| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

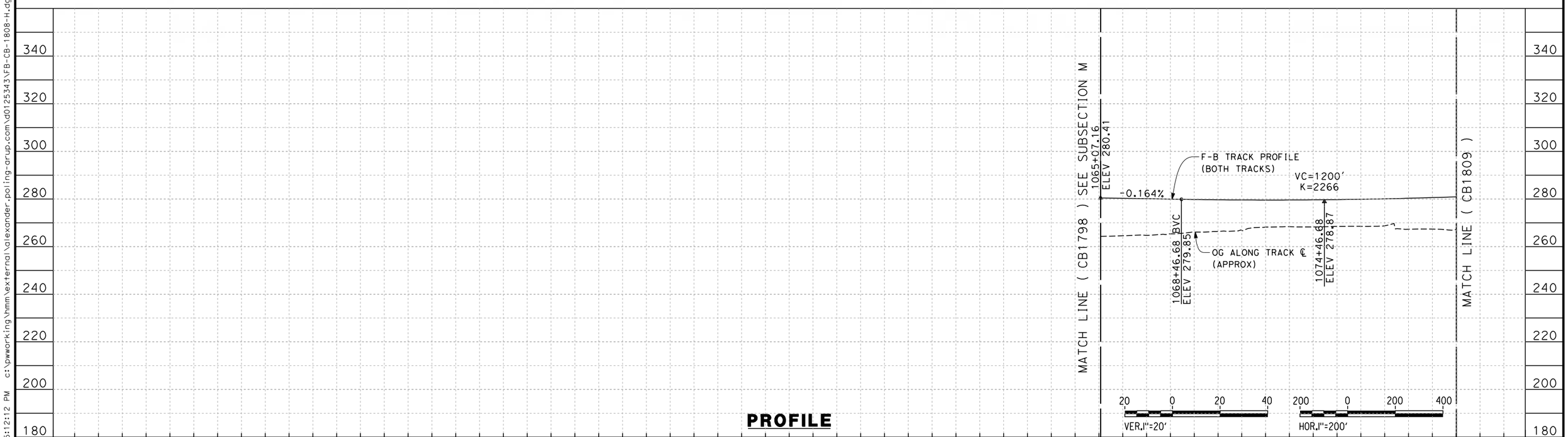
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1065+07 TO 2144+63
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1800
SCALE AS SHOWN
SHEET NO. 1 OF 31

eron.sudhausen 12/9/2013 5:29:55 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125343\FB-CB-1800-H.dgn

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1065+07 TO 1080+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1808
SCALE AS SHOWN
SHEET NO. 2 OF 31

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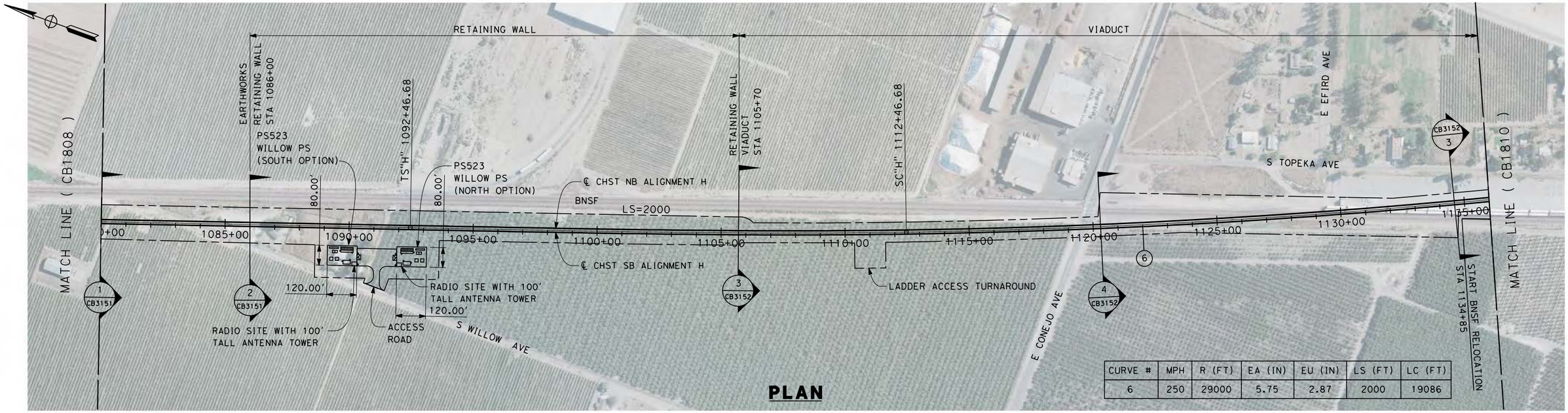
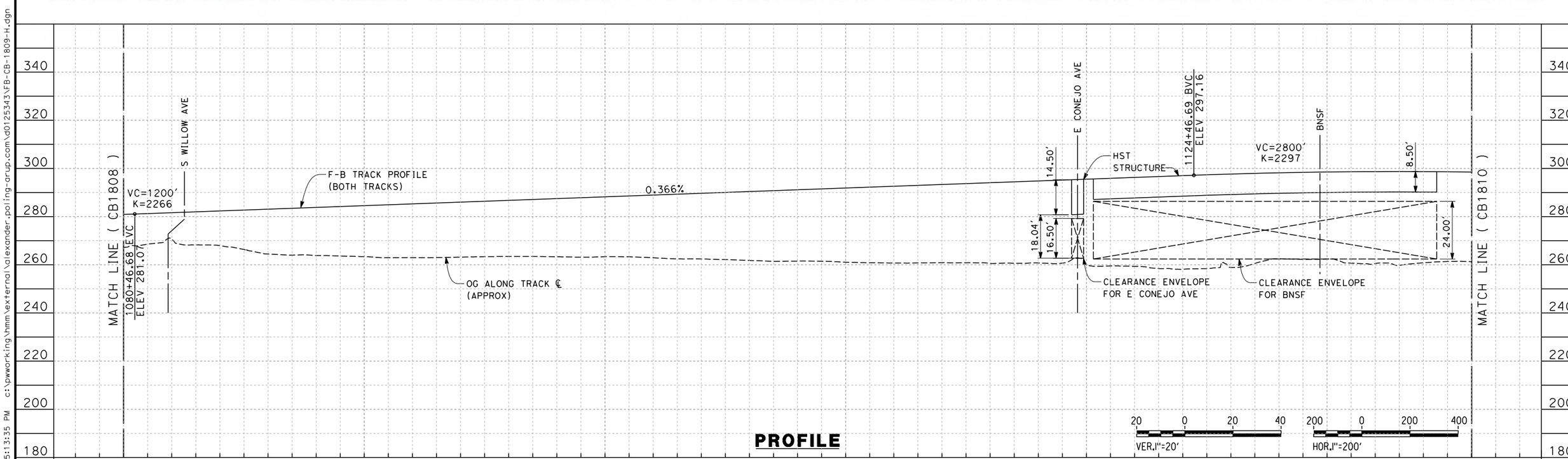



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1080+00 TO 1136+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1809
SCALE AS SHOWN
SHEET NO. 3 OF 31

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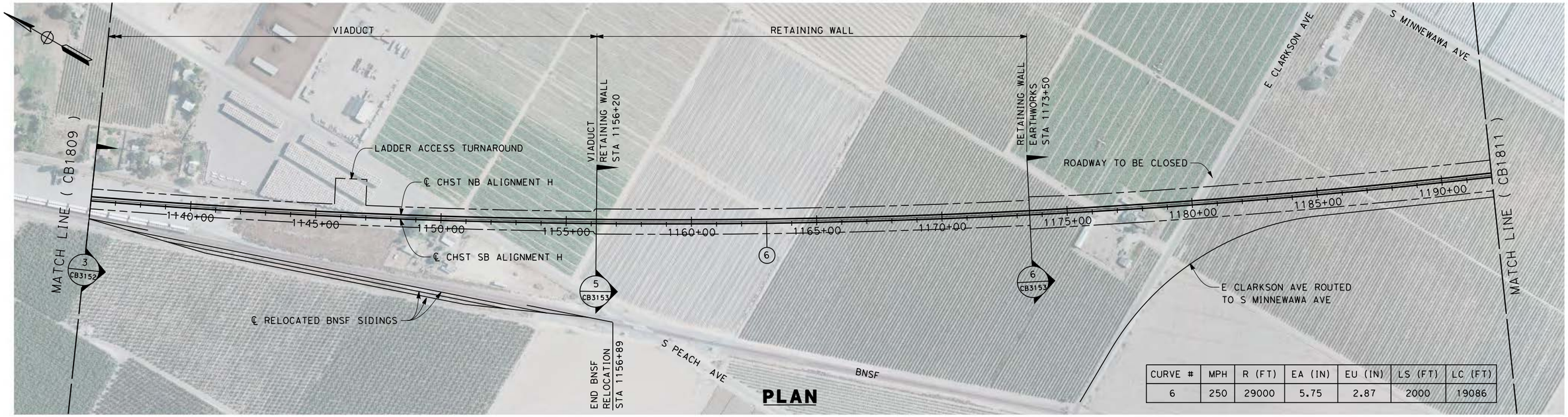
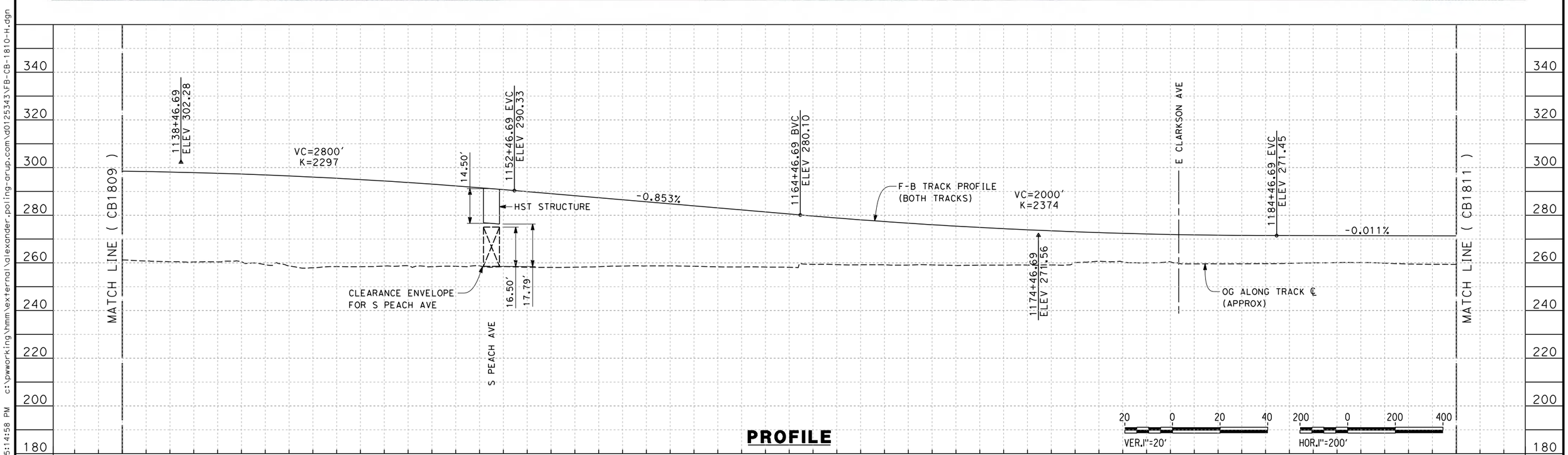



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 6 | 250 | 29000 | 5.75 | 2.87 | 2000 | 19086 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1136+00 TO 1192+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1810
SCALE AS SHOWN
SHEET NO. 4 OF 31

