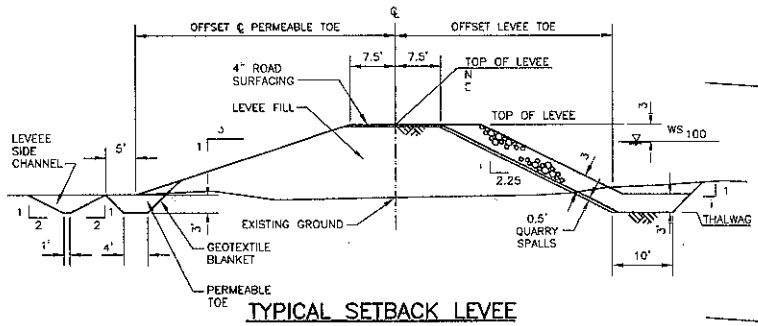
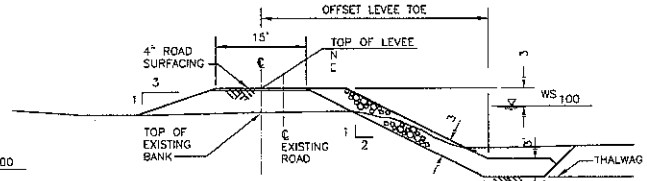
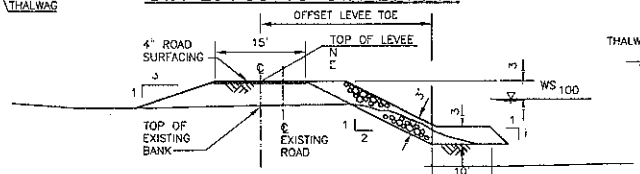



TYPICAL SETBACK LEVEE
STA 0+00 TO STA 51+50

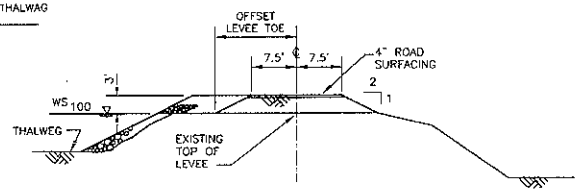
NOTE:
THE ROAD SURFACING CONSISTS OF 2-INCH (MINUS 5/8" CRUSHED SURFACING TOP COURSE) OVER 2-INCH (MINUS 1 1/4" CRUSHED SURFACING BASE COURSE)




TYPICAL LEFT BANK LEVEE
STA L0+00 TO STA L10+36




TYPICAL LEFT BANK LEVEE
STA 51+50 TO STA 76+15




TYPICAL RIGHT BANK LEVEE
(STA R0+00 TO R24+00)

PROJECT CONTROL
SETBACK LEVEE CONTROL

| STATION | CENTERLINE COORDINATES NORTHING | CENTERLINE COORDINATES EASTING | 100 YEAR WS + 3 FEET TOP OF LEVEE | EXISTING GROUND ELEVATION | THALWEG | OFF-SET LEVEE TOE 21/4H: 1V | PERMEABLE TOE EXIST GROUND | OFF-SET PERMEABLE TOE 3H:1V |
|---|---|---|---|---|---|---|---|---|
| 0+43 | 644061.9 | 1214343.8 | 206.3 | 204.0 | 191.5 | 41.9 | 198.0 | 32.4 |
| 1+50 | 643959.9 | 1214373.8 | 206.8 | 205.0 | 191.9 | 42.1 | 198.0 | 34.0 |
| 2+65 | 643849.6 | 1214406.4 | 206.5 | 198.0 | 192.5 | 40.2 | 198.0 | 33.3 |
| 3+90 | 643729.8 | 1214441.8 | 208.0 | 199.3 | 193.0 | 42.3 | 199.8 | 32.1 |
| 9+30 | 643211.8 | 1214594.6 | 210.3 | 201.0 | 196.0 | 40.6 | 201.8 | 32.9 |
| 14+60 | 642754.5 | 1214842.9 | 211.1 | 203.5 | 199.0 | 35.7 | 204.0 | 28.9 |
| 19+65 | 642379.5 | 1215181.2 | 213.1 | 208.5 | 202.6 | 32.1 | 208.0 | 22.7 |
| 22+20 | 642189.8 | 1215351.4 | 214.3 | 210.0 | 204.7 | 30.1 | 210.5 | 19.0 |
| 27+70 | 641711.2 | 1215622.4 | 219.1 | 214.0 | 210.7 | 27.3 | 214.0 | 22.7 |
| 29+30 | 641571.9 | 1215701.3 | 221.2 | 214.0 | 209.4 | 35.1 | 214.0 | 29.2 |
| 31+25 | 641402.2 | 1215797.3 | 224.5 | 216.0 | 215.9 | 27.8 | 216.0 | 32.9 |
| 35+50 | 641032.4 | 1216006.8 | 229.2 | 221.0 | 216.0 | 38.4 | 221.0 | 32.2 |
| 38+75 | 640747.4 | 1216162.9 | 231.7 | 226.0 | 219.1 | 36.7 | 224.0 | 30.5 |
| 41+20 | 640531.1 | 1216278.0 | 233.5 | 230.4 | 221.7 | 35.0 | 230.0 | 17.9 |
| 46+00 | 640107.4 | 1216503.5 | 236.5 | 230.5 | 225.0 | 34.5 | 230.0 | 27.1 |
| 47+50 | 639975.0 | 1216574.0 | 240.6 | 228.0 | 225.0 | 43.6 | 228.0 | 45.3 |
| 49+60 | 639789.6 | 1216672.7 | 239.2 | 230.0 | 226.9 | 36.1 | 228.0 | 41.1 |
| 51+50 | 639621.9 | 1216761.9 | 242.2 | 238.0 | 228.4 | 39.6 | 238.0 | |

PROJECT CONTROL
LEFT BANK LEVEE CONTROL

| STATION | CENTERLINE COORDINATES NORTHING | CENTERLINE COORDINATES EASTING | 100 YEAR WS + 3 FEET TOP OF LEVEE | TOP OF EXISTING LEVEE ELEVATION | THALWAG | EXISTING GROUND AT TOE | OFFSET LEVEE TOE THALWAG |
|---|---|---|---|---|---|---|---|
| L0+00 | | | 200.7 | 196 | 184.5 | 191.0 | 39.8 |
| L0+80 | | | 202.2 | 198 | 184.6 | 191.0 | 42.7 |
| L2+00 | | | 202.2 | 200 | 184.9 | 191 | 42.1 |
| L5+80 | | | 203.5 | 201 | 188.8 | 191.9 | 36.9 |
| L8+80 | | | 205.1 | 201 | 189.3 | 194.0 | 39.1 |
| L10+36 (0+00) | | | 206.3 | 203 | 191.0 | 191.9 | 38.1 |

| STATION | CENTERLINE COORDINATES NORTHING | CENTERLINE COORDINATES EASTING | 100 YEAR WS + 3 FEET TOP OF LEVEE | TOP OF EXISTING BANK ELEVATION | THALWAG | EXISTING GROUND TOE | OFFSET LEVEE TOE |
|---|---|---|---|---|---|---|---|
| 51+50 | | | 242.2 | 238 | 228.3 | 229.5 | 32.9 |
| 53+70 | | | 243.8 | 239 | 230.2 | 233.5 | 28.1 |
| 59+40 | | | 248.9 | 243 | 234.7 | 235.8 | 33.7 |
| 62+20 | | | 250.3 | 246.7 | 237.0 | 238.6 | 30.9 |
| 66+00 | | | 252.7 | 250 | 240.0 | 241.8 | 29.3 |
| 68+75 | | | 254.4 | 254 | 242.2 | 245.5 | 25.3 |
| 71+50 | | | 256.0 | 255 | 244.4 | 250.2 | 19.1 |
| 74+30 | | | 257.7 | 256 | 246.7 | 253.2 | 18.5 |
| 76+15 | | | 259.3 | 259.3 | 248.2 | 256.0 | 14.1 |

