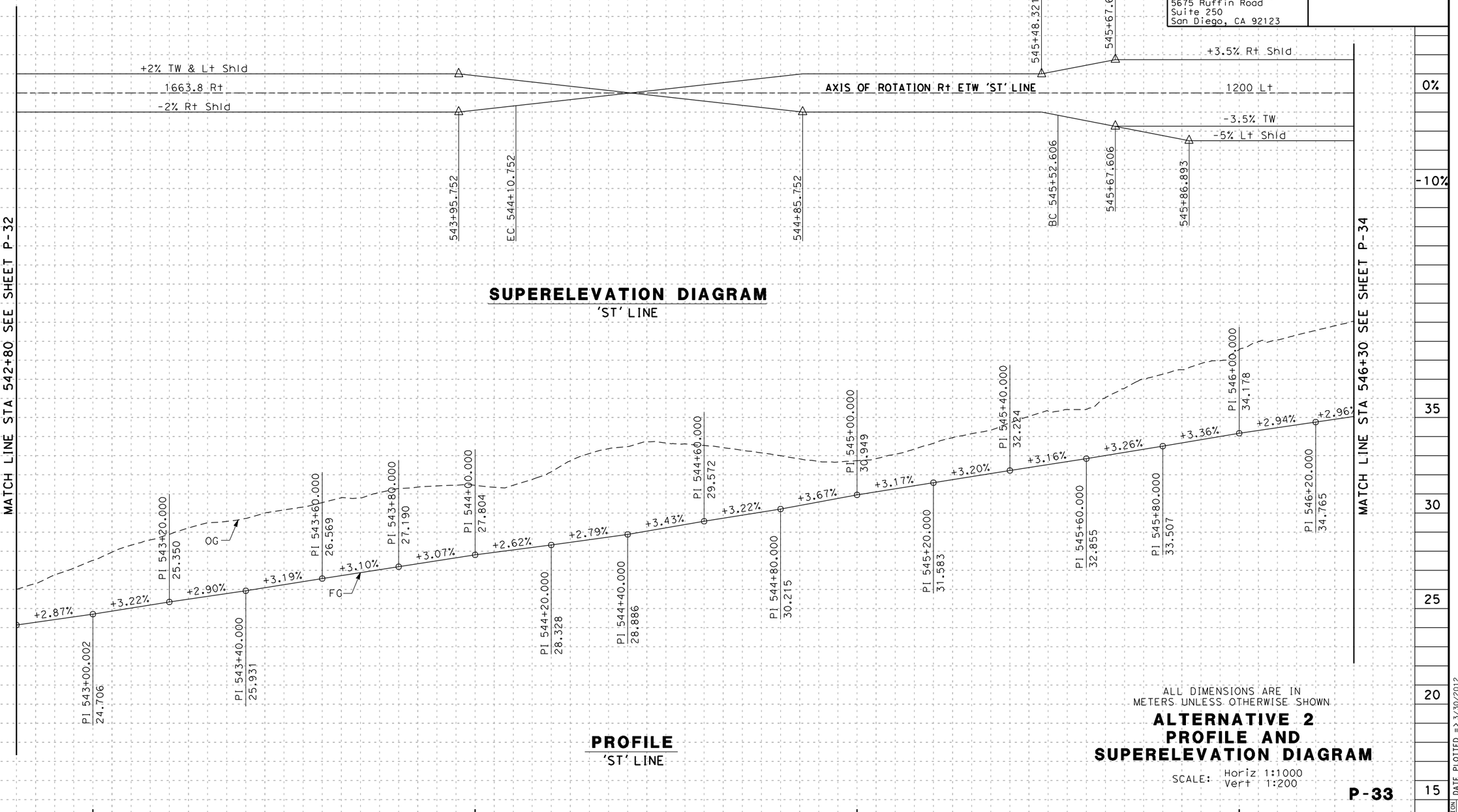
Caltrans

SUPERELEVATION DIAGRAM
'ST' LINE



PROFILE
'ST' LINE

Station	543+00	544+00	545+00	546+00
m^3 Exc				
m^3 Emb				

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-33

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:52 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb033_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

+3.5% Rt Shld

3011.8 Lt

-3.5% TW

-5% Lt Shld

PCC 546+52.455

EC 548+41.175

MATCH LINE STA 546+30 SEE SHEET P-33

MATCH LINE STA 549+80 SEE SHEET P-35

SUPERELEVATION DIAGRAM
'ST' LINE

OG

FG

PI 546+40.000 35.357

PI 546+60.000 35.957

PI 546+80.000 36.517

PI 547+00.000 37.210

PI 547+20.000 37.827

PI 547+40.000 38.444

PI 547+60.000 39.022

PI 547+80.000 39.610

PI 548+00.000 40.244

PI 548+20.000 40.874

PI 548+40.000 41.461

PI 548+60.000 42.033

PI 548+80.000 42.618

PI 549+00.000 43.236

PI 549+20.000 43.817

PI 549+40.000 44.382

PI 549+60.000 45.042

PI 549+80.000 45.595

+3.00% +2.80% +3.46% +3.09% +3.09% +2.89% +2.94% +3.17% +3.15% +2.94% +2.86% +2.92% +3.09% +2.90% +2.83% +3.30% +2.76%

Station: 547+00 548+00 549+00

m³ Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN.

PROFILE
'ST' LINE

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-34

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:53 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb034_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

+3.5% Rt Shld

AXIS OF ROTATION Rt ETW 'ST' LINE

-3.5% TW

-5% Lt Shld

MATCH LINE STA 549+80 SEE SHEET P-34

MATCH LINE STA 553+30 SEE SHEET P-36

SUPERELEVATION DIAGRAM
'ST' LINE

OG

FG

PI 550+00.000 46.252
PI 550+20.000 46.866
PI 550+40.000 47.418
PI 550+60.000 47.971
PI 550+80.000 48.635
PI 551+00.000 49.224
PI 551+20.000 49.785
PI 551+40.000 50.404
PI 551+60.000 51.067
PI 551+80.000 51.715
PI 552+00.000 52.214
PI 552+20.000 52.826
PI 552+40.000 53.387
PI 552+60.000 54.084
PI 552+80.000 54.665
PI 553+00.000 55.267
PI 553+20.000 55.854

+3.29% +3.07% +2.76% +2.76% +3.32% +2.95% +2.81% +3.09% +3.32% +3.24% +2.49% +3.06% +2.80% +3.48% +2.91% +3.01% +2.94% +2.79%