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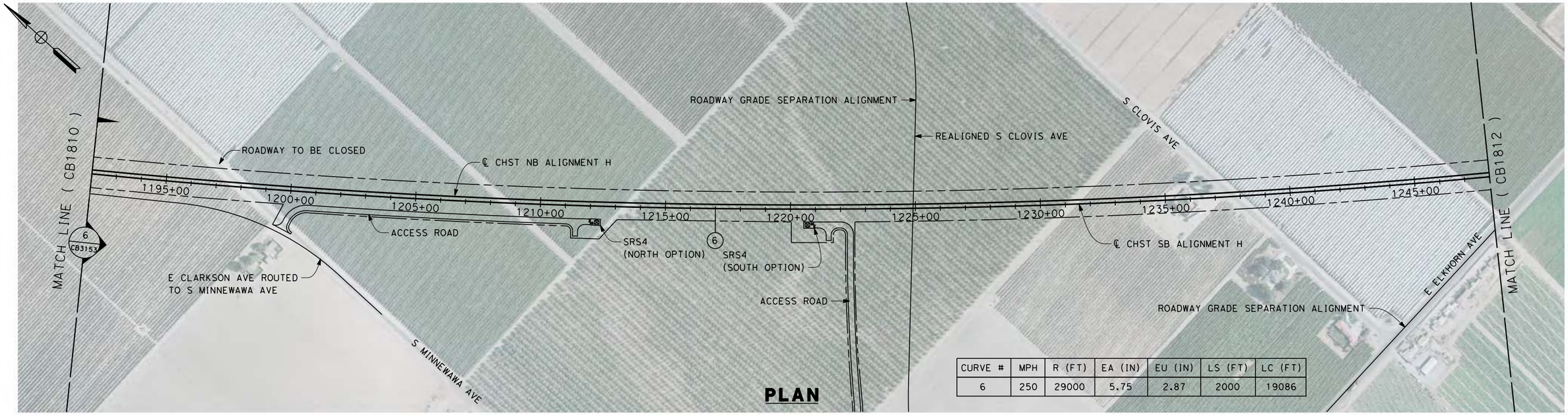
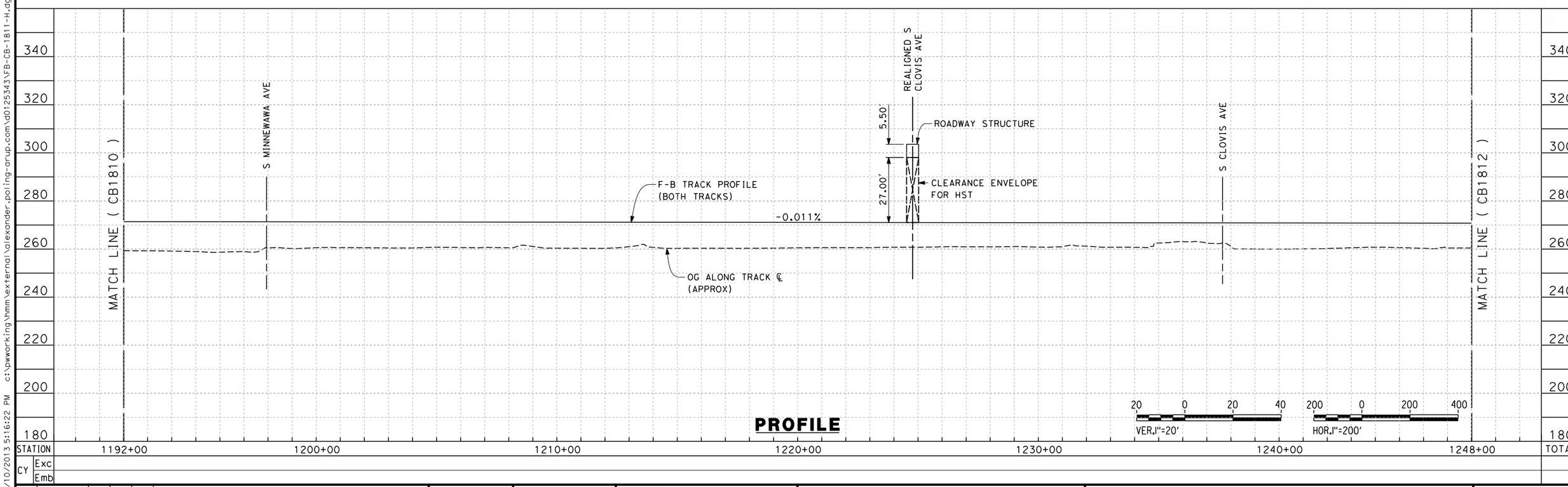



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 6 | 250 | 29000 | 5.75 | 2.87 | 2000 | 19086 |




| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1192+00 TO 1248+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1811
SCALE AS SHOWN
SHEET NO. 5 OF 31

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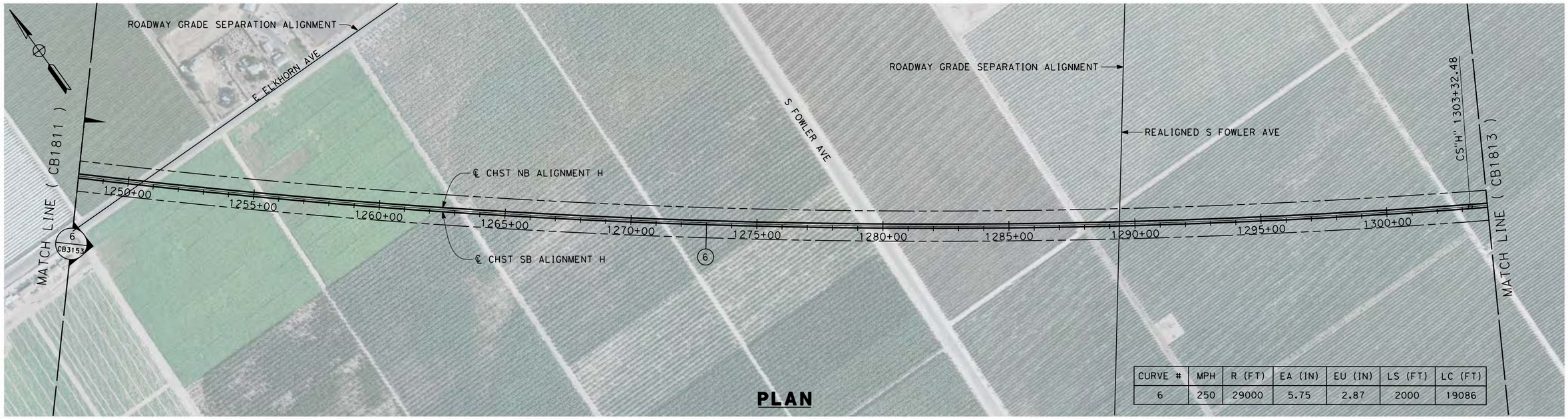
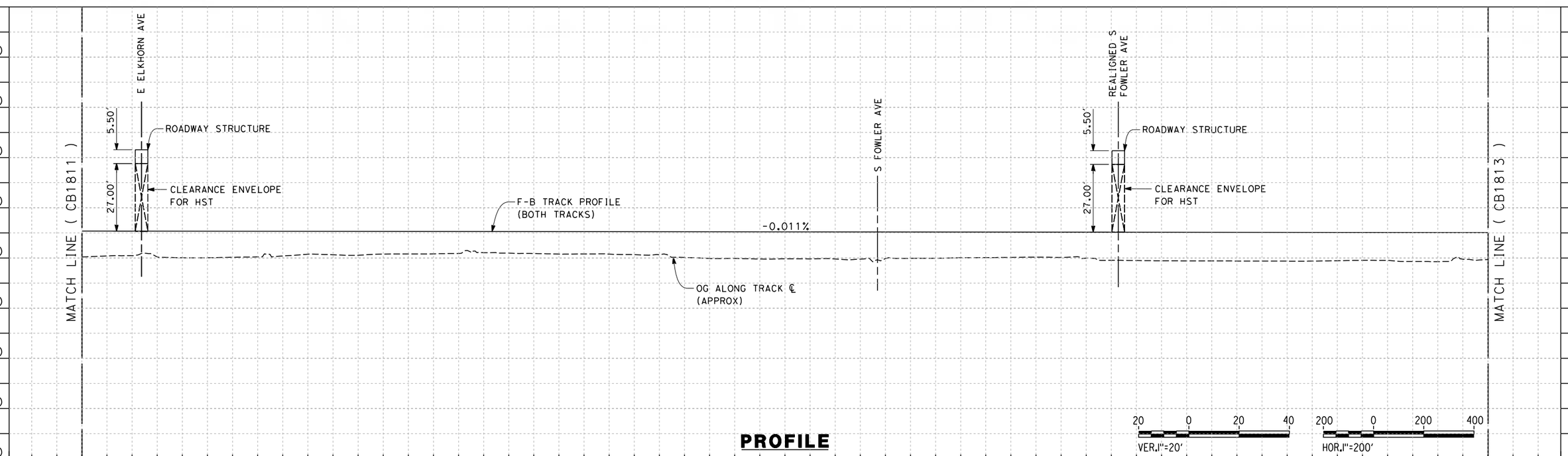



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 6 | 250 | 29000 | 5.75 | 2.87 | 2000 | 19086 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA 1248+00 TO 1304+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1812
SCALE AS SHOWN
SHEET NO. 6 OF 31

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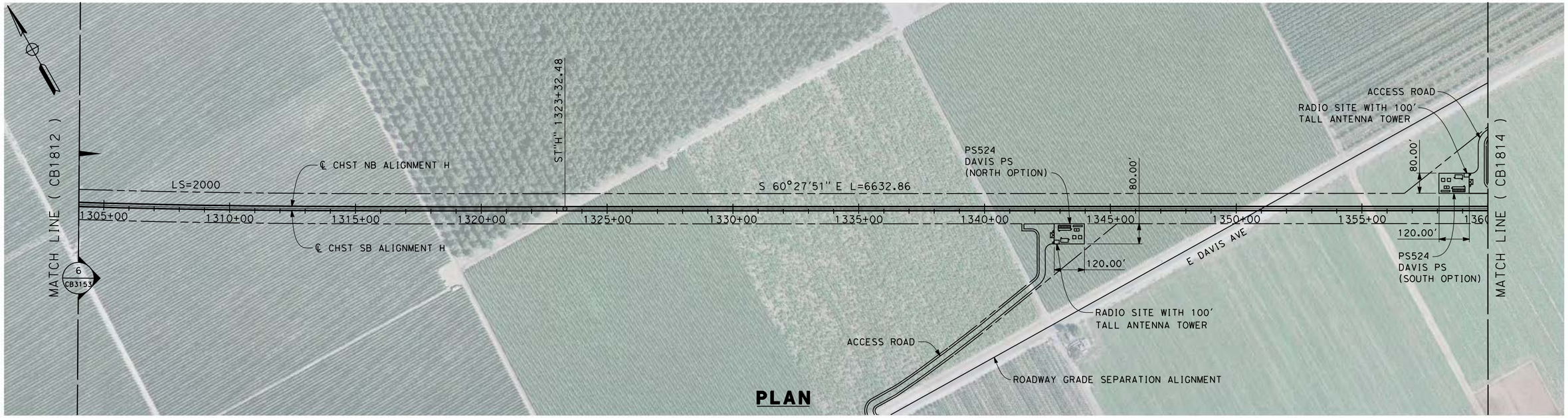
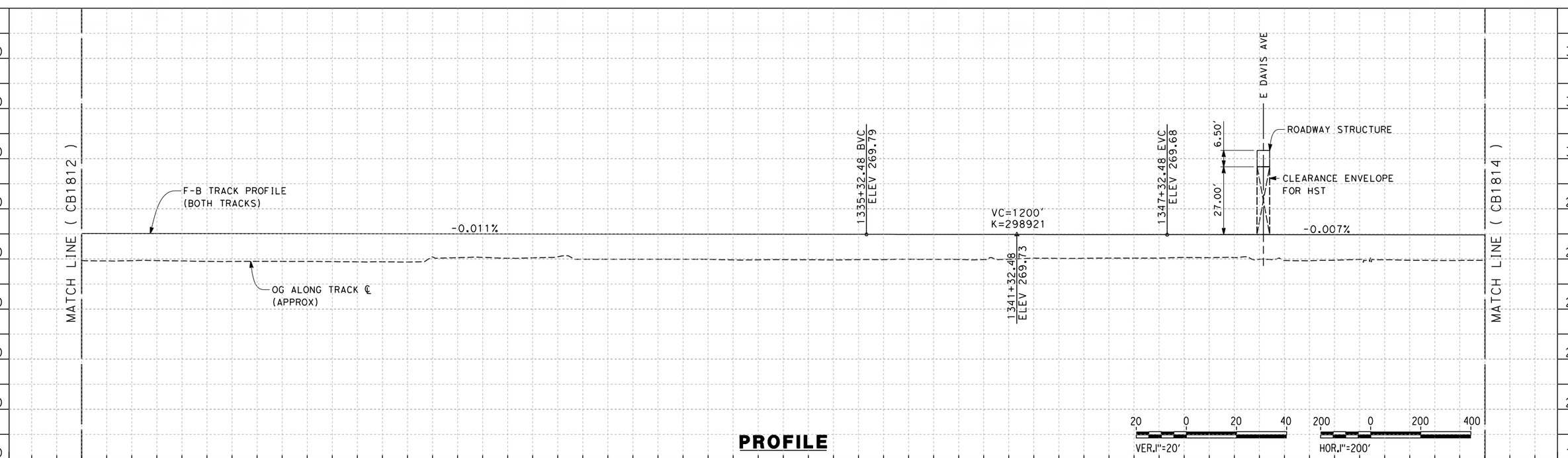