PROJECT CONTROL
RIGH BANK LEVEE CONTROL

| STATION | CENTERLINE COORDINATES NORTHING | CENTERLINE COORDINATES EASTING | 100 YEAR WS + 3 FEET TOP OF LEVEE | TOP OF EXISTING LEVEE ELEVATION | THALWAG | OFFSET LEVEE TOE 2H:1V |
|---|---|---|---|---|---|---|
| R0+00 | | | 200.7 | 197 | 184.5 | 17 |
| R0+70 | | | 202.2 | 197 | 184.6 | 17 |
| R1+45 | | | 202.2 | 197.5 | 184.7 | 17 |
| R1+90 | | | 202.2 | 198 | 185.0 | 15 |
| R2+80 | | | 202.4 | 198.7 | 187.1 | 16 |
| R2+90 | | | 202.4 | 198.8 | 187.2 | 16 |
| R3+80 | | | 203.0 | 199.6 | 187.9 | 16 |
| R5+80 | | | 203.5 | 201 | 188.9 | 15 |
| R8+80 | | | 205.1 | 202.2 | 189.3 | 15.5 |
| R11+80 | | | 206.8 | 202.9 | 193.2 | 18 |
| R18+80 | | | 210.3 | 207.5 | 196 | 17 |
| R23+40 | | | 211.1 | 210.5 | 199.0 | 12.7 |
| R24+00 | | | 211.4 | 213.3 | 199.5 | |
| R28+50 | | | 213.1 | 212.6 | 202.6 | |
| R53+30 | | | 229.2 | 232 | 216.0 | |
| R55+00 | | | 230.6 | 233 | 217.9 | |
| R58+40 | | | 233.5 | 233 | 221.7 | |
| R63+30 | | | 236.8 | 237 | 225.5 | |
| R66+40 | | | 240.5 | 240.5 | 227.5 | |

| | |
|---|---|
| DRAWING NO. C02 | SURVEYED BY: PRISM |
| DRAWN BY: J. FULLNER | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-9300 Fax 206-443-9372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SWOLD, P.E. WATER PROGRAMS MANAGER

90%

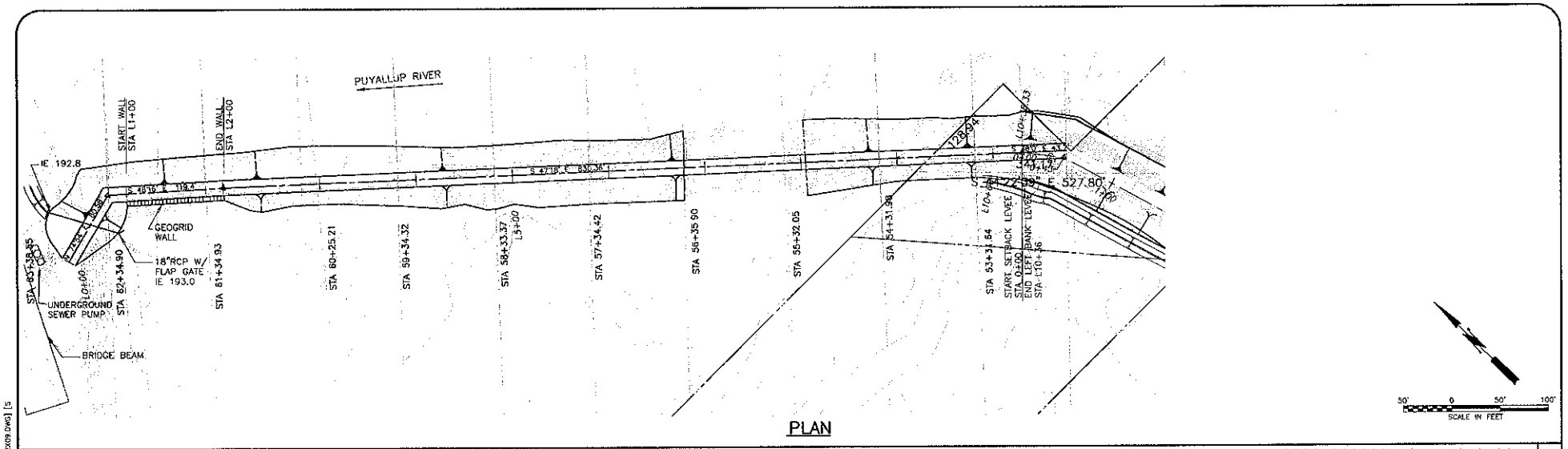
**OLD SOLDIER'S HOME LEVEE SETBACK**
CAUSTOGA AVENUE AND 193 RD STREET EAST

**PROJECT CONTROL TABLES AND TYPICAL CROSS SECTIONS**

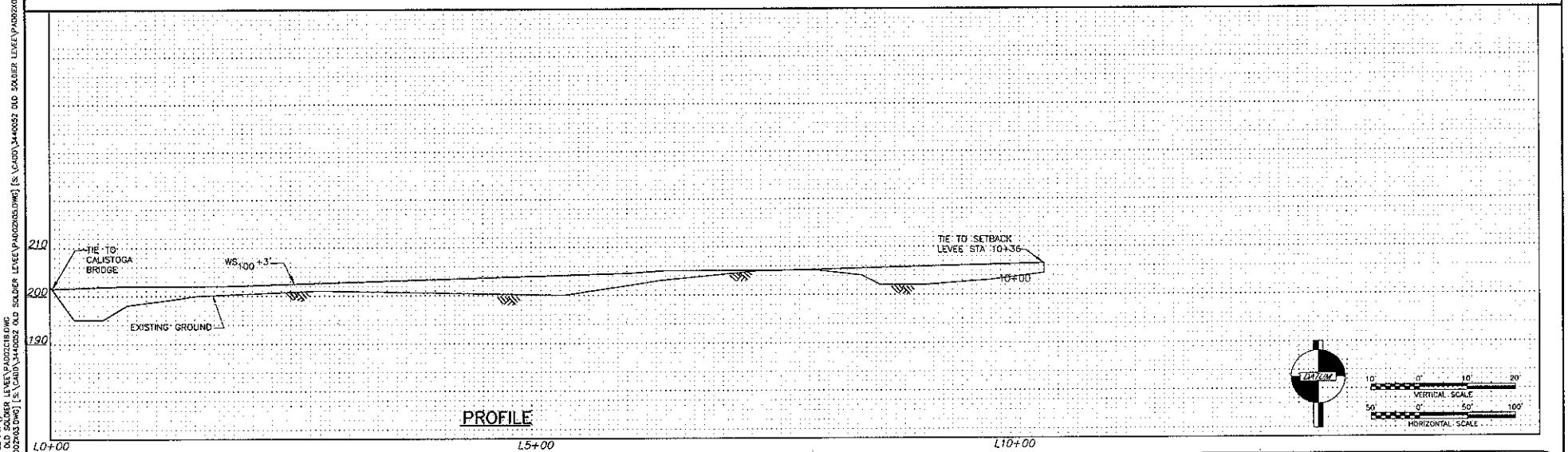
**C.I.P. D010-3-6**

SHEET 5 OF 23

Date: Nov 30, 2005 11:32:27 AM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02015.DWG
Xrefs:




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C03 | SURVEYED BY: PRISM |
| DRAWN BY: JF/ RM | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax: 206-443-5372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
DONALD P. SWIFT, P.E. WATER PROGRAMS MANAGER

90%

**OLD SOLDIER'S HOME LEVEE SETBACK**

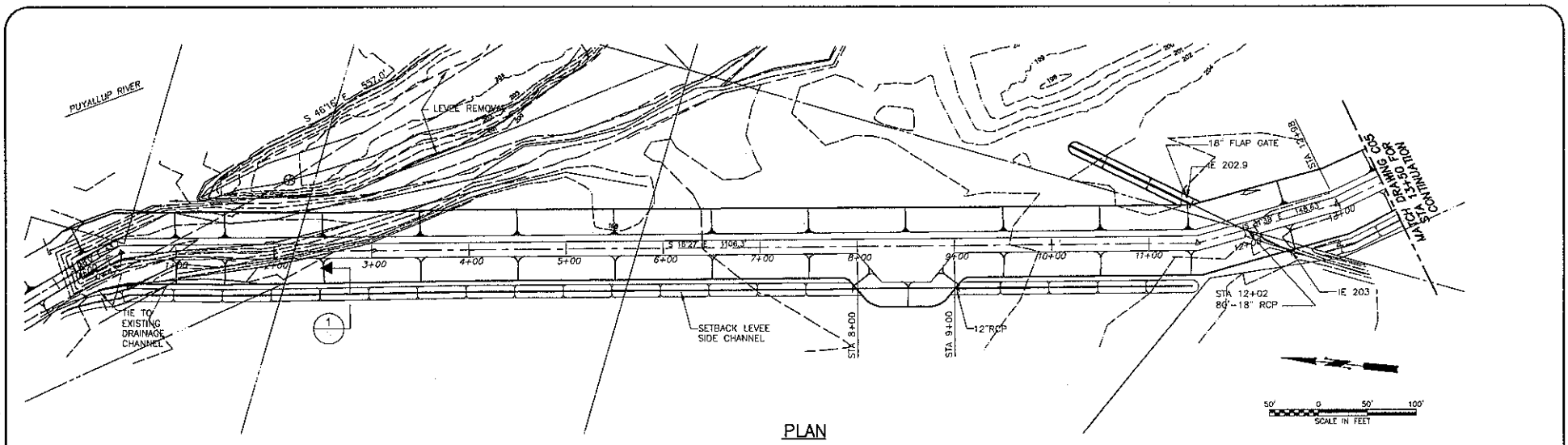
CALISTOGA AVENUE AND 193 RD STREET EAST

**LEFT BANK PLAN AND PROFILE**
**STA L0+00 TO STA 10+36**

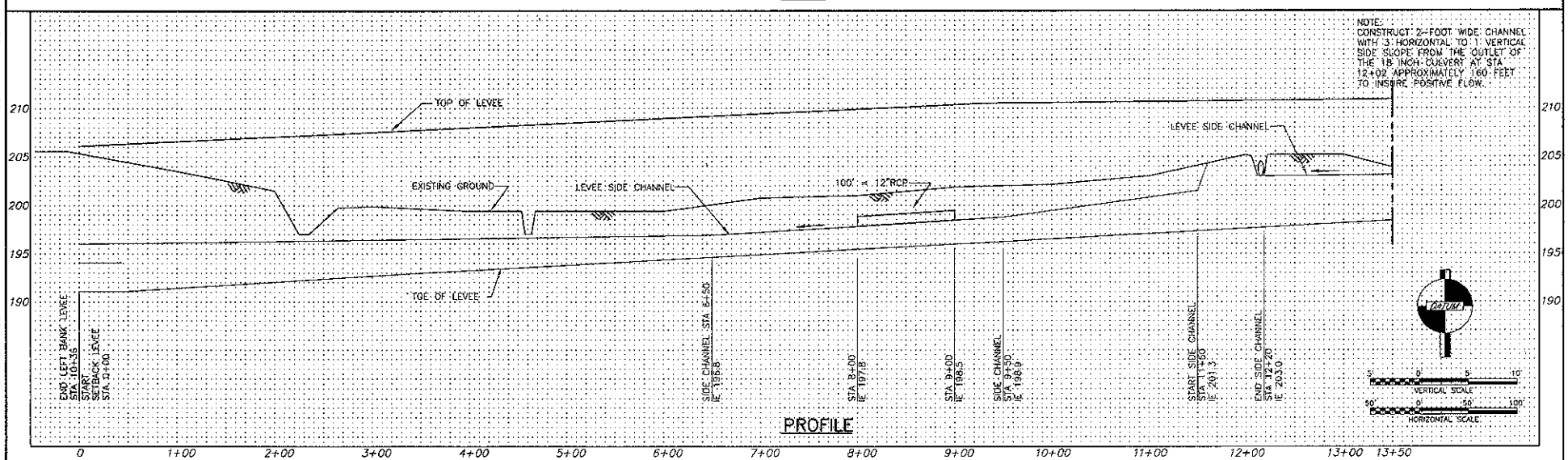
**C.I.P. D010-3-6**

SHEET 6 OF 23

Date: Nov 30, 2005 12:31:05 PM (J)
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA002C18.DWG
Xrefs: [P-A002X01.DWG] [P-A002X03.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X05.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X09.DWG] [S




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C04 | SURVEYED BY: PRISM |
| DRAWN BY: R.M. | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax: 206-443-5372