55
50
45
40

Station: 550+00 551+00 552+00 553+00

m³ Exc Emb

PROFILE
'ST' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-35

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:02:54 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb035_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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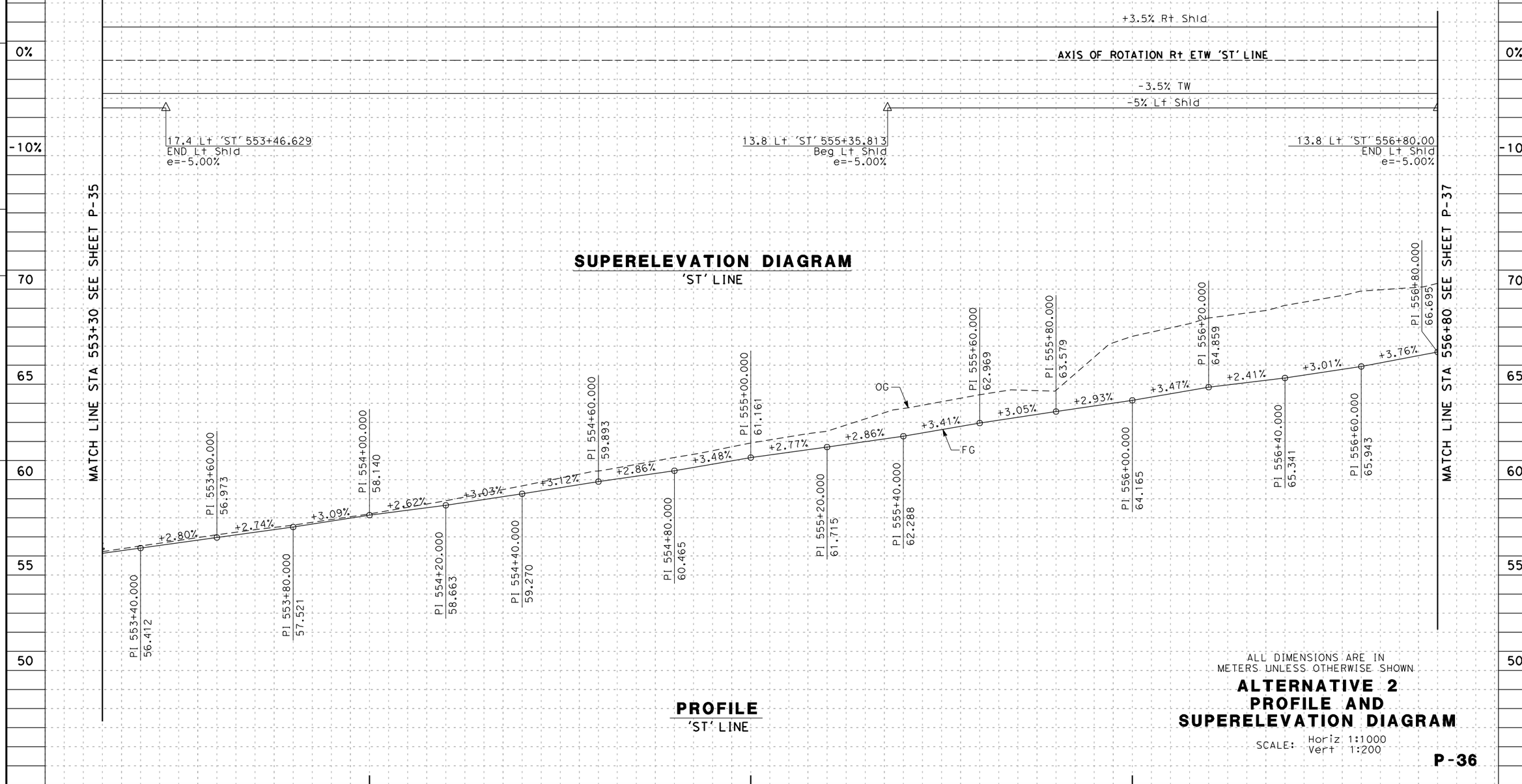

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-36

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR | CALCULATED-DESIGNED BY | CHECKED BY | REVISED BY | DATE REVISED

DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:02:55 PM

LAST REVISION 00-00-00

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

MATCH LINE STA 556+80 SEE SHEET P-36

10.2 Lt 'ST' 558+69.186
Beg Lt Shld
e=+.43%

BC 558+89.432

559+04.432
+2% TW & Lt Shld

559+38.616

EC 559+53.616

1370 Rt

AXIS OF ROTATION Rt ETW 'ST' LINE

557+80.682

2.778 Rt 'ST' 559+14.132
END Rt Shld
e=-2.00%

560+28.616

'ST' 560+50.097
10.2 Lt END Lt Shld
e=-2.95%
7.2 Lt END TW
e=-2.00%

SUPERELEVATION DIAGRAM
'ST' LINE

75
70
65
60

PI 557+00.000
67.274

PI 557+20.000
67.800

PI 557+40.000
68.379

PI 557+60.000
68.951

PI 557+80.000
69.440

PI 558+00.000
70.028

PI 558+20.000
70.464

PI 558+40.000
70.897

PI 558+60.000
71.246

PI 558+80.000
71.592

PI 559+00.000
71.945

PI 559+20.000
72.200

PI 559+40.000
72.413

PI 559+60.000
72.541

PI 559+80.000
72.639

PI 560+00.000
72.573

PI 560+20.000
72.670

PI 560+35.000
72.747

END 'ST' 560+50.097 POT=
29.377 Lt+ 'SD-5' 560+50.097 POT
72.728

+2.89% +2.63% +2.89% +2.86% +2.44% +2.94% +2.18% +2.16% +1.75% +1.73% +1.77% +1.27% +1.06% +0.64% +0.49% -0.33% +0.48% +0.51% -0.30%

FG FG OG

Station: 557+00 | 558+00 | 559+00 | 560+00

m³ Exc
m³ Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PROFILE
'ST' LINE

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-37

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:56 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb037_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

+12% Rt Shld

1.2 Rt 'CC-4' 39+49.464
Beg Rt Shld
e=+10.56%

AXIS OF ROTATION Rt ETW 'CC-4' LINE

1150 Lt 44.196 Lt

-2% TW

-5% Lt Shld

'CC-4' 37+76.104
3.6 Lt Beg TW
e=-2.00%
6.6 Lt Beg Lt Shld
e=-5.00%

BC 38+80.198

39+04.419

PCC 39+60.933

-12% TW & Lt Shld

40+67.219

'CC-4' 40+83.185
10.973 Lt END Lt Shld
8.534 Lt END TW
e=-10.00%
1.219 Rt END Rt Shld
e=+10.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CC-4' LINE

PROFILE
'CC-4' LINE

Beg 'CC-4' LINE 37+76.104 POT=
17.7 Lt 'SD-56' 37+76.104 POT
29.204

+1.00%

BVC 38+81.140
30.255

OG

FG

198 VC

+1.00%

+7.74%

PI 39+80.140
31.245

+7.74%

EVC 40+79.140
38.907

'CC-4' 40+83.185
39.220
MATCH Exist

+6.11 %

PI 41+03.185
40.442

+3.29 %

PI 41+23.185
41.101

+1.13 %

PI 41+43.185
41.326

40 35 30 25

Station 38+00 39+00 40+00 41+00

m^3 Exc Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-38

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:02:57 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb038_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%

0%

-10%

'CC-3' 35+56.291 BC
7.2 Rt Beg TW
9.6 Rt Beg Rt Shld
e=+6.00%

+6% TW & Rt Shld

AXIS OF ROTATION Lt ETW 'CC-3' LINE

36+95.360

+2% Lt Shld

-2% TW

-5% Rt Shld

'CC-3' 37+70.621
1.2 Lt END Lt Shld
e=+2.00%
10.8 Rt END TW
e=-2.00%
12.0 Rt END Rt Shld
e=-5.00%
MATCH Exist