**PLAN**




**PROFILE**

| STATION | 1304+00 | 1310+00 | 1320+00 | 1330+00 | 1340+00 | 1350+00 | 1360+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

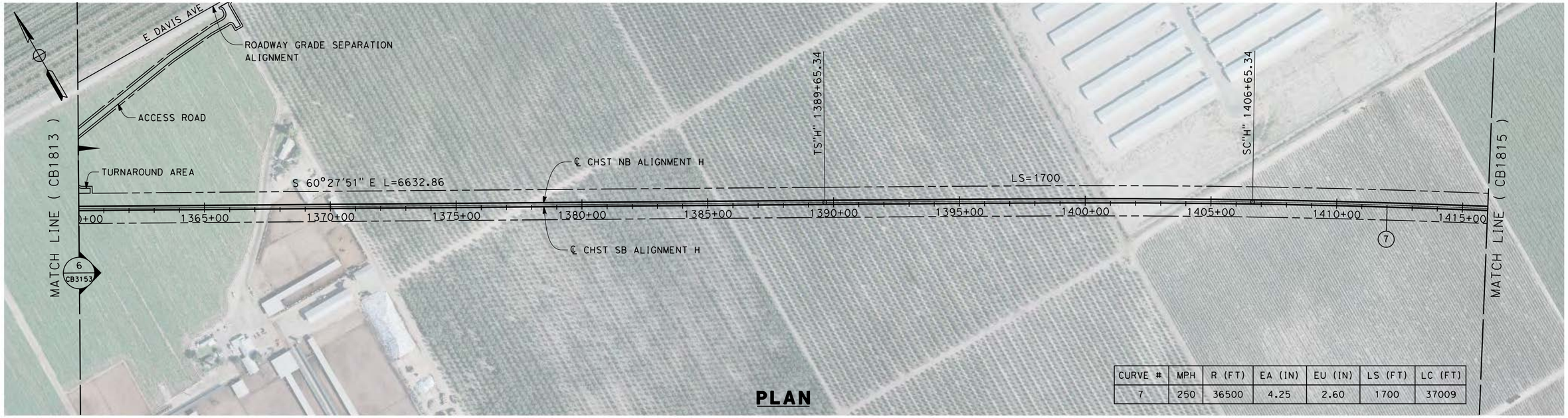
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1304+00 TO 1360+00
PLAN AND PROFILE

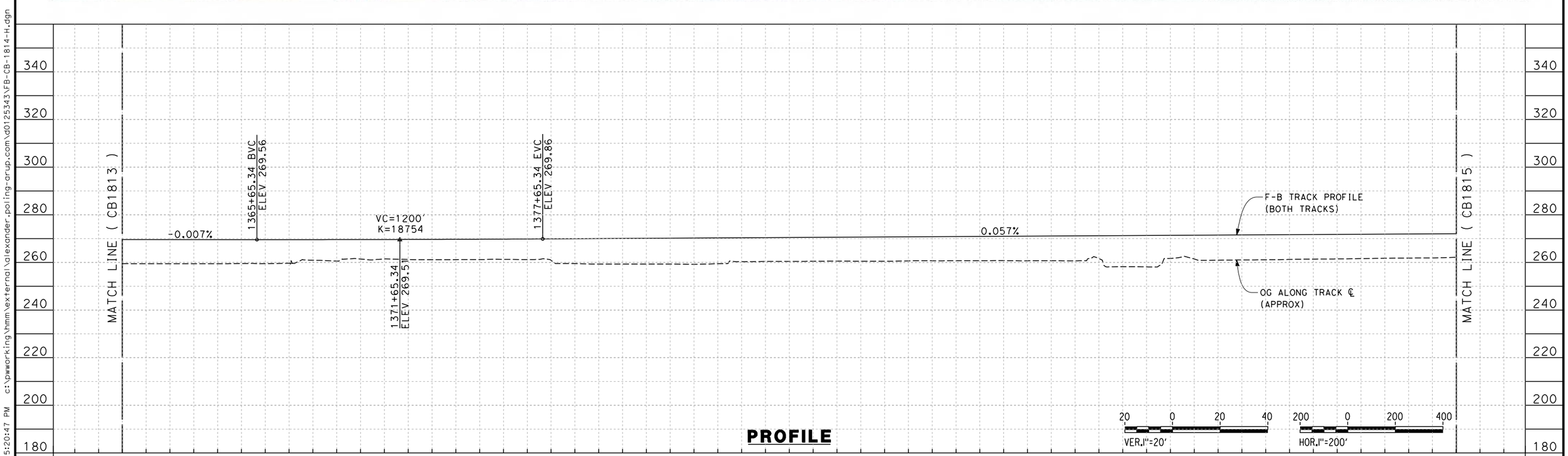
CONTRACT NO. HSR 06-0003
DRAWING NO. CB1813
SCALE AS SHOWN
SHEET NO. 7 OF 31

alexander.poling 12/10/2013 5:19:24 PM c:\pwworking\hmm\external\alexander.poling-arup.com\d0125343\FB-CB-1813-H.dgn




| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| STATION | 1360+00 | 1370+00 | 1380+00 | 1390+00 | 1400+00 | 1410+00 | 1416+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1360+00 TO 1416+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1814
SCALE AS SHOWN
SHEET NO. 8 OF 31

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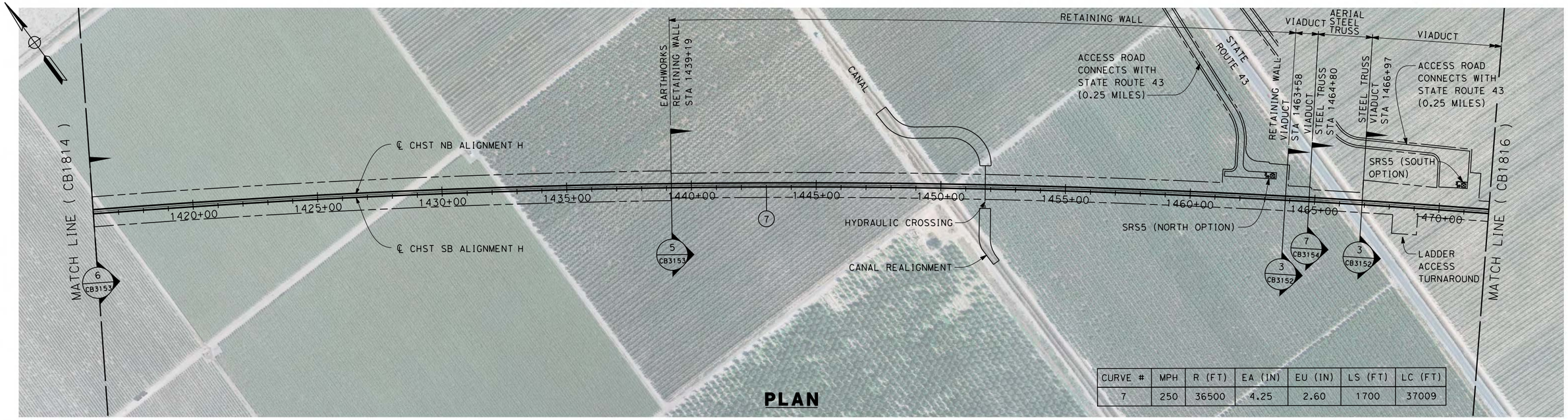
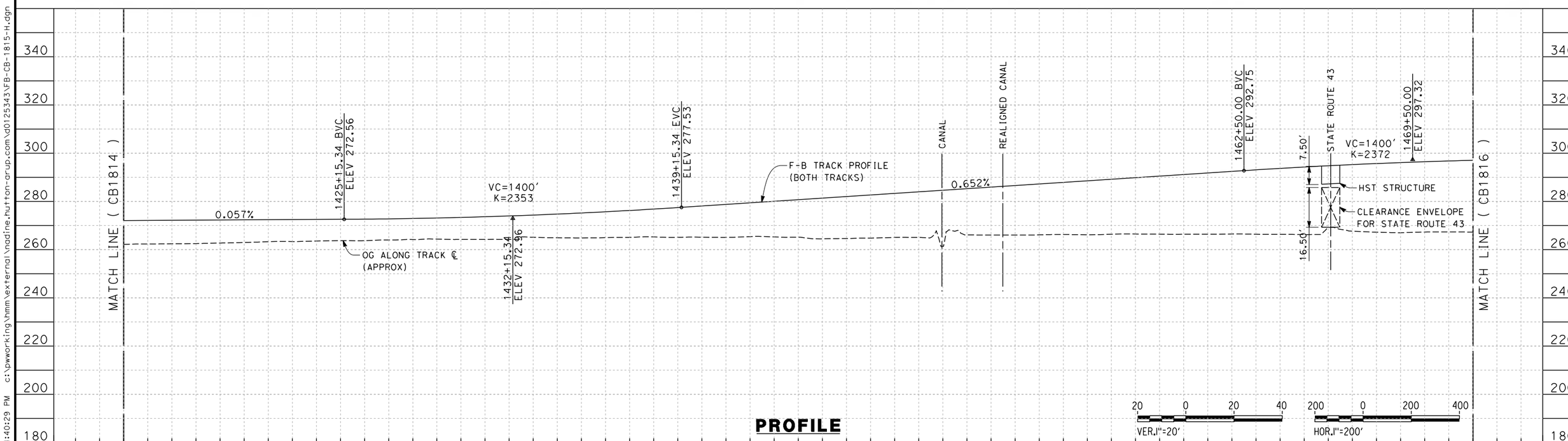



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1416+00 TO 1472+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1815
SCALE AS SHOWN
SHEET NO. 9 OF 31