**Pierce County**
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SMITH, P.E. WATER PROGRAMS MANAGER

90%

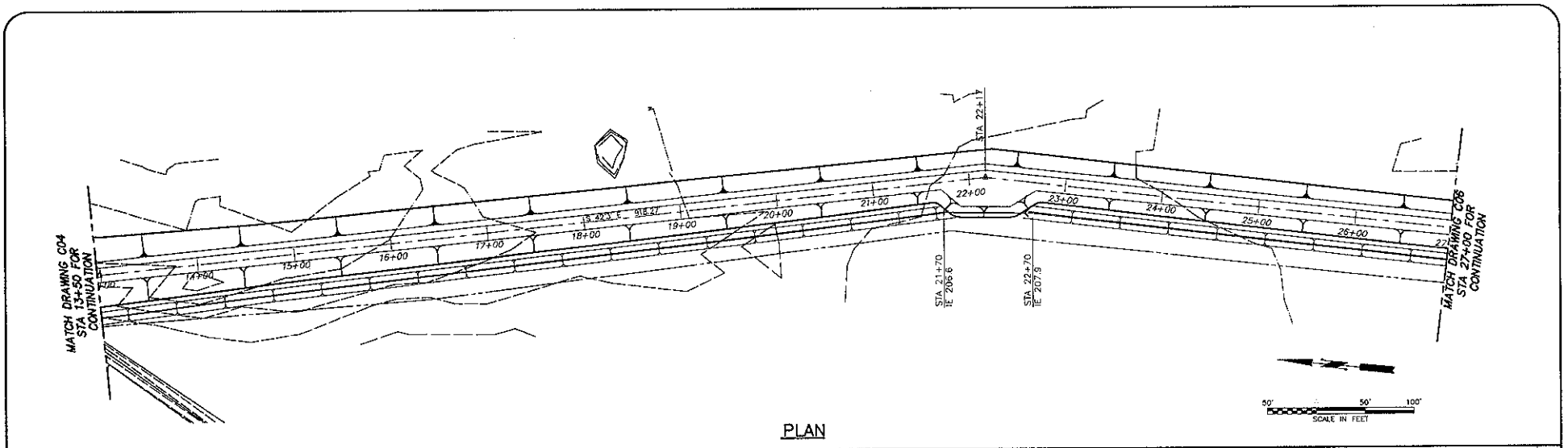
**OLD SOLDIER'S HOME LEVEE SETBACK**
CALISTOGA AVENUE AND 193 RD STREET EAST

**SETBACK LEVEE PLAN AND PROFILE**
**STA 0+00 TO STA 13+50**

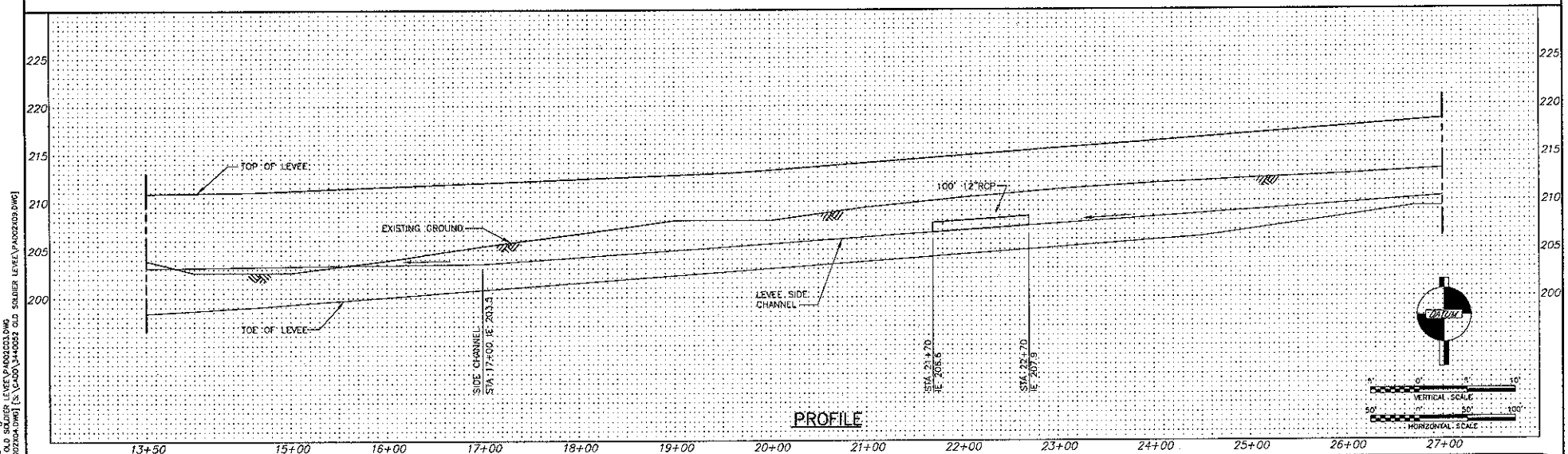
**C.I.P. D010-3-6**

SHEET 7 OF 23

Date: Nov 30, 2005 11:41:04 AM O
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA0020D2.DWG
Xrefs: [S:\CADD\3440052 OLD SOLDIER LEVEE\PA0020X2.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA0020X05.DWG] [P:\0020X03.DWG] [P:\0020X04.DWG]




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C05 | SURVEYED BY: PRISM |
| DRAWN BY: R.M. | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax: 206-443-5372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SWALT, P.E. WATER PROGRAMS MANAGER