-6% Lt Shld

'CC-3' 36+39.051
1.2 Lt
Beg Lt Shld
e=-6.00%

36+50.360

EC 36+65.360

37+10.360

37+32.860

SUPERELEVATION DIAGRAM
'CC-3' LINE

40

35

30

Beg 'CC-3' LINE 35+56.291 BC=
19.202 Rt 'SD-56' 35+56.292 POC
29.721
MATCH Exist

+0.80 %

OG

FG

60 VC

+0.80% +1.50%

+1.50 %

'CC-3' 37+70.621
31.950
MATCH Exist

+1.71 %

+1.89 %

+1.78 %

+1.98 %

+2.11 %

+2.24 %

+1.63 %

END 'CC-3' 39+16.361 POT=
'CCO' 19+25.394 POC
34.713

BVC 36+67.061
30.607

PI 36+97.061
30.847

EVC 37+27.061
31.297

PI 37+90.621
32.293

PI 38+10.621
32.671

PI 38+30.621
33.027

PI 38+50.621
33.422

PI 38+70.621
33.845

PI 38+90.621
34.293

PROFILE
'CC-3' LINE

Station: 36+00 | 37+00 | 38+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-39

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:02:59 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb039_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% 0% -10%

'CC-2' 39+40
1.2 Lt Beg Lt Shld e=+3.5%
7.2 Rt Beg TW e=-3.5%
9.9 Rt Beg Rt Shld e=-3.5%
MATCH Exist

+2.0% Lt Shld | +10% Lt Shld

1.2 Lt 'CC-2' 41+41.982
END Lt Shld
e=+10.0%

AXIS OF ROTATION Lt ETW 'CC-2' LINE

300 Rt | 100 Rt

-2.0% TW | -5% Rt Shld | -10% TW & Rt Shld

39+59.286 | 40+08.717 | 40+31.217 | BC 40+43.717 | 40+68.717 | PCC 41+66.926 | 42+01.982 | EC 42+16.982 | 42+21.533

MATCH LINE STA 42+40 SHEET P-41

SUPERELEVATION DIAGRAM
'CC-2' LINE

39+63.264
35.650
+2.02 %
74 VC
PI 39+72.574
36.315
-4.80 %
PVRC 40+09.574
34.539
FG
166 VC
-4.80 %
+0.90 %
41+49.451
31.182
PI 40+92.626
30.552
EVC 41+75.678
31.300
+2.87 %

Beg 'CC-2' LINE 39+16.763 POT=
'CCO' 19+25.394 POC
34.713

'CC-2' 39+35.574
35.253
MATCH Exist

40 35 30 25

Station: 40+00 | 41+00 | 42+00

m³ Exc / Emb

PROFILE
'CC-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-40

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:03:00 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb040_alt2.dgn

CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

AXIS OF ROTATION Lt ETW 'CC-2' LINE

-2% TW

-5% Rt Shld

'CC-2' 43+17.003
6.0 Rt END Rt Shld
e=-5.00%
3.6 Rt END TW
e=-2.00%

MATCH LINE STA 42+40 SHEET P-40

+0.90 %

F.G.

END 'CC-2' 43+17.003 POT=
19.145 Rt 'SD-56' 43+17.003 POT
32.572

40
35
30
25

Station
m^3 Exc
Emb

43+00

SUPERELEVATION DIAGRAM
'CC-2' LINE

PROFILE
'CC-2' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-41

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:03:01 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb041_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10% | 0% | -10%

'C-1' 23+11.080
13.2 Lt Beg Lt Shld
10.8 Lt Beg TW
e=+0.3%
MATCH Exist

+8% TW & Lt Shld

24+42.312

+10% Rt Shld

+2% Rt Shld

100 Rt

AXIS OF ROTATION Rt ETW 'C-1' LINE

300 Lt

-2% TW

-5% Lt Shld

'C-1' 23+11.769
1.2 Rt Beg Rt Shld
e=-0.4%
MATCH Exist

-8% Rt Shld

-10% TW & Lt Shld

BC 23+41.722

23+58.354

23+82.312

EC 24+02.312

24+57.312

24+79.812

24+94.613

25+17.113

BC 25+29.613

25+54.613

MATCH LINE STA 26+00 SHEET P-43

SUPERELEVATION DIAGRAM
'C-1' LINE

30 | 25 | 20

'C-1' 23+11.769
26.508
MATCH Exist

-2.00 %

FG

OG

160 VC

-2.00% +0.50%

BVC 24+95.977
22.824

PI 25+75.977
21.224

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-42

PROFILE
'C-1' LINE

Station: 23+00 | 24+00 | 25+00 | 26+00

m³ Exc | Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:02 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb042_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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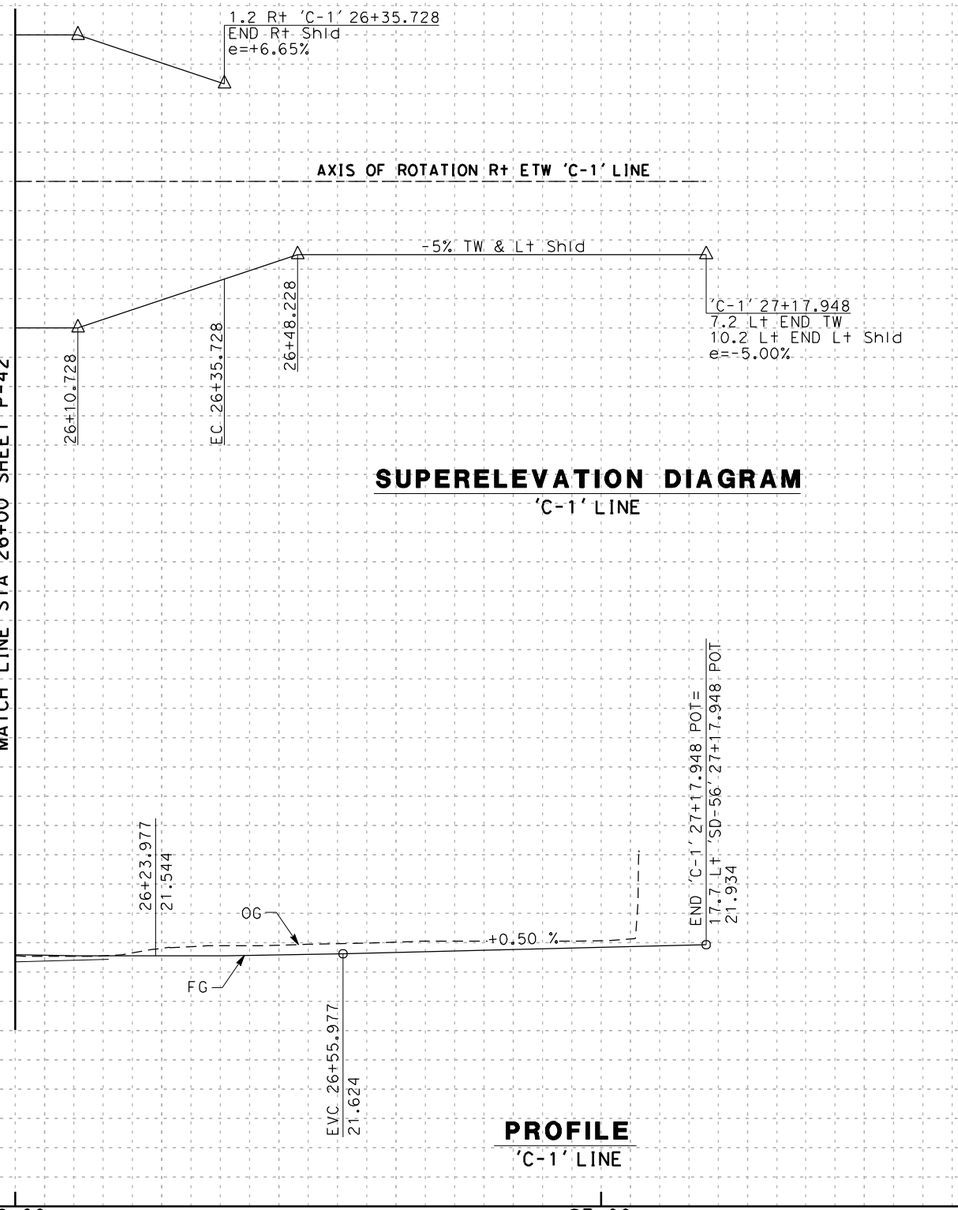
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans



SUPERELEVATION DIAGRAM
'C-1' LINE

PROFILE
'C-1' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-43

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:03 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb043_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

+10%
0%
-10%

1.2 Lt 'C-2' 23+47.211
Beg Lt Shld
e=+0.92%

+10% Lt Shld

1.2 Lt 'C-2' 25+37.935
END Lt Shld
e=+3.12%

23+38.618
23+23.089
+0.8% TW

+2% Lt Shld

300 Rt — AXIS OF ROTATION Lt ETW 'C-2' LINE — 100 Rt

-2% TW

10.2 Rt 'C-2' 23+48.280
Beg Rt Shld
e=-1.13%

-5% Rt Shld

-4% TW
-5% Rt Shld

-10% TW
& Rt Shld

BC 23+52.618
23+92.618
24+00.777
EC 24+25.777
24+38.277
24+60.777
25+24.996
BC 25+32.496
25+47.496
25+93.711

MATCH LINE STA 26+00 SHEET P-45

SUPERELEVATION DIAGRAM
'C-2' LINE

30
25
20

Beg 'C-2' LINE 23+23.089 POT=
'CCR' 19+46.745 POT
28.531
MATCH Exist

-2.00%
BVC 23+43.089
28.131
PI 23+73.089
27.531
-2.00%
-7.50%
60 VC
-7.50%
PRVC 24+03.089
25.281
OG
LO 25+15.937
21.050
137 VC
-7.50%
+1.60%
PI 24+71.550
20.147
EVC 25+40.011
21.242

PROFILE
'C-2' LINE

Station: 23+00 | 24+00 | 25+00 | 26+00

m³ Exc
m³ Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-44

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:04 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb044_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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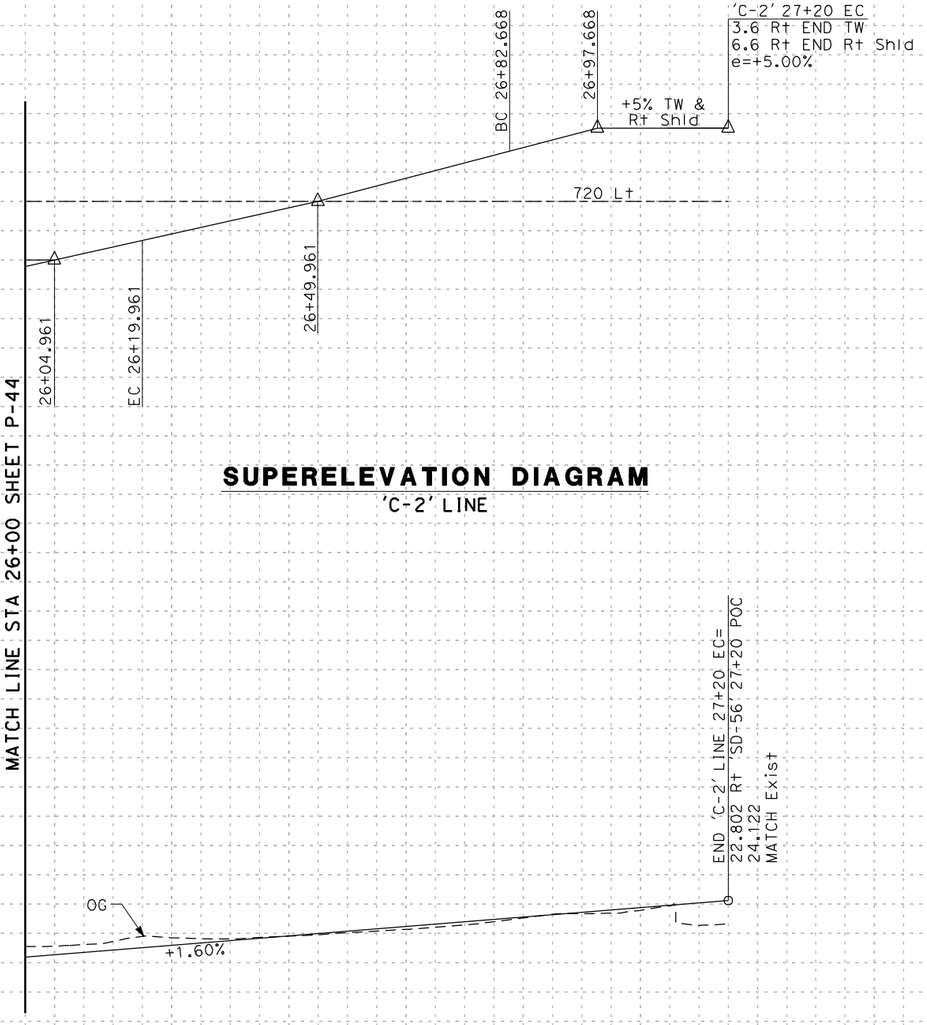

SUPERELEVATION DIAGRAM
'C-2' LINE

PROFILE
'C-2' LINE

Station 26+00 27+00

m³ Exc / Emb

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-45

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Caltrans

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BORDER LAST REVISED 3/1/2007 | RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80 | USERNAME => Merjad | DGN FILE => ...\1643fb045_alt2.dgn | CU 00000 | EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