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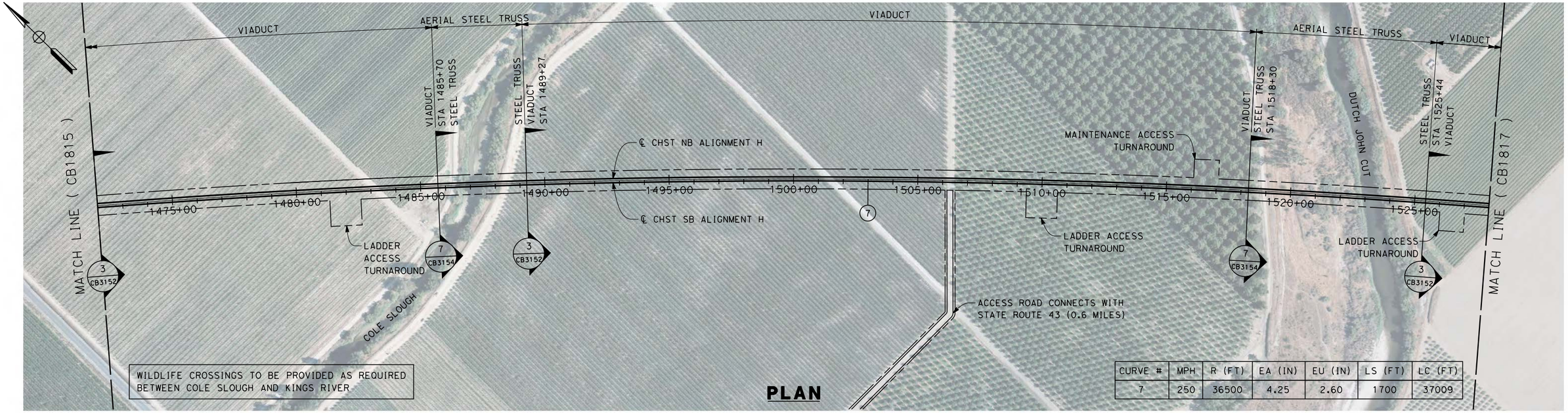
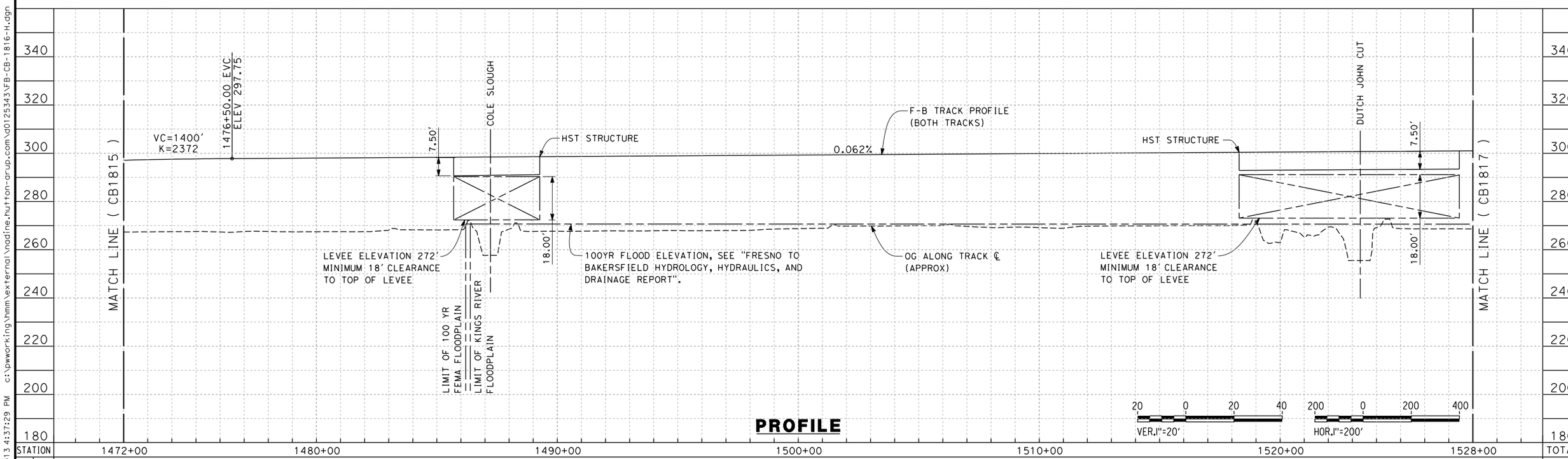



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1472+00 TO 1528+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1816
SCALE AS SHOWN
SHEET NO. 10 OF 31

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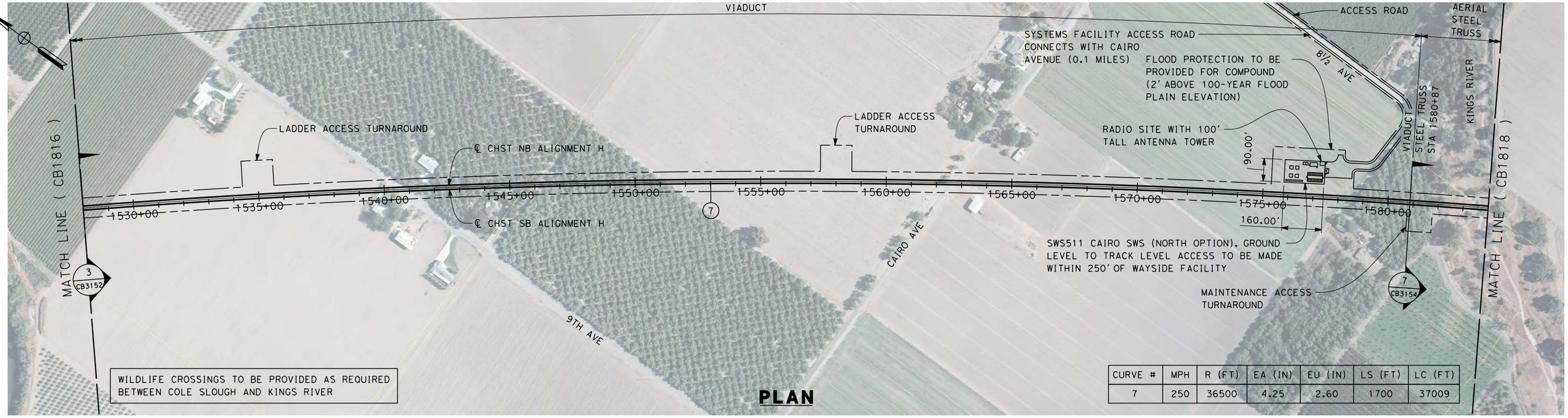
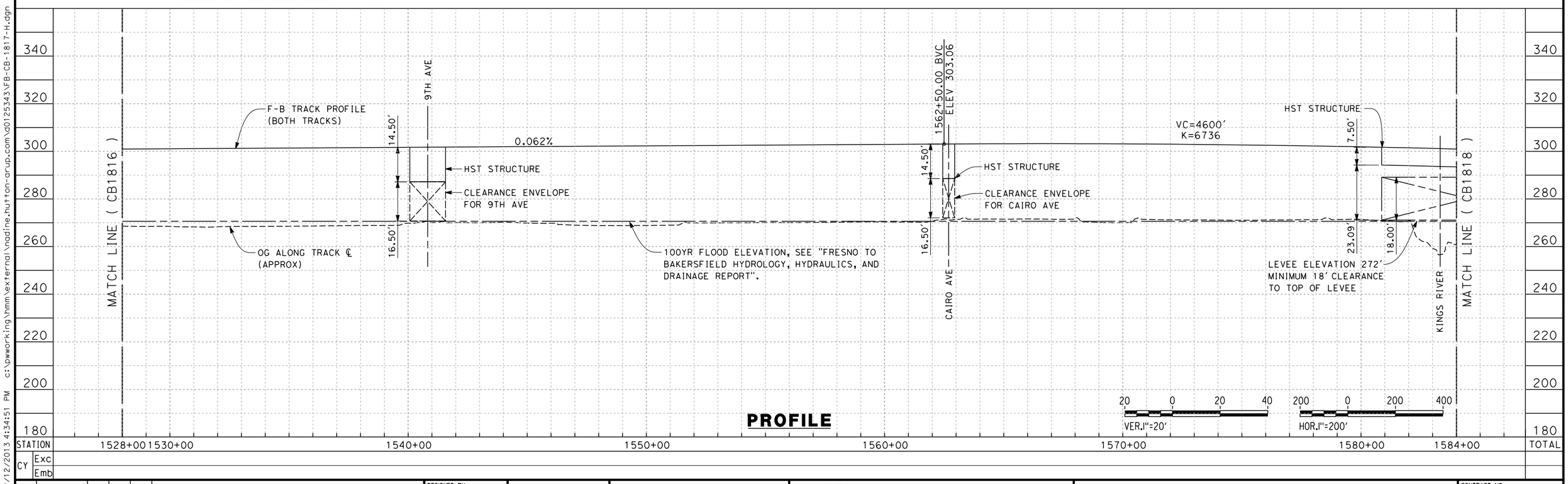



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA.1528+00 TO 1584+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1817
SCALE AS SHOWN
SHEET NO. 11 OF 31

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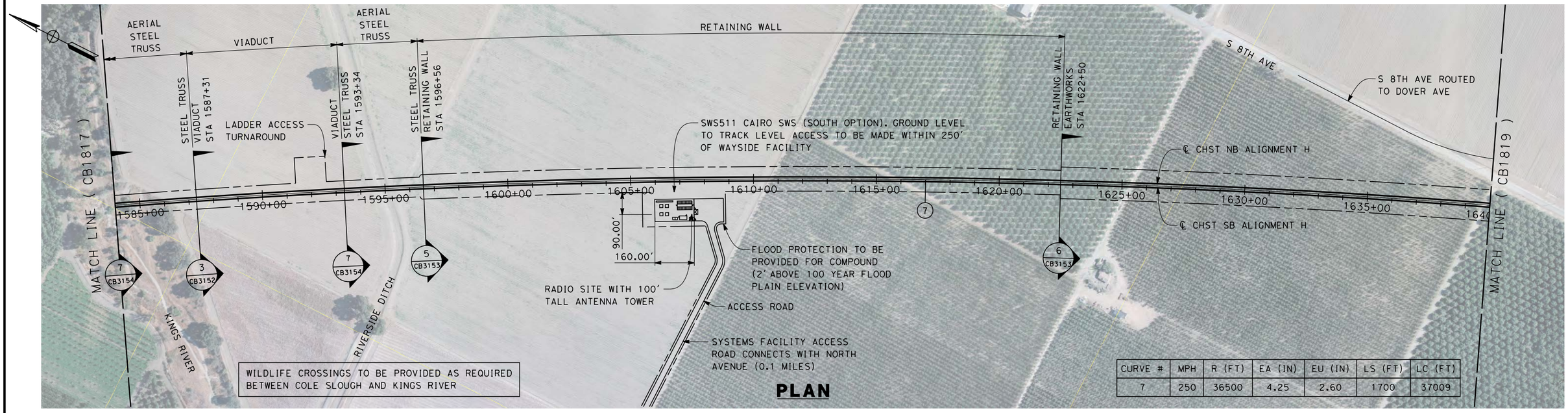
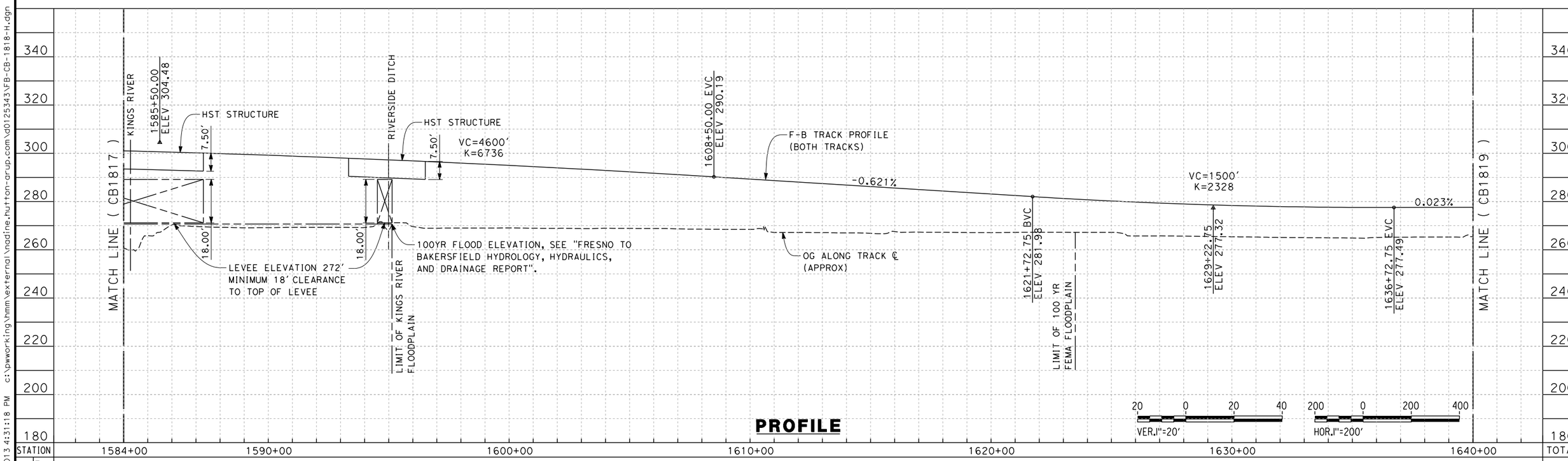



WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN COLE SLOUGH AND KINGS RIVER

**PLAN**

| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |




**PROFILE**

| STATION | 1584+00 | 1590+00 | 1600+00 | 1610+00 | 1620+00 | 1630+00 | 1640+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHES
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

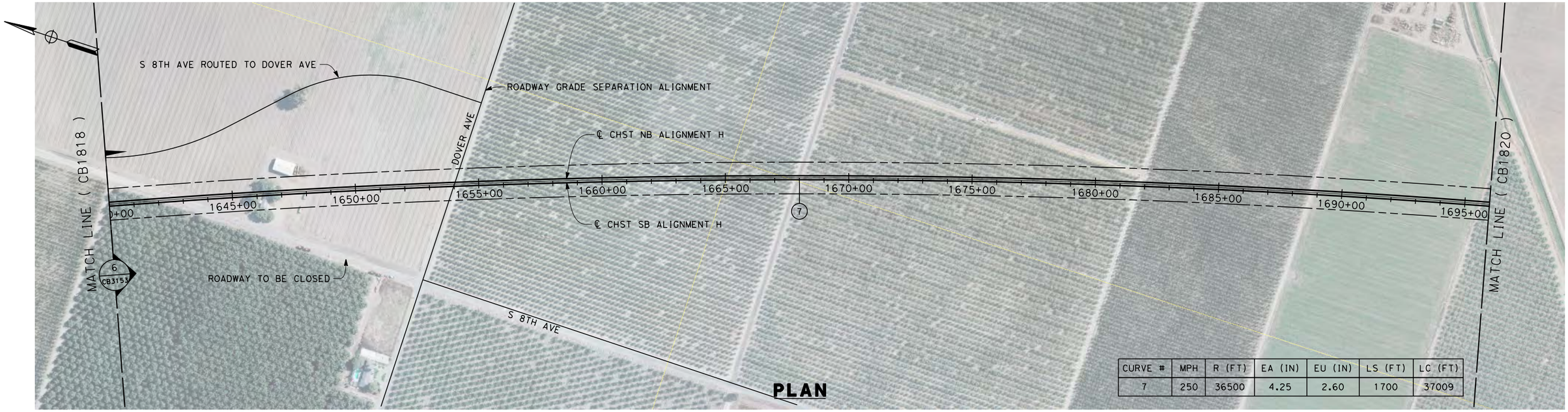
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1584+00 TO 1640+00
PLAN AND PROFILE

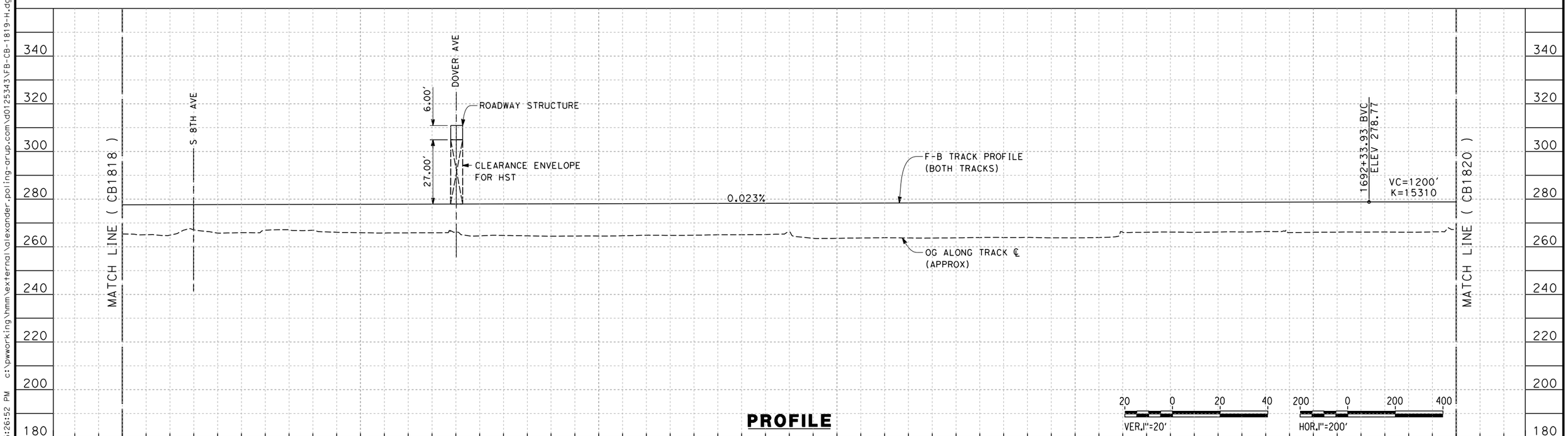
CONTRACT NO. HSR 06-0003
DRAWING NO. CB1818
SCALE AS SHOWN
SHEET NO. 12 OF 31

Nadine.Hutton 12/12/2013 4:31:18 PM c:\pwworking\hmm\external\nadine.hutton-arup.com\d0125343\FB-CB-1818-H.dgn




| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| STATION | 1640+00 | 1650+00 | 1660+00 | 1670+00 | 1680+00 | 1690+00 | 1696+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

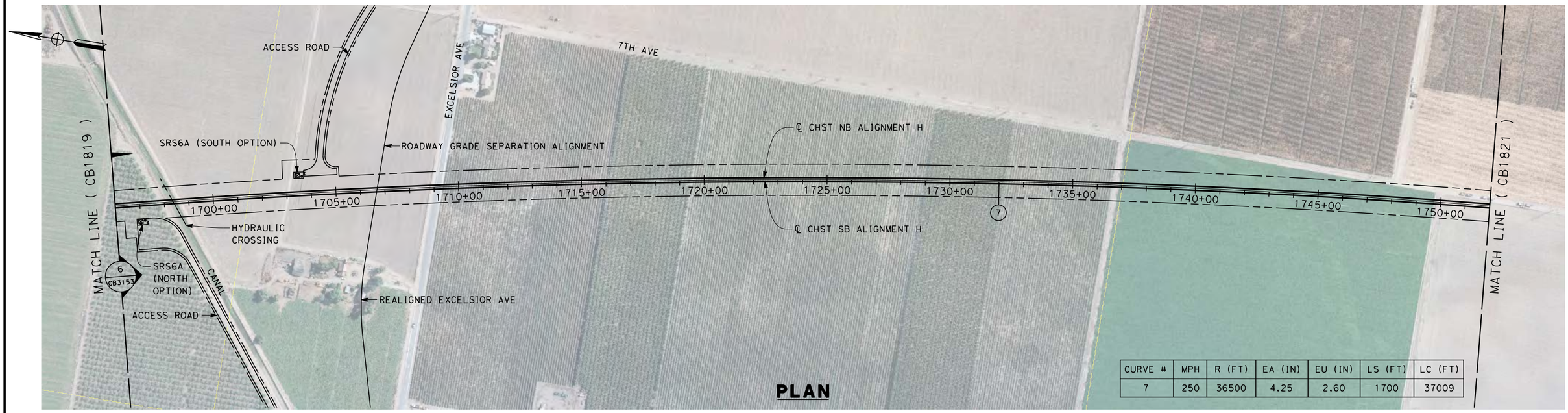
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1640+00 TO 1696+00
PLAN AND PROFILE

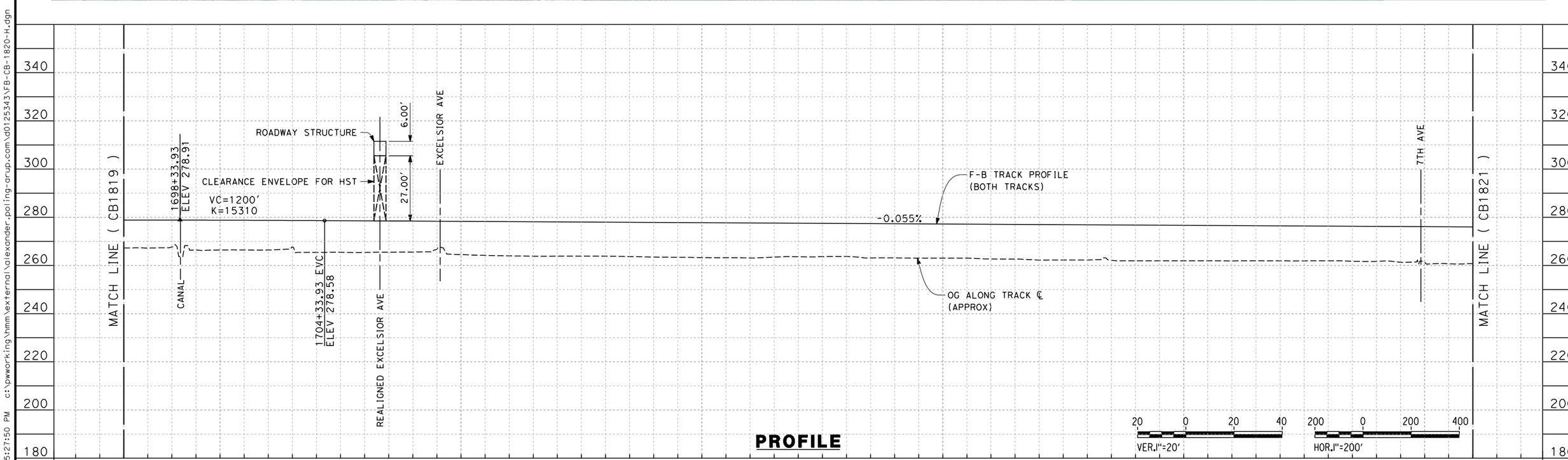
CONTRACT NO. HSR 06-0003
DRAWING NO. CB1819
SCALE AS SHOWN
SHEET NO. 13 OF 31

alexander.poling 12/10/2013 5:26:52 PM c:\pwworking\hmm\external\alexander.poling-arup.com\d0125343\FB-CB-1819-H.dgn




| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| STATION | 1696+00 | 1700+00 | 1710+00 | 1720+00 | 1730+00 | 1740+00 | 1750+00 | 1752+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | | |
| CY Emb | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1696+00 TO 1752+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1820
SCALE AS SHOWN
SHEET NO. 14 OF 31