90%

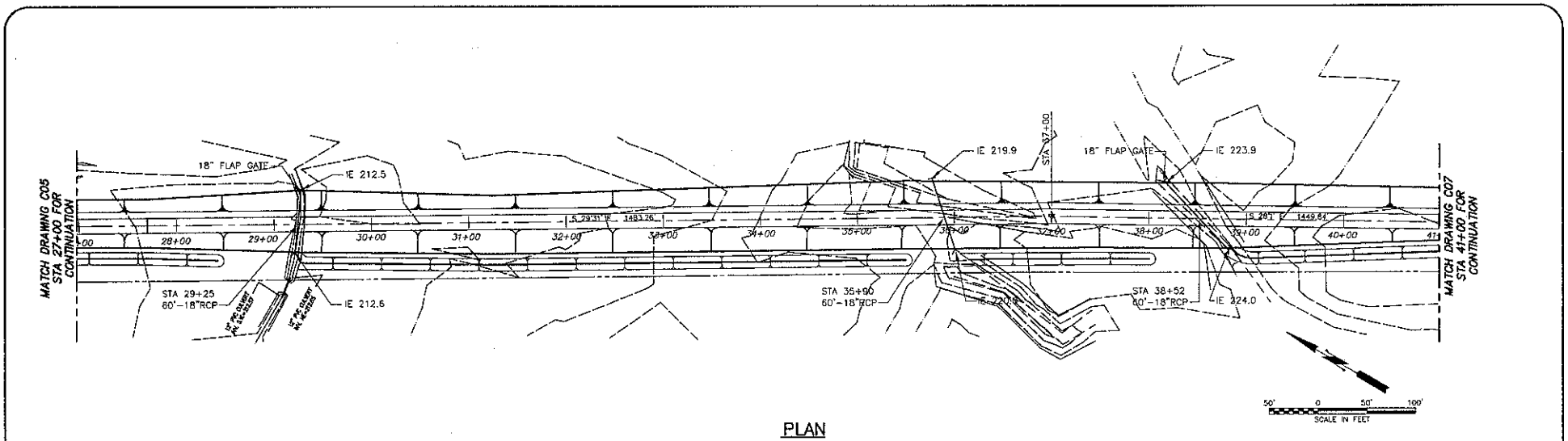
**OLD SOLDIER'S HOME LEVEE SETBACK**
CAUSTOGA AVENUE AND 193 RD STREET EAST

**SETBACK LEVEE PLAN AND PROFILE**
**STA 13+50 TO STA 27+00**

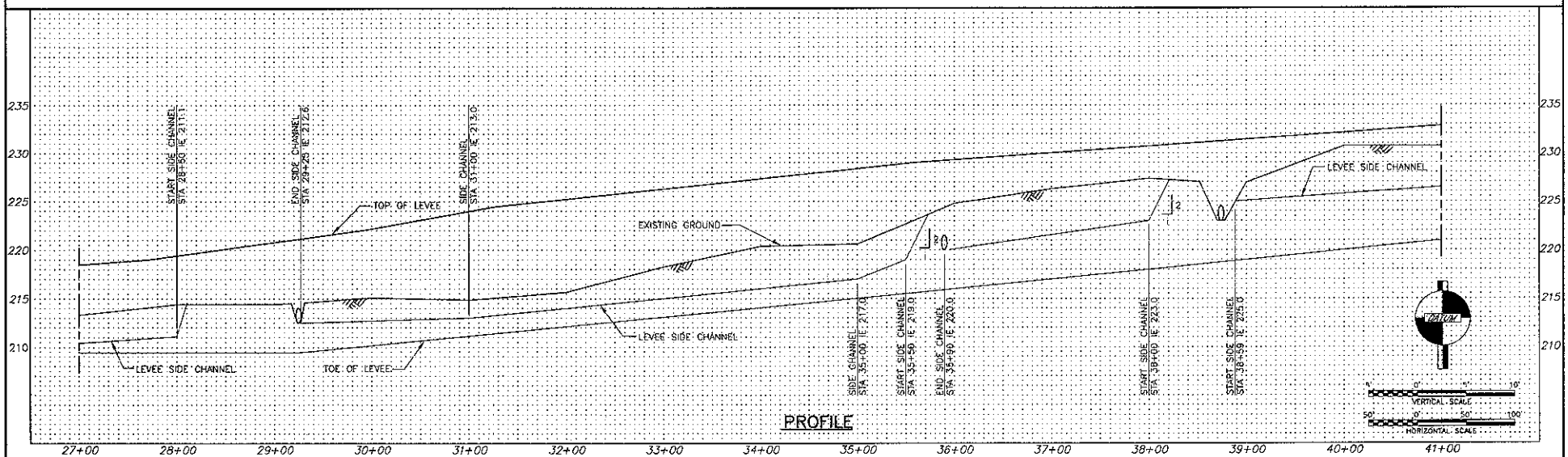
**C.I.P. D010-3-6**

SHEET 8 OF 23

Date: Nov 30, 2005 11:41:51 AM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA002C03.DWG
Xrefs: [PA002X02.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X04.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X09.DWG]




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C06 | SURVEYED BY: PRISM |
| DRAWN BY: J. FULLNER | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. HELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax 206-443-5572

**Pierce County**
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SWAU, P.E. WATER PROGRAMS MANAGER

90%

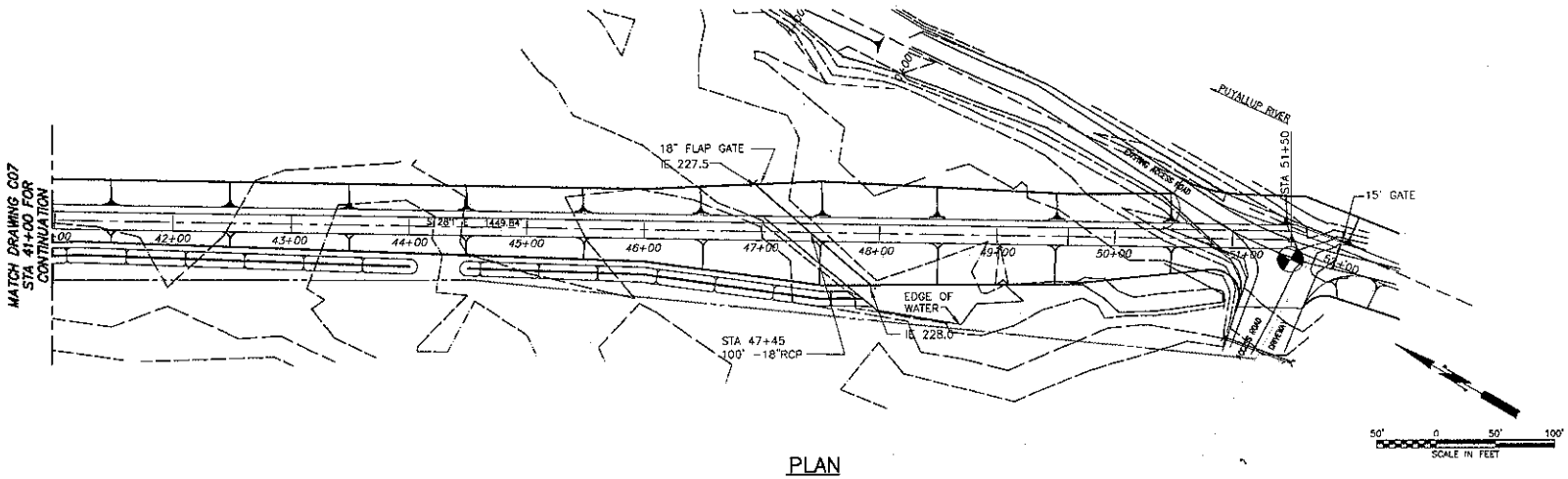
**OLD SOLDIER'S HOME LEVEE SETBACK**
CALISTOGA AVENUE AND 193 RD STREET EAST

**SETBACK LEVEE PLAN AND PROFILE**
**STA 27+00 TO STA 41+00**

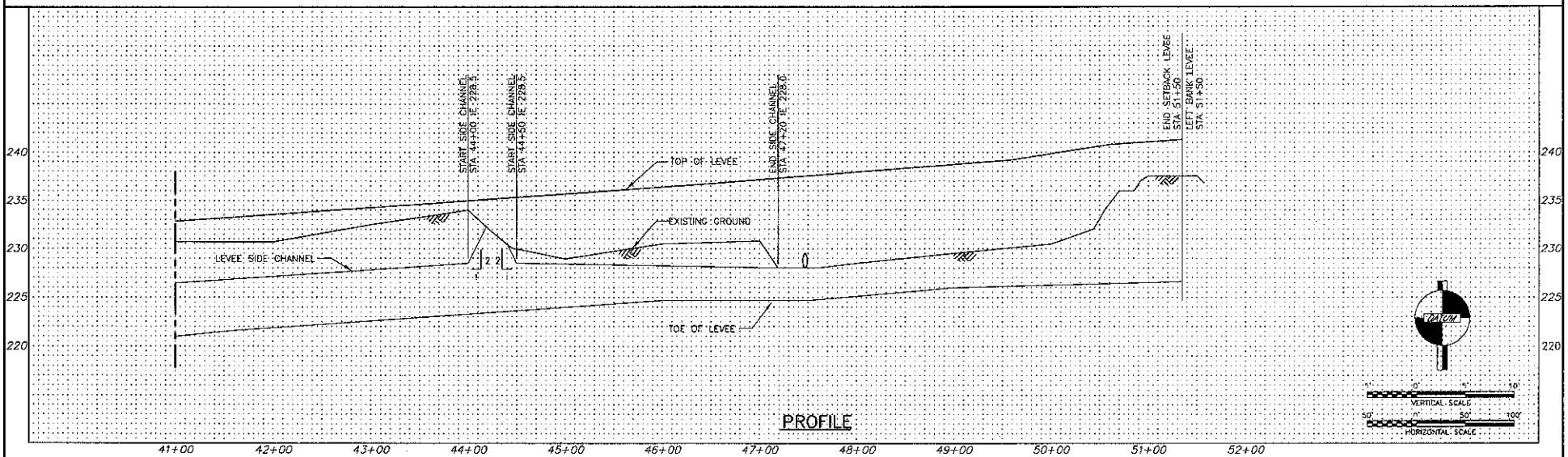
**C.I.P. D010-3-6**

SHEET 9 OF 23

Date: Nov 30, 2005 12:42:43 AM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA002C04.DWG
Xrefs: [PA002R02.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002I09.DWG] [PA002X02.DWG]




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C07 | SURVEYED BY: PRIZM |
| DRAWN BY: R.M. | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax: 206-443-5372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SMELT, P.E. WATER PROGRAMS MANAGER