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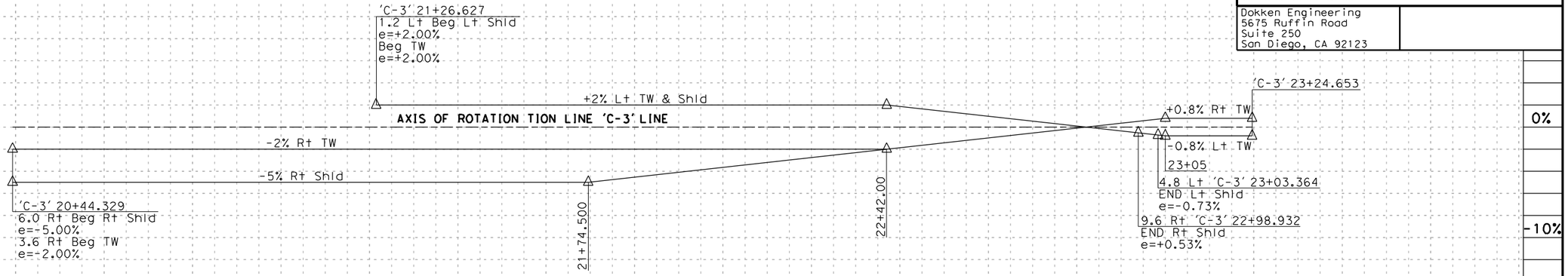
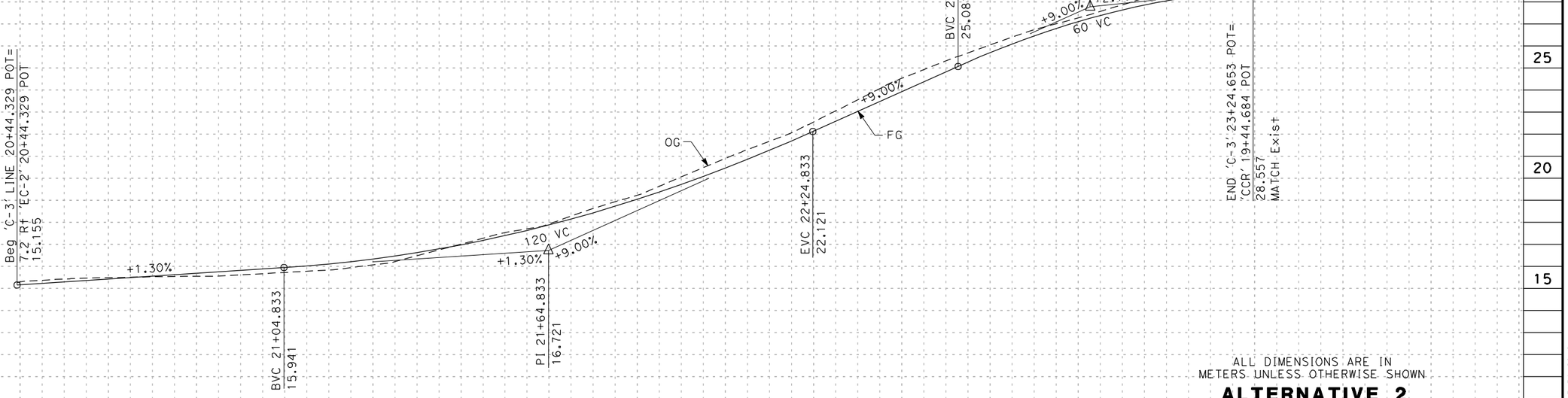
Caltrans

SUPERELEVATION DIAGRAM
'C-3' LINE



PROFILE
'C-3' LINE



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-46

Station
m^3 Exc
Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:07 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb046_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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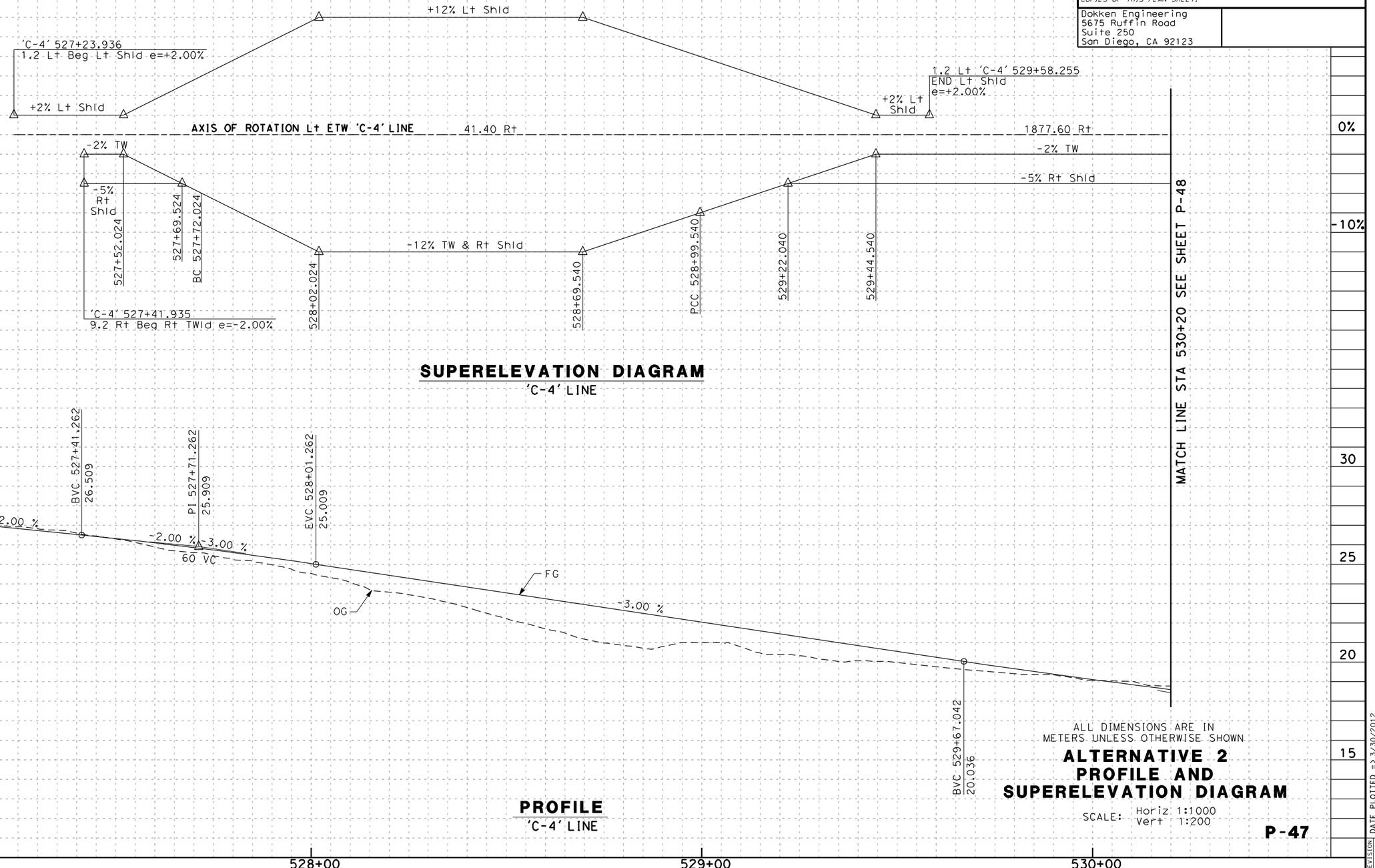
Caltrans



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-47

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:08 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb047_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