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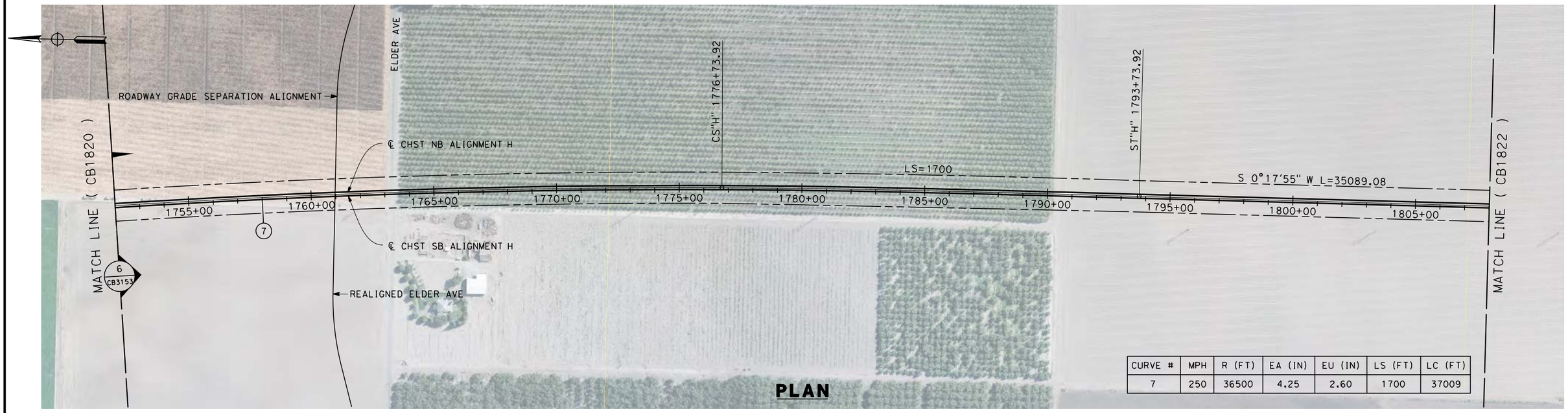
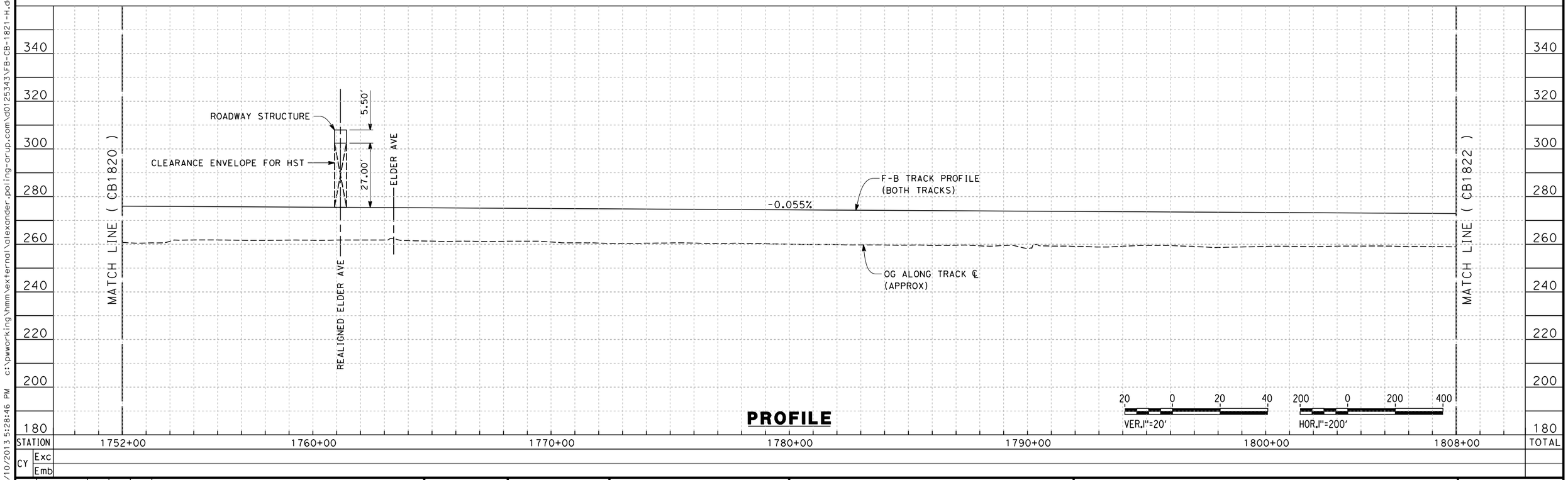



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 7 | 250 | 36500 | 4.25 | 2.60 | 1700 | 37009 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1752+00 TO 1808+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1821
SCALE AS SHOWN
SHEET NO. 15 OF 31

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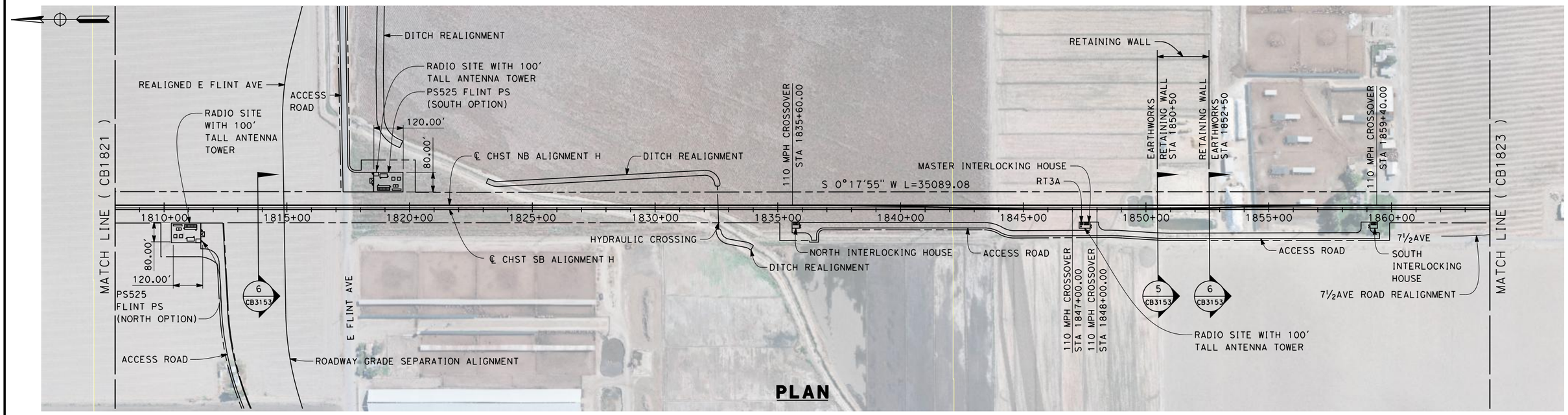
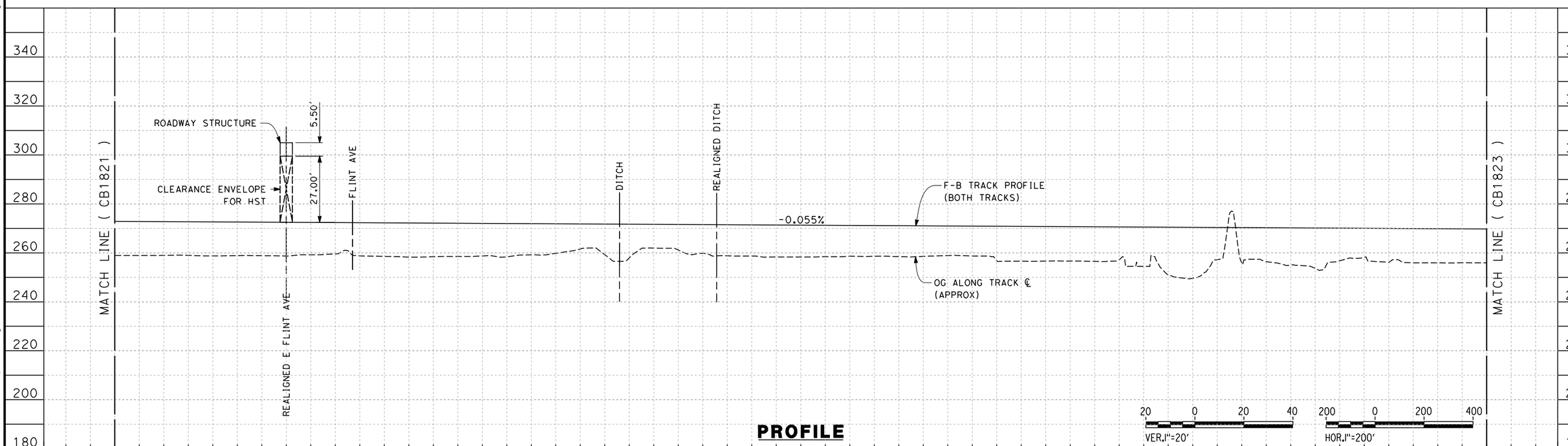



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 03/19/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1808+00 TO 1864+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1822
SCALE AS SHOWN
SHEET NO. 16 OF 31

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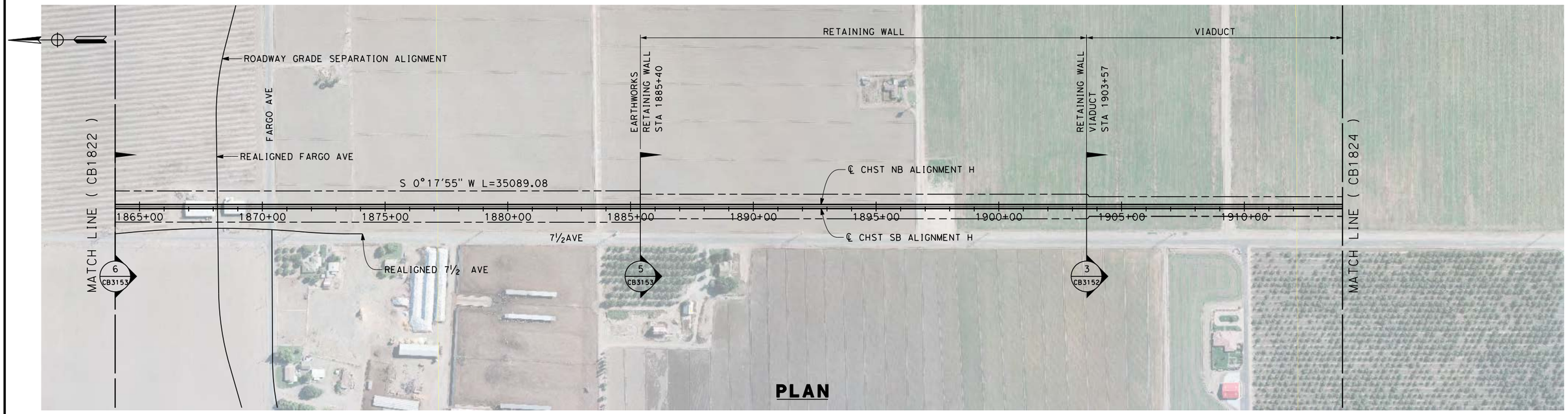


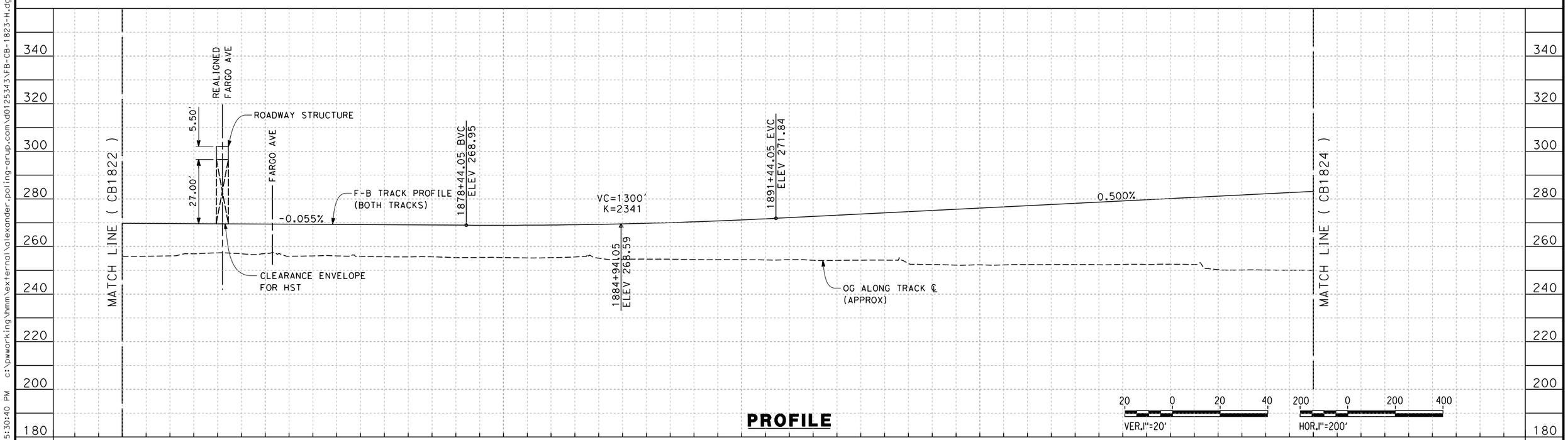


| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1864+00 TO 1914+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1823
SCALE AS SHOWN
SHEET NO. 17 OF 31