90%

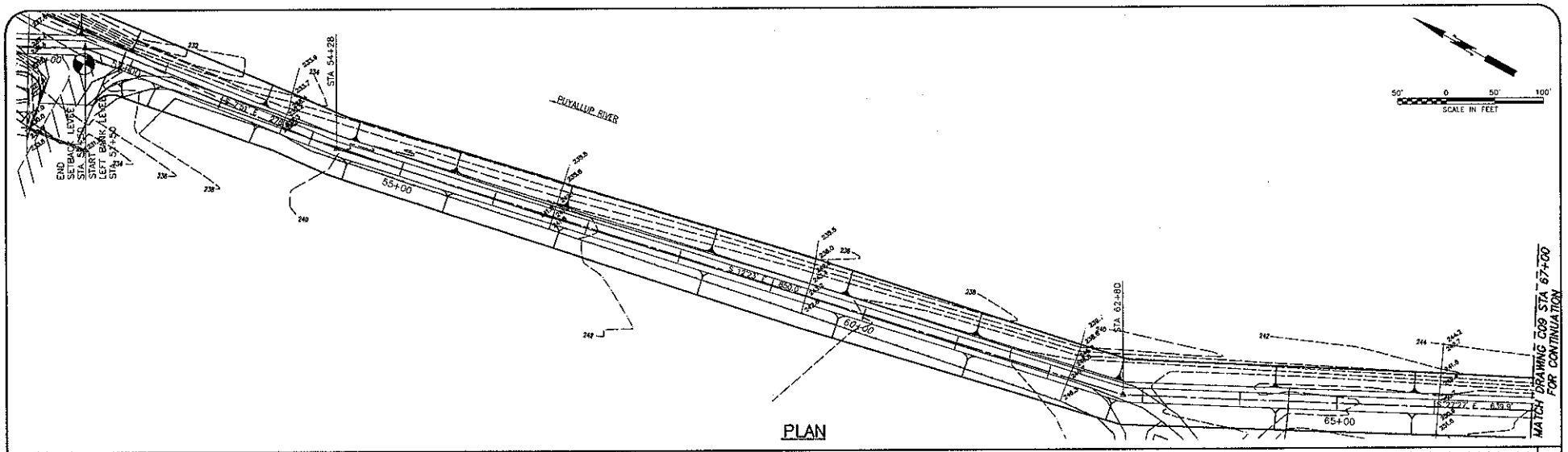
**OLD SOLDIER'S HOME LEVEE SETBACK**
CALISTOGA AVENUE AND 193 RD STREET EAST

**SETBACK LEVEE PLAN AND PROFILE**
**STA 41+00 TO STA 51+50**

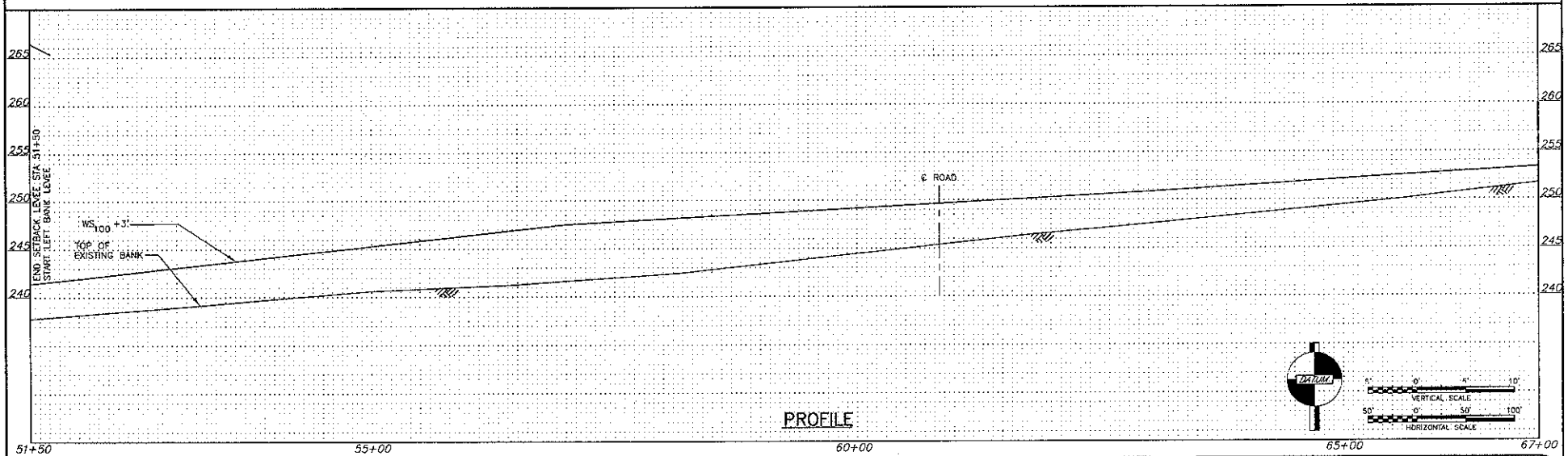
**C.I.P. D010-3-6**

SHEET 10 OF 23

Date: Nov 30, 2005 11:43:19 AM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA002C05.DWG
Xrefs: [PA002X02.DWG] [PA002X04.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X09.DWG] [PA002X03.DWG]




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C08 | SURVEYED BY: PRISM |
| DRAWN BY: R.M. | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax 206-443-5372