Caltrans Metric

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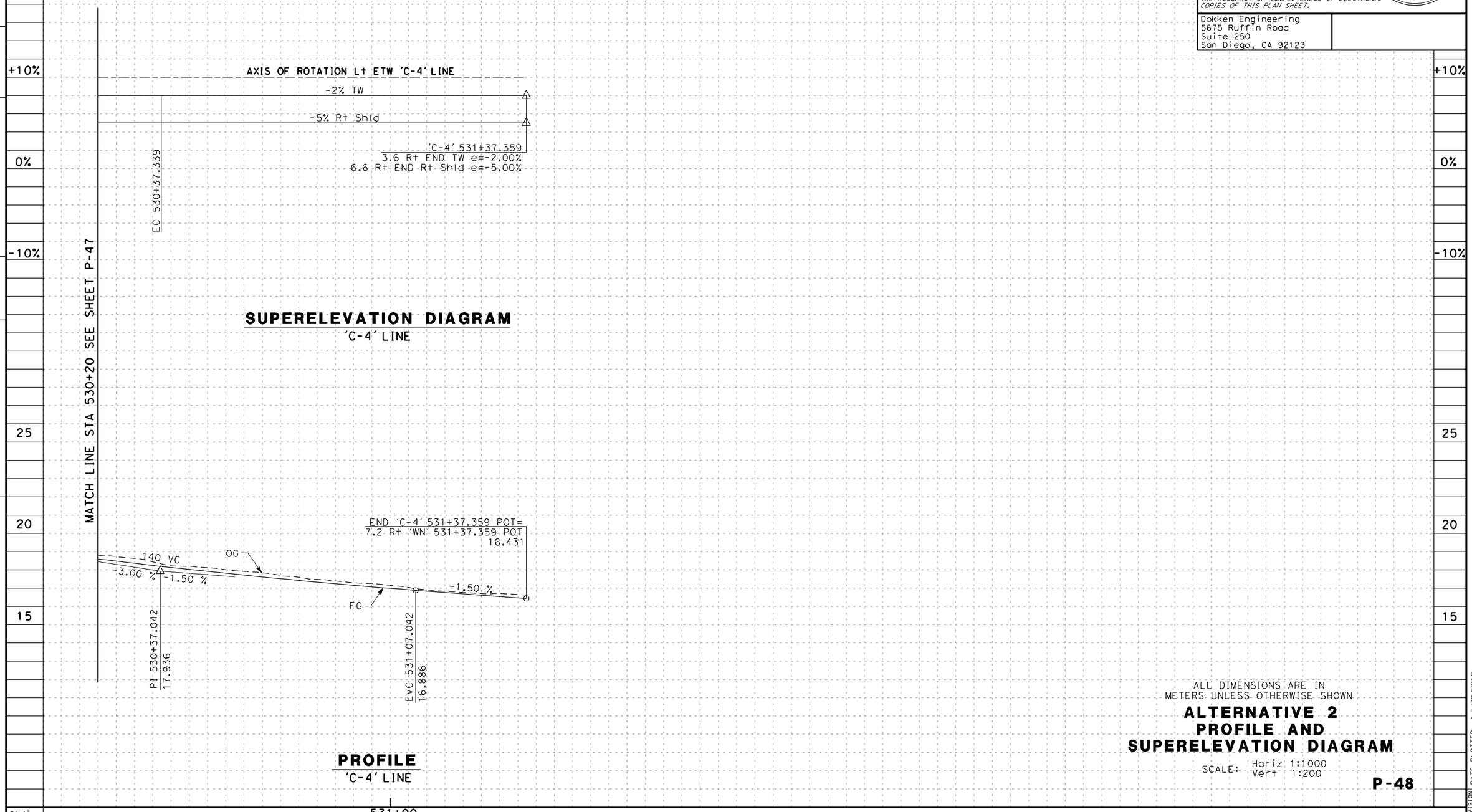

SUPERELEVATION DIAGRAM
'C-4' LINE

PROFILE
'C-4' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000 Vert 1:200

P-48

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DATE PLOTTED => 3/30/2012
TIME PLOTTED => 1:03:09 PM

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Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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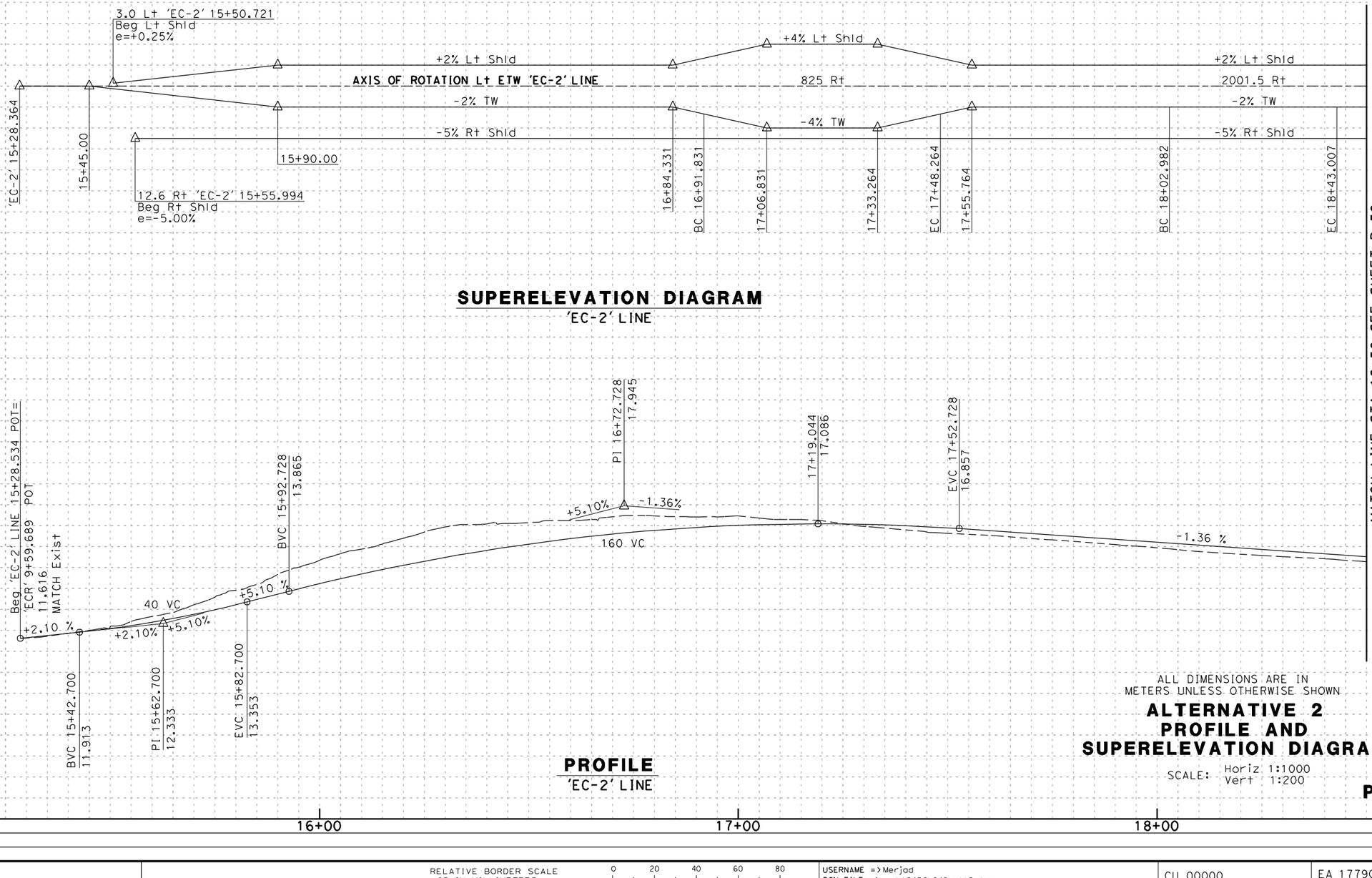