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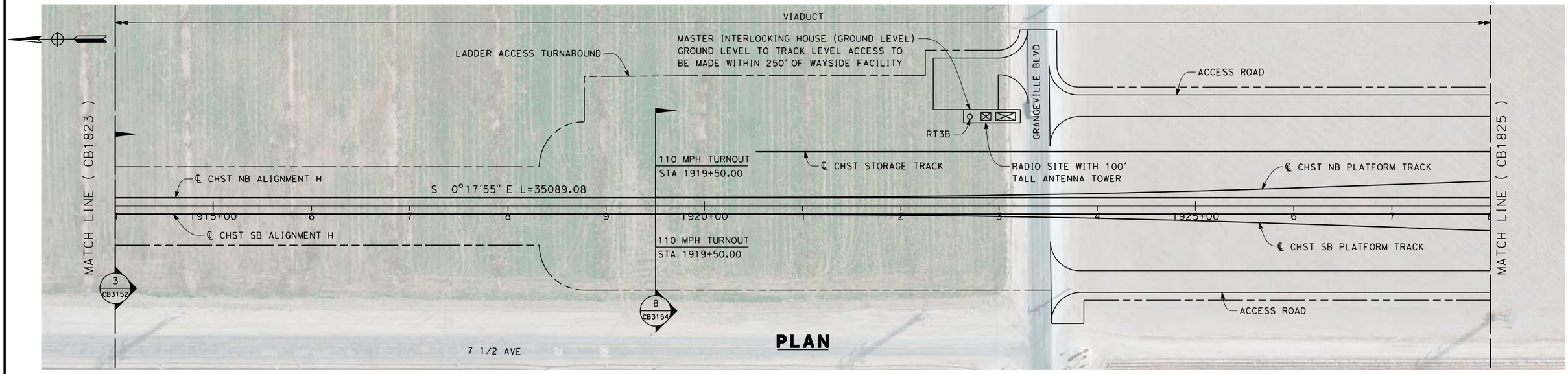
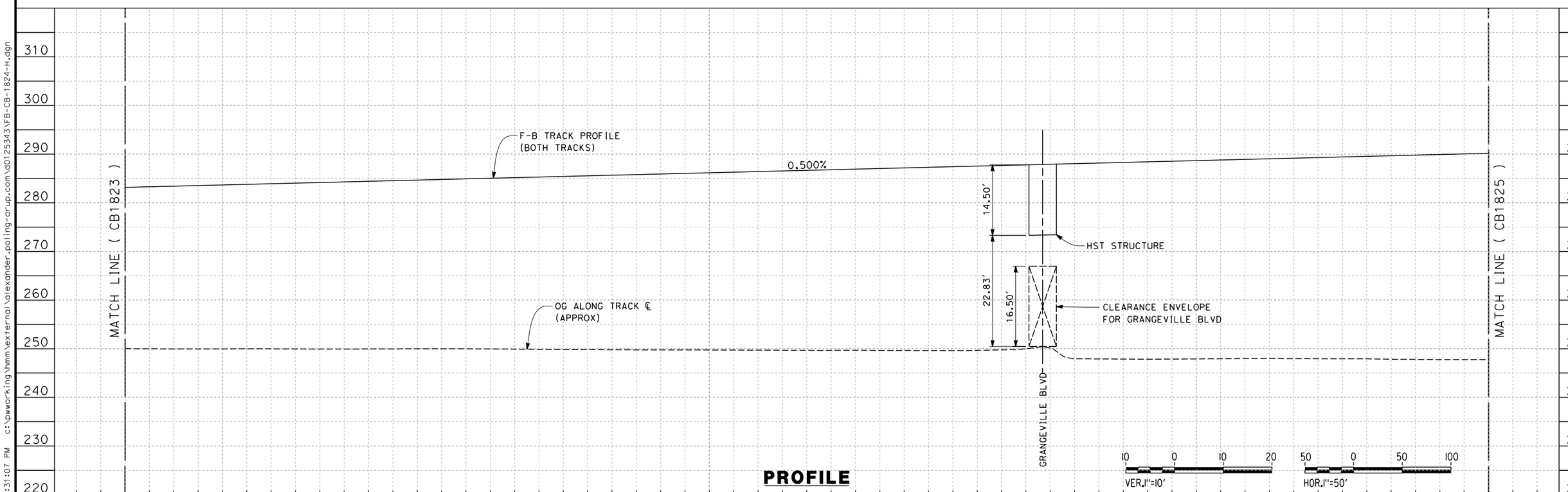



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1914+00 TO 1928+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1824
SCALE AS SHOWN
SHEET NO. 18 OF 31

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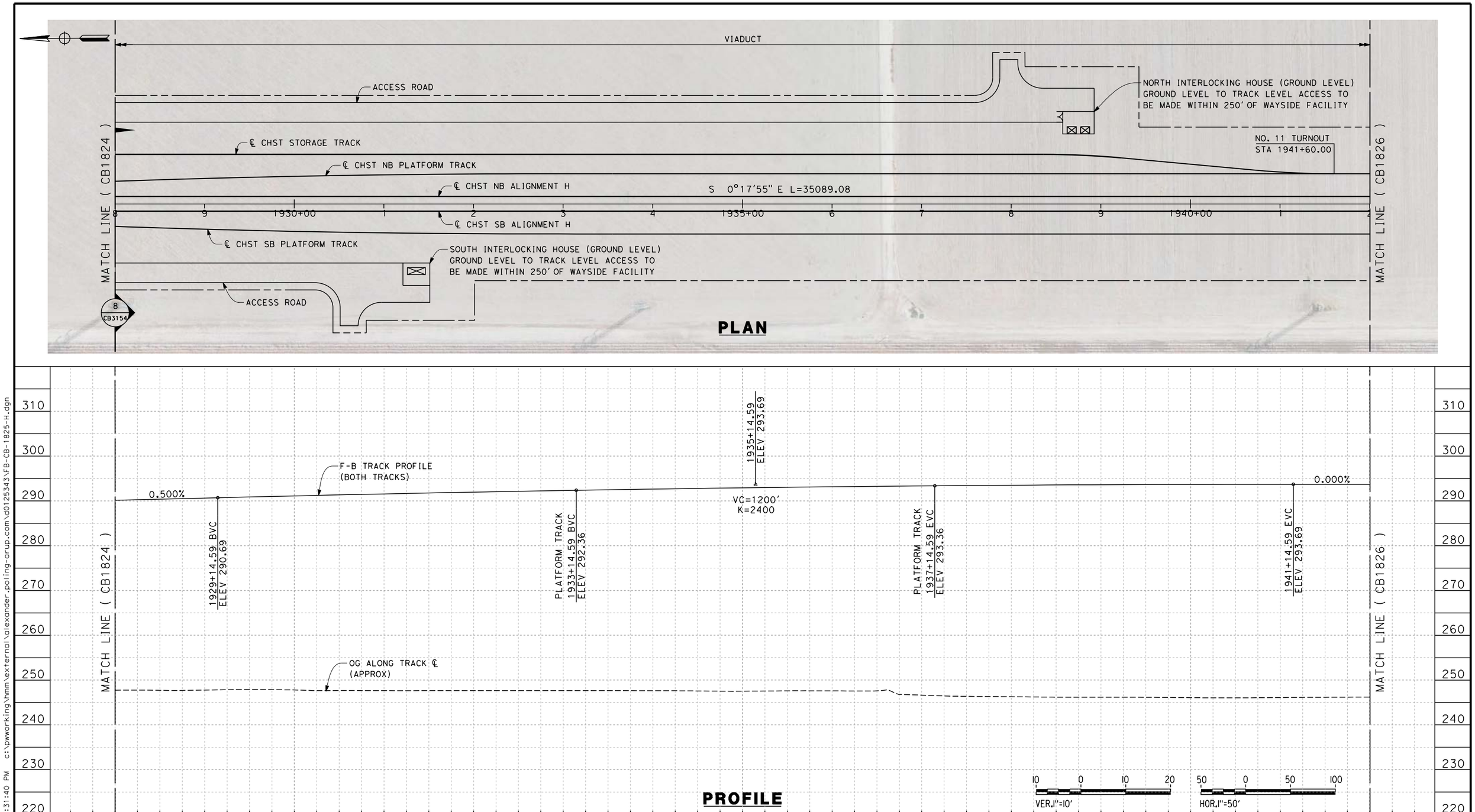


| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R.COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1928+00 TO 1942+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1825
SCALE AS SHOWN
SHEET NO. 19 OF 31

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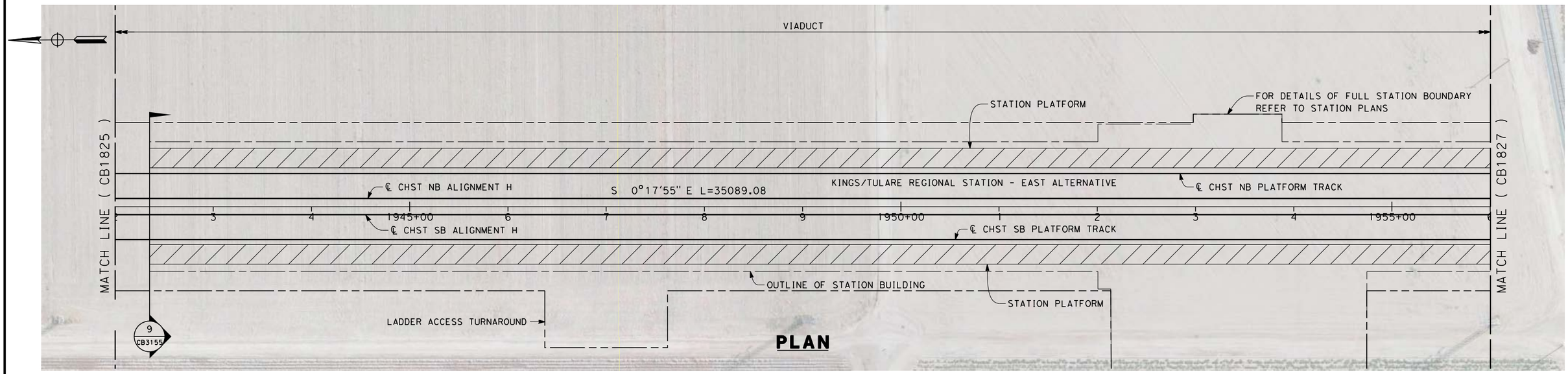


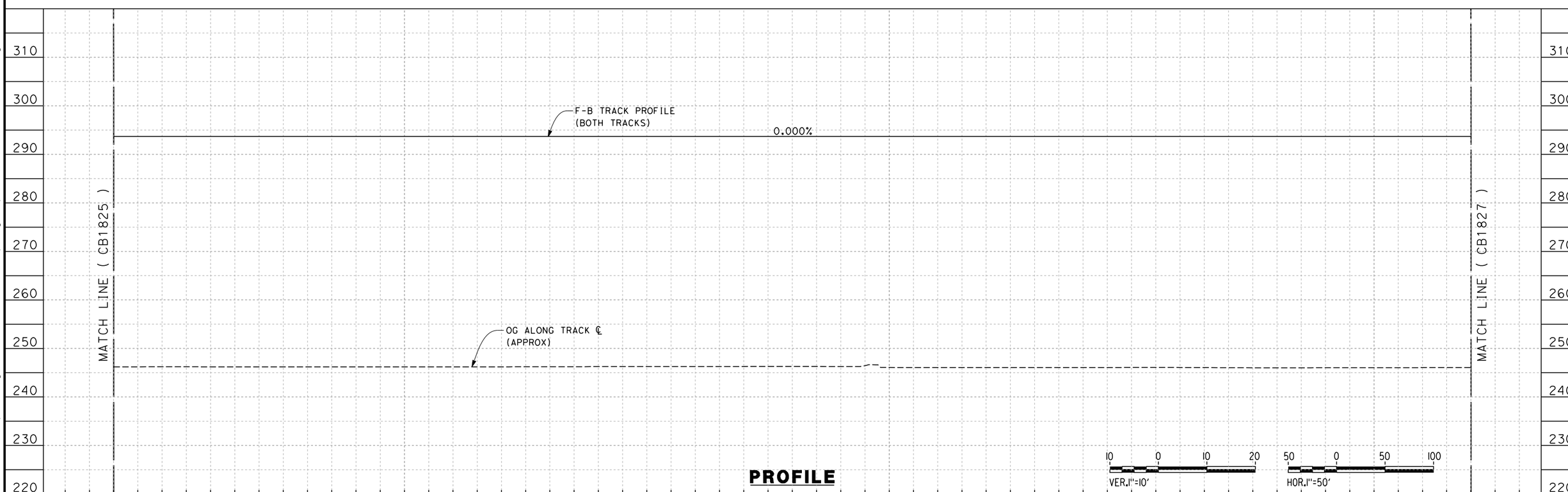


| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1942+00 TO 1956+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1826
SCALE AS SHOWN
SHEET NO. 20 OF 31