**Pierce County**
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY
HAROLD P. SMELT, P.E. WATER PROGRAMS MANAGER

90%

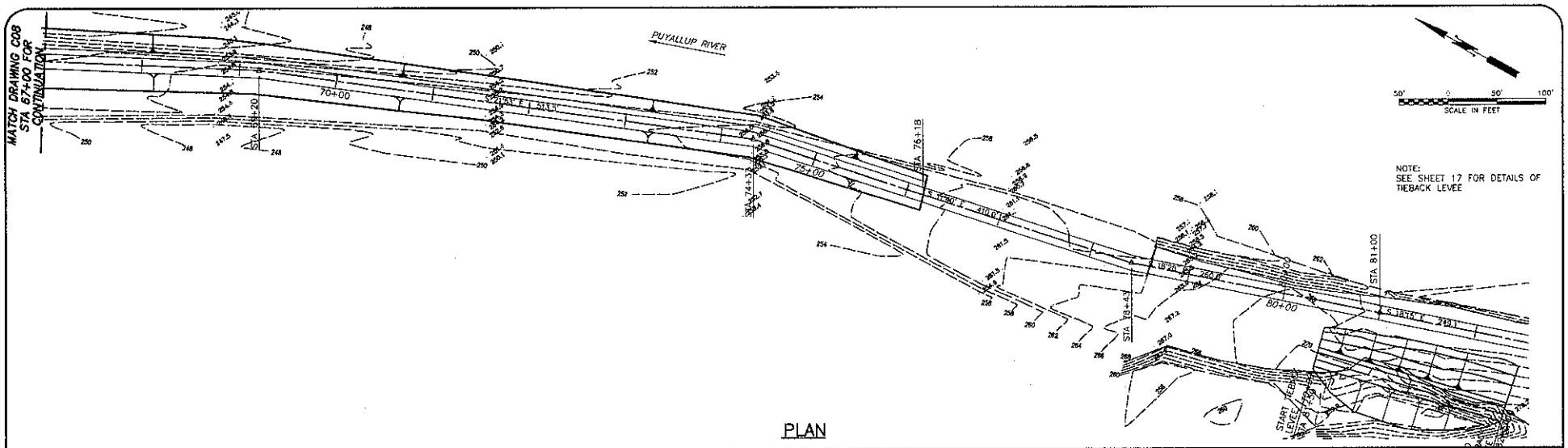
**OLD SOLDIER'S HOME LEVEE SETBACK**
CALISTOGA AVENUE AND 193 RD STREET EAST

**LEFT BANK LEVEE PLAN AND PROFILE**
**STA 51+50 TO STA 67+00**

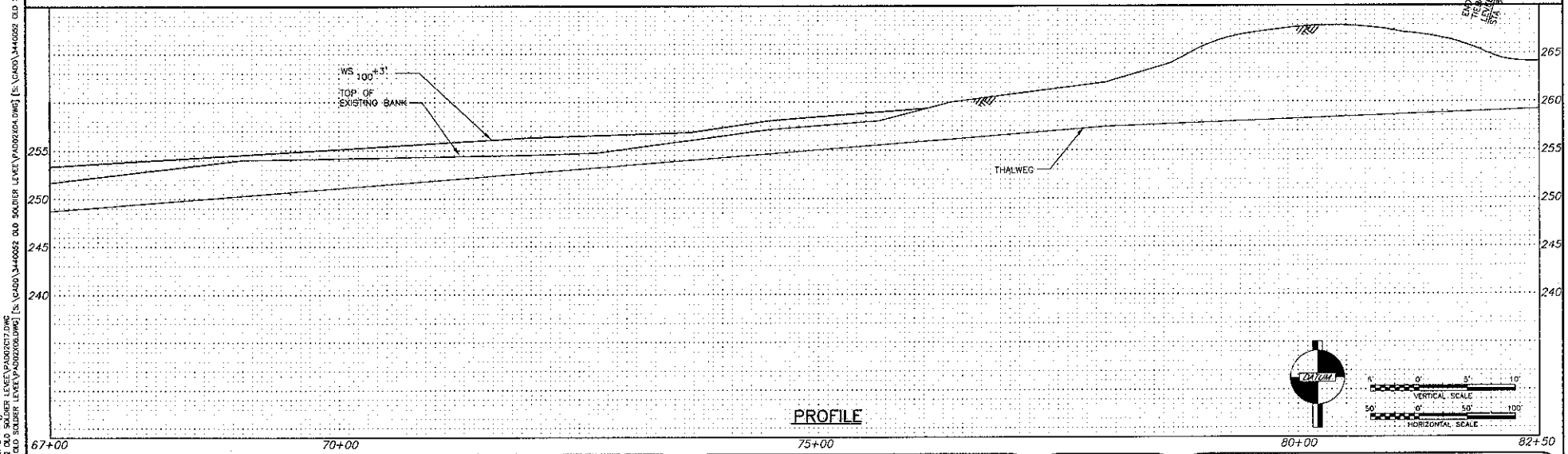
**C.I.P. D010-3-6**

SHEET 11 OF 23

Date: Nov 30, 2005 11:51:53 AM
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02C14.DWG
Xrefs: [S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02X06.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02X04.DWG] [S:\CADD\3440052 OLD SOLDIER LEV




PLAN




PROFILE

| DRAWING NO. COB | SURVEYED BY: PRISM |
|---|---|
| DRAWN BY: R.M. | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax 206-443-1372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SMITH, P.E. WATER PROGRAMS MANAGER

90%

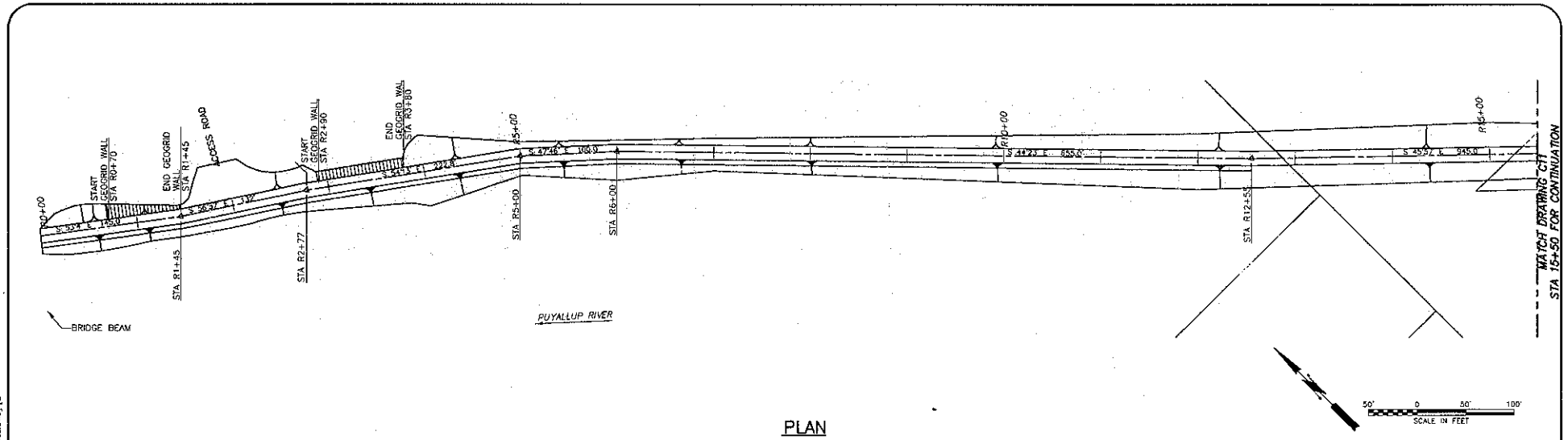
**OLD SOLDIER'S HOME LEVEE SETBACK**
CAUSTOGA AVENUE AND 193 RD STREET EAST

**LEFT BANK LEVEE**
**PLAN AND PROFILE - STA 67+00 TO STA 82+50**

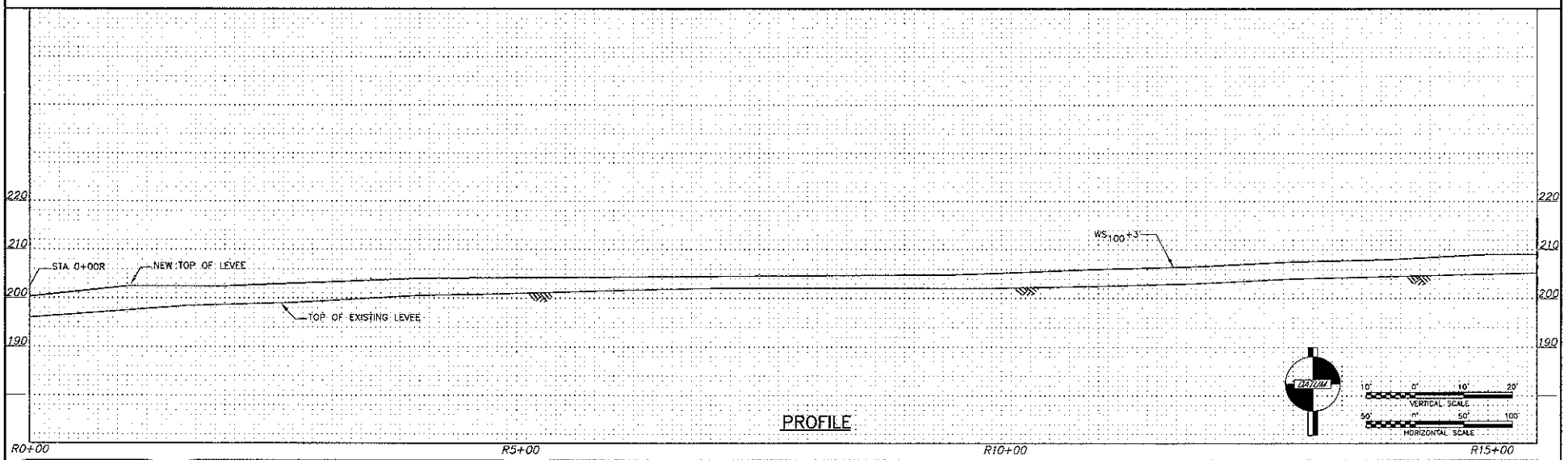
**C.I.P. D010-3-6**

SHEET 12 OF 23

Date: Nov 30, 2005 12:30:15 PM ()
Drawn: [S:\CADD\3440052 OLD SOLDIER LEVEE\PA0902C17.DWG]
Xrefs: [S:\CADD\3440052 OLD SOLDIER LEVEE\PA0902XOLD.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA0902P04.DWG] [S:\CADD\3440052 OLD SOLDIER LEV