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-49

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:10 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb049_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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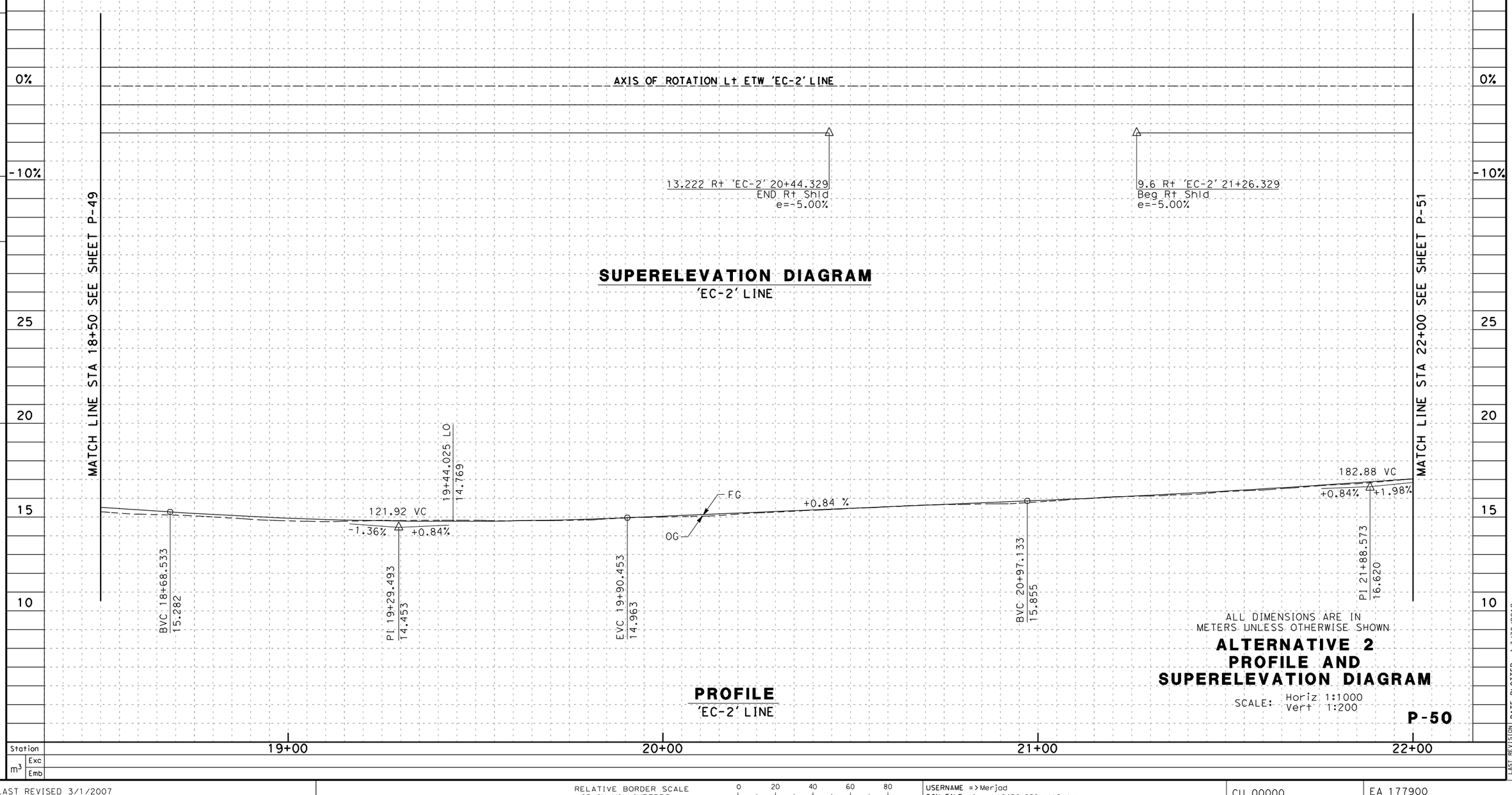

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2 PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-50

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 1:03:11 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb050_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

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Caltrans

+10% 0% -10%

MATCH LINE STA 22+00 SEE SHEET P-50

1.5 Lt 'EC-2' 23+34.073
END Lt Shld
e=+2.00%

+2% Lt Shld

AXIS OF ROTATION Lt ETW 'EC-2' LINE

800 Rt

-2% TW

-5% Rt Shld

-5% TW & Rt Shld

-2% TW

-5% Rt Shld

23+92.772

BC 24+04.772

24+19.772

24+84.371

EC 24+99.371

25+11.371

'EC-2' 25+31.443
3.6 Rt END TW
6.6 Rt END Rt Shld
e=-2.00%

SUPERELEVATION DIAGRAM
'EC-2' LINE

PI 22+89.157
18.613
157

PI 23+03.042
18.880

PI 23+23.042
19.240

PI 23+34.073
19.426

BVC 23+52.827
19.707

PI 24+27.827
20.832

+1.92 %

+1.80 %

+1.50 %

+1.50%

+0.60%

150 VC

+0.60 %

FG

OG

+1.98%

+1.69%

EVC 22+80.013
18.432

EVC 25+02.827
21.282

END 'EC-2' LINE 25+31.443 POT=
19.202 Rt 'SD-56' 25+31.443 POT
21.454
MATCH Exist

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

PROFILE
'EC-2' LINE

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-51

Station: 22+00 | 23+00 | 24+00 | 25+00

m^3 Exc / Emb

LAST REVISION 00-00-00 DATE PLOTTED => 3/30/2012 TIME PLOTTED => 11:03:12 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb051_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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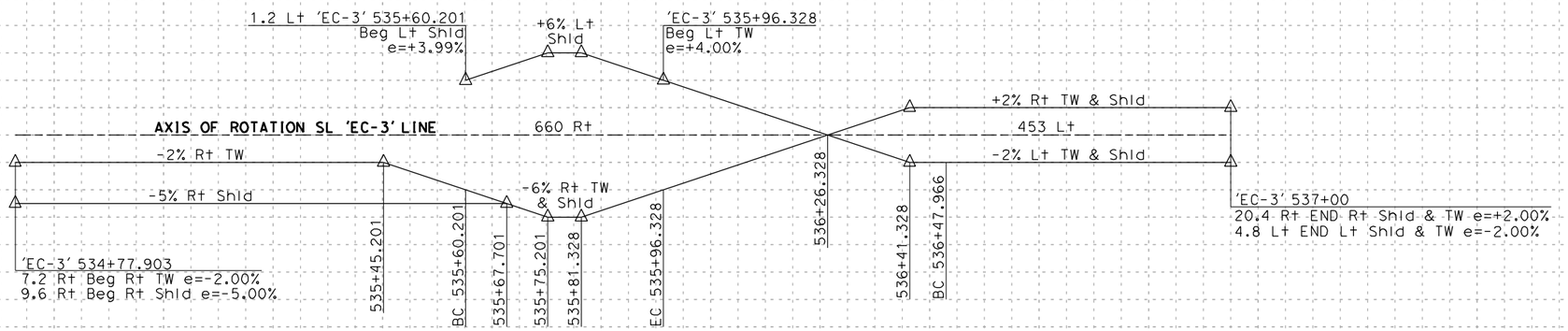
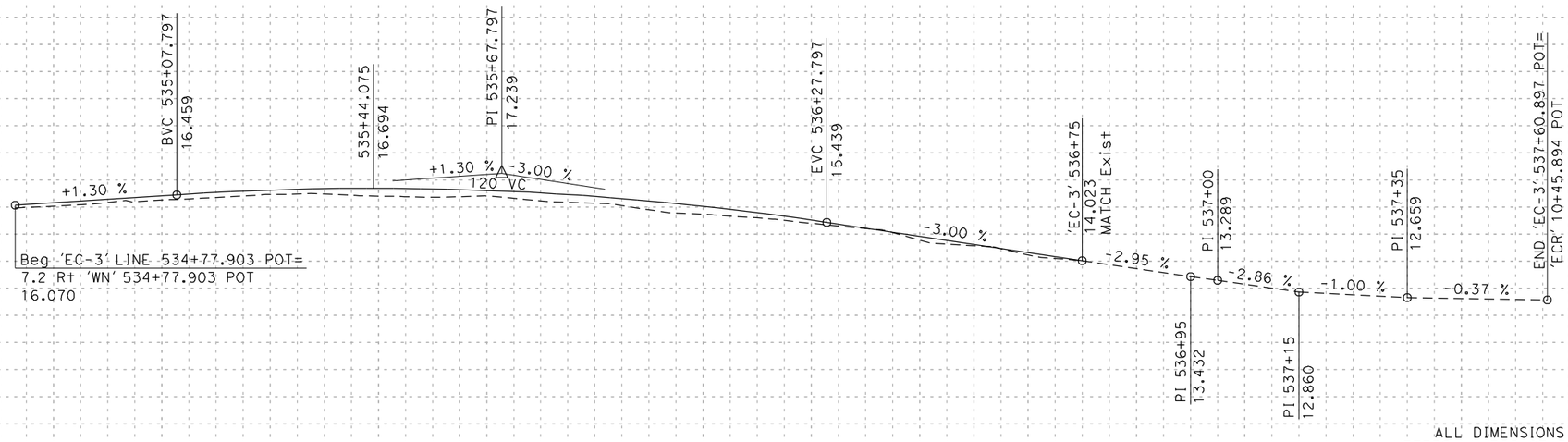


SUPERELEVATION DIAGRAM
'EC-3' LINE



PROFILE
'EC-3' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-52

+10% 0% -10%

20 15 10

Station: 535+00 536+00 537+00

m³ Exc / Emb

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Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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Caltrans

'POR' 542+60.000
Beg Lt Shld & TW
e=+2.00%
MATCH Exist

'POR' 542+60.000
Beg Rt Shld & TW
e=-2.00%
MATCH Exist

+2% Lt Shld & TW

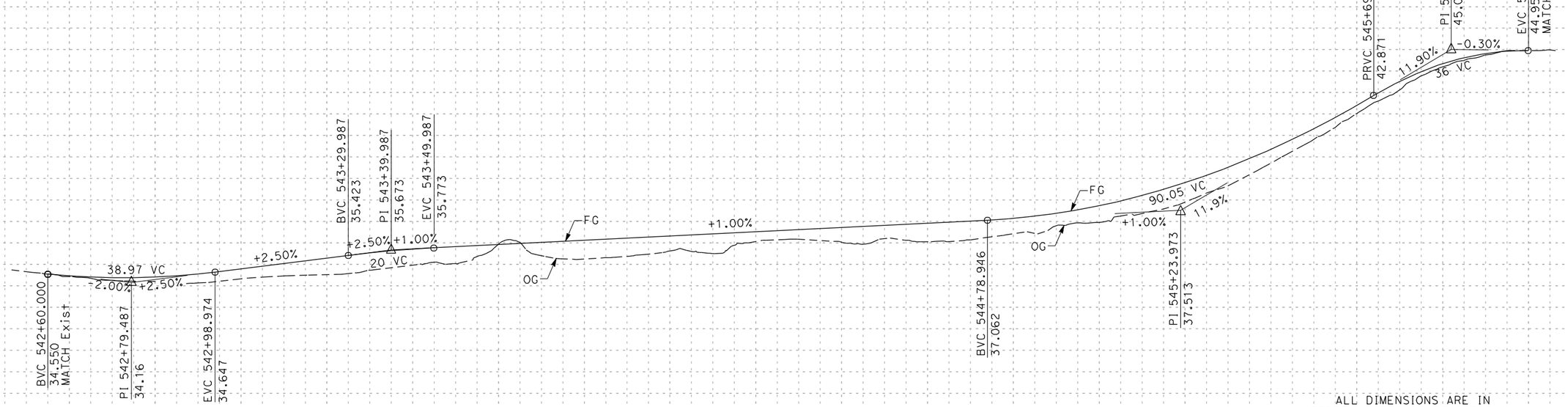
AXIS OF ROTATION CENTER LINE 'POR' LINE

-2% Rt Shld & TW

'POR' 546+05.000
END Lt Shld & TW
e=+2.00%
MATCH Exist

'POR' 546+05.000
END Rt Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'POR' LINE



PROFILE
'POR' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-53

Station: 543+00 | 544+00 | 545+00

m³ Exc / Emb

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 1:03:14 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb053_alt2.dgn

CU 00000

EA 177900

Dist	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	5/56	52.6/56.0, R0.0/R4.1		

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PLANS APPROVAL DATE

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Caltrans

+10%
0%
-10%

AXIS OF ROTATION CENTER LINE 'CVS' LINE

-2% Lt & Rt Shld & TW

'CVS' 541+77.000
Beg Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

'CVS' 543+83.533
END Lt & Rt Shld & TW
e=-2.00%
MATCH Exist

SUPERELEVATION DIAGRAM
'CVS' LINE

20
15
10
5

BVC 542+12.878
11.339

542+23.466
11.355

PI 542+42.878
11.429

EVC 542+72.878
11.009

543+36.082
10.267

'CVS' 543+83.533
11.015
MATCH Exist

+0.30 %
+0.30 %
-1.40 %
60 VC
-1.40 %
OG
FG
-1.40 %
60 VC
+2.70 %
+2.70 %

Beg 'CVS' LINE 541+77 POT=
8.679 Rt CVR' 541+77 POT
11.231

BVC 543+15.594
10.411

PI 543+45.594
9.991

EVC 543+75.594
10.801

Station: 543+00 | 544+00 | 545+00

m³ Exc / Emb

PROFILE
'CVS' LINE

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

ALTERNATIVE 2
PROFILE AND SUPERELEVATION DIAGRAM

SCALE: Horiz 1:1000
Vert 1:200

P-54

LAST REVISION 00-00-00 | DATE PLOTTED => 3/30/2012 | TIME PLOTTED => 11:03:16 PM

BORDER LAST REVISED 3/1/2007

RELATIVE BORDER SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => Merjad
DGN FILE => ...\1643fb054_alt2.dgn

CU 00000

EA 177900