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C10 | SURVEYED BY: PRISM |
| DRAWN BY: JF/ RM | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5300 Fax: 206-443-5372

**Pierce County**
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1078

APPROVED BY:
HAROLD P. SMITH, P.E. WATER PROGRAMS MANAGER

90%

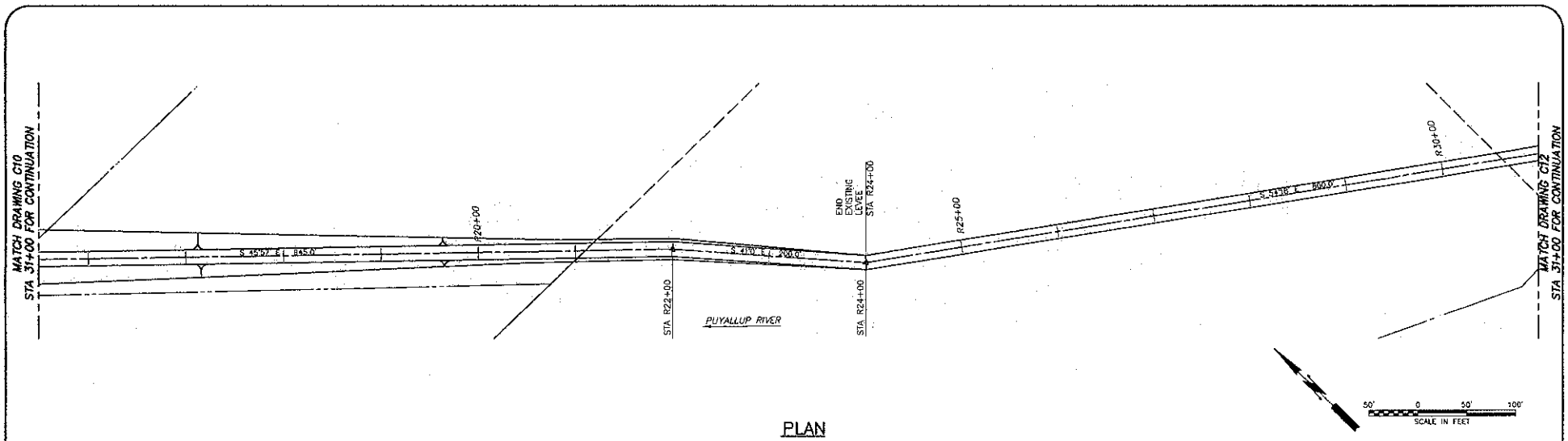
**OLD SOLDIER'S HOME LEVEE SETBACK**
CALISTOGA AVENUE AND 193 RD STREET EAST

**RIGHT BANK LEVEE PLAN AND PROFILE**
**STA R0+00 TO STA R15+50**

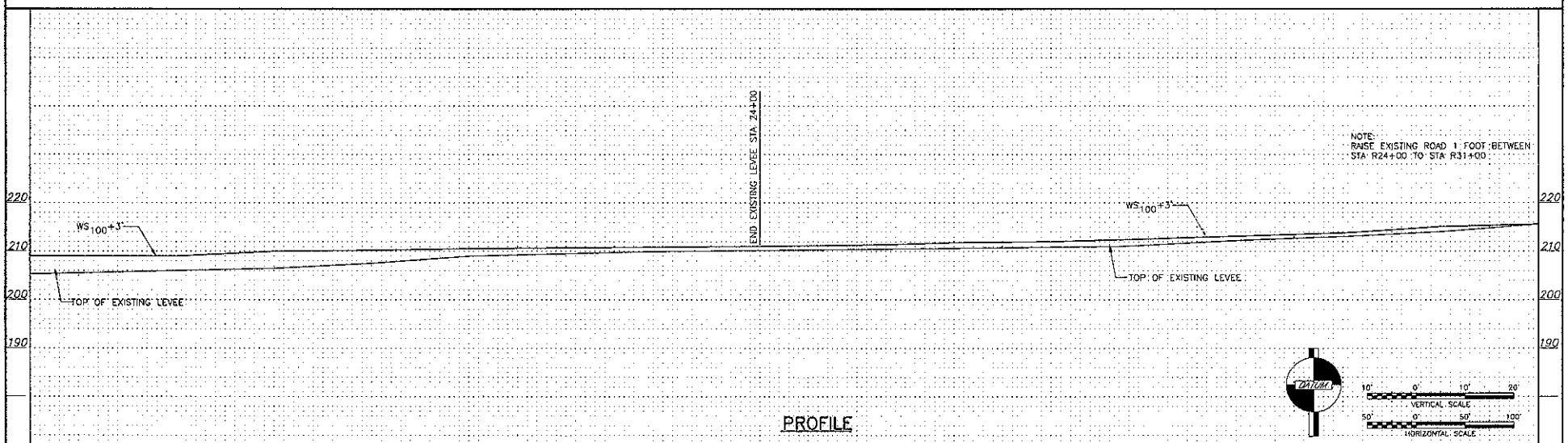
**C.I.P. D010-3-6**

SHEET 13 OF 23

Date: Nov 30, 2005 11:48:12 AM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PA002D09.DWG
Xrefs: [PA002X01.DWG] [PA002X03.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X05.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PA002X09.DWG] [S




PLAN




PROFILE

| | |
|---|---|
| DRAWING NO. C11 | SURVEYED BY: PRISM |
| DRAWN BY: JF/ RM | DATE SURVEYED: |
| DESIGNED BY: L. GIBBONS | BOOK NO. |
| CHECKED BY: A. MELONE | DATE: |

| NO. | DATE | REVISION | BY | APPROVED |
|---|---|---|---|---|

TETRA TECH/KCM
1917 First Avenue
Seattle, Washington 98101
206-443-5500 Fax: 206-443-5372

Pierce County
DEPARTMENT OF PUBLIC WORKS AND UTILITIES
WATER PROGRAMS
9850 64th STREET WEST
UNIVERSITY PLACE, WA 98467-1076

APPROVED BY:
HAROLD P. SMITH, P.E. WATER PROGRAMS MANAGER

90%

**OLD SOLDIER'S HOME LEVEE SETBACK**
CAUSTOGA AVENUE AND 199 RD STREET EAST

**RIGHT BANK LEVEE PLAN AND PROFILE**
**STA R15+50 TO STA R31+00**

**C.I.P. D010-3-6**

SHEET 14 OF 23

Date: Nov 30, 2005 12:31:46 PM ()
Drawing: S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02C20.DWG
Xrefs: [PAD02X01.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02X03.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02X05.DWG] [S:\CADD\3440052 OLD SOLDIER LEVEE\PAD02X08.DWG] [S