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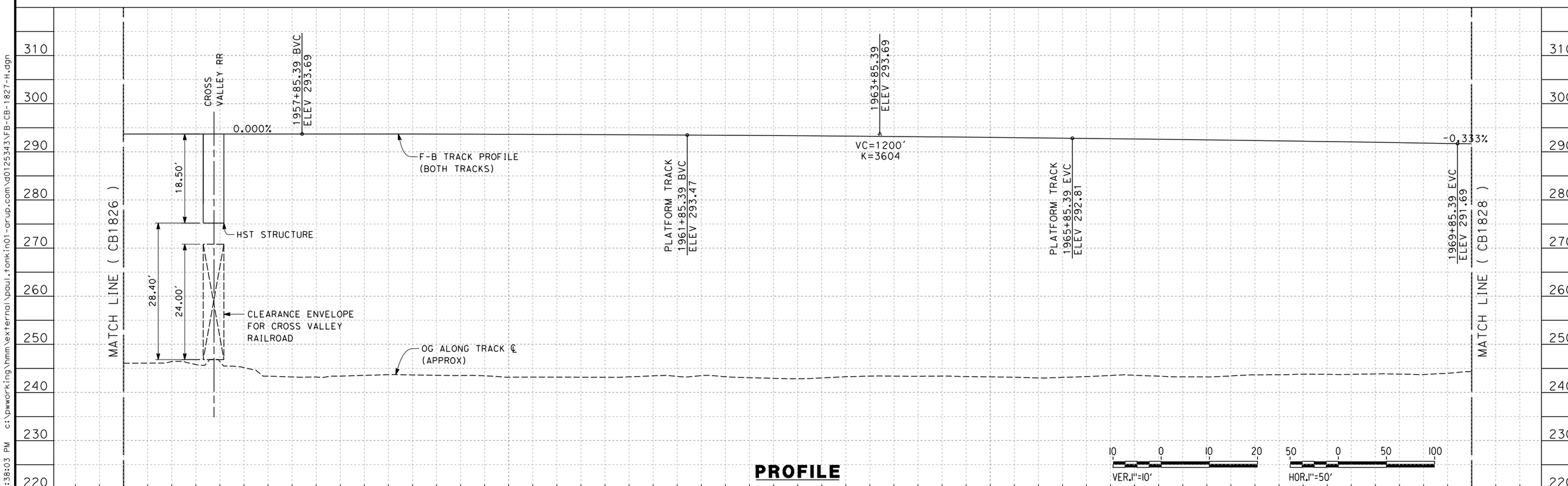
**PLAN**




**PROFILE**

| STATION | 1956+00 | 7 | 8 | 9 | 1960+00 | 1 | 2 | 3 | 4 | 1965+00 | 6 | 7 | 8 | 9 | 1970+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | | | | | | | | | |
| CY Emb | | | | | | | | | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
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CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1956+00 TO 1970+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1827
SCALE AS SHOWN
SHEET NO. 21 OF 31

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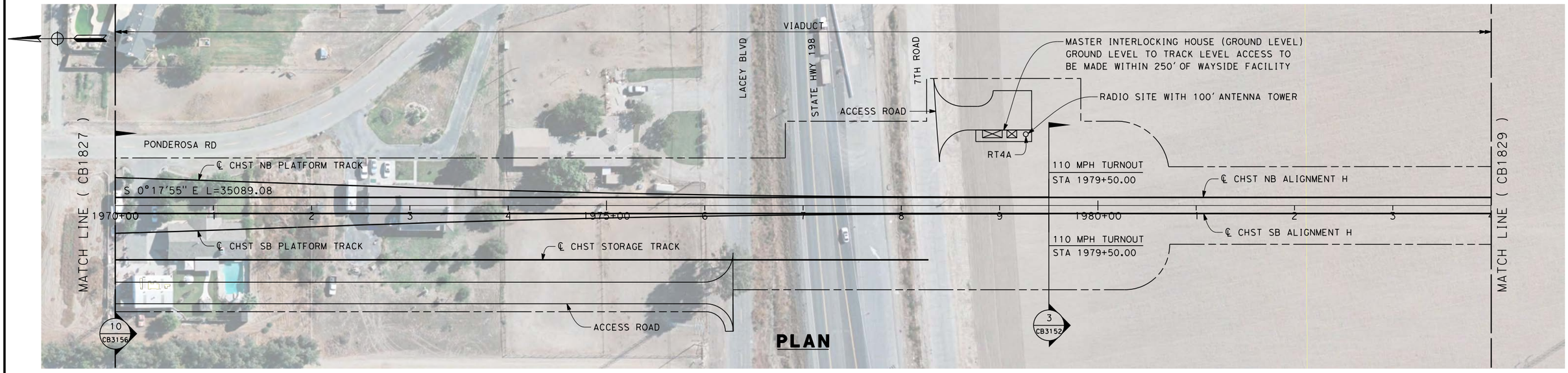


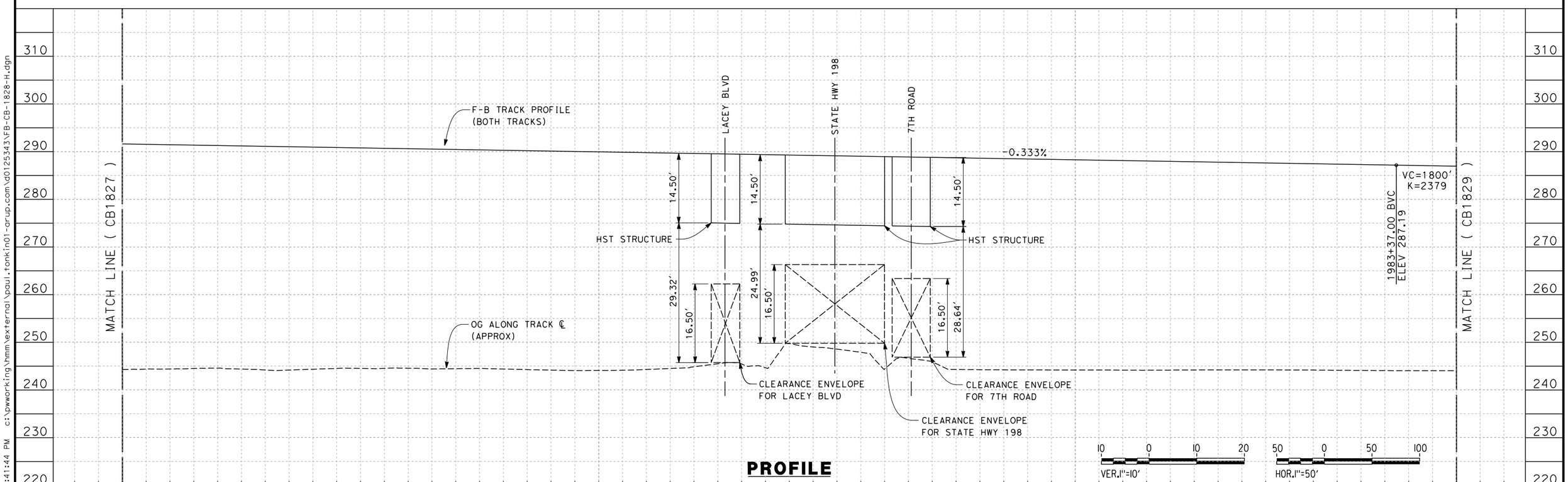


| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1970+00 TO 1984+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1828
SCALE AS SHOWN
SHEET NO. 22 OF 31

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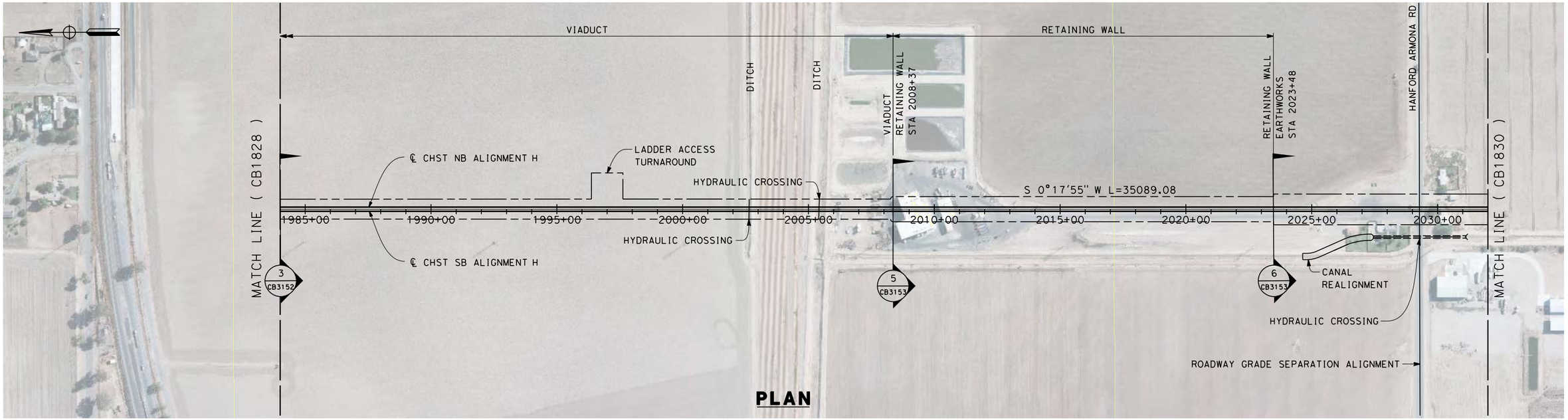
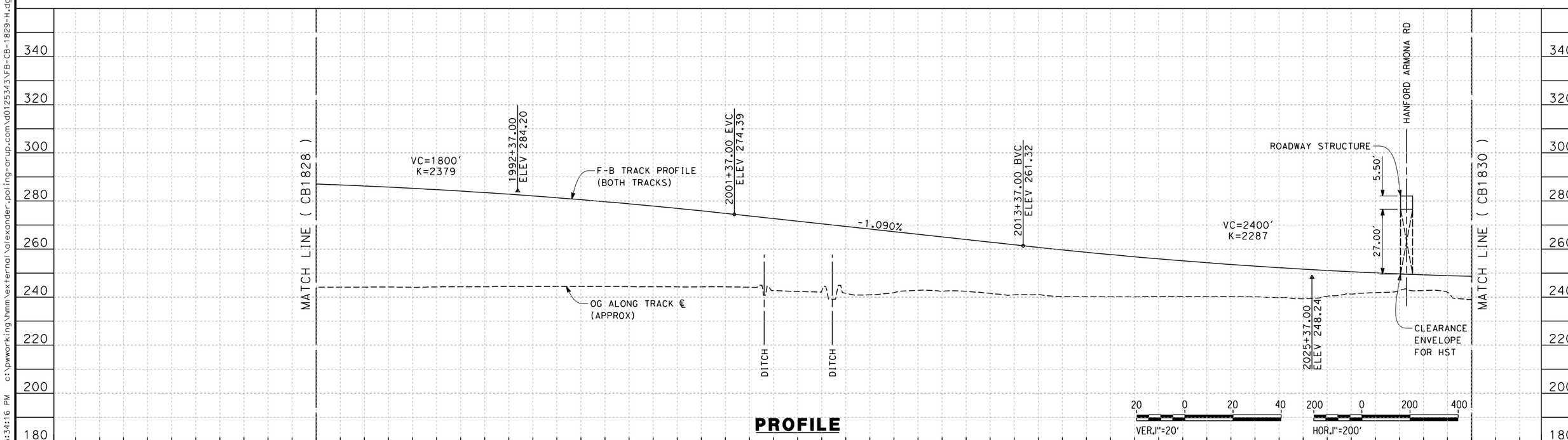
paul.tonkin




**PLAN**




**PROFILE**

| STATION | 1984+00 | 1990+00 | 2000+00 | 2010+00 | 2020+00 | 2030+00 | 2032+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 1984+00 TO 2032+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1829
SCALE AS SHOWN
SHEET NO. 23 OF 31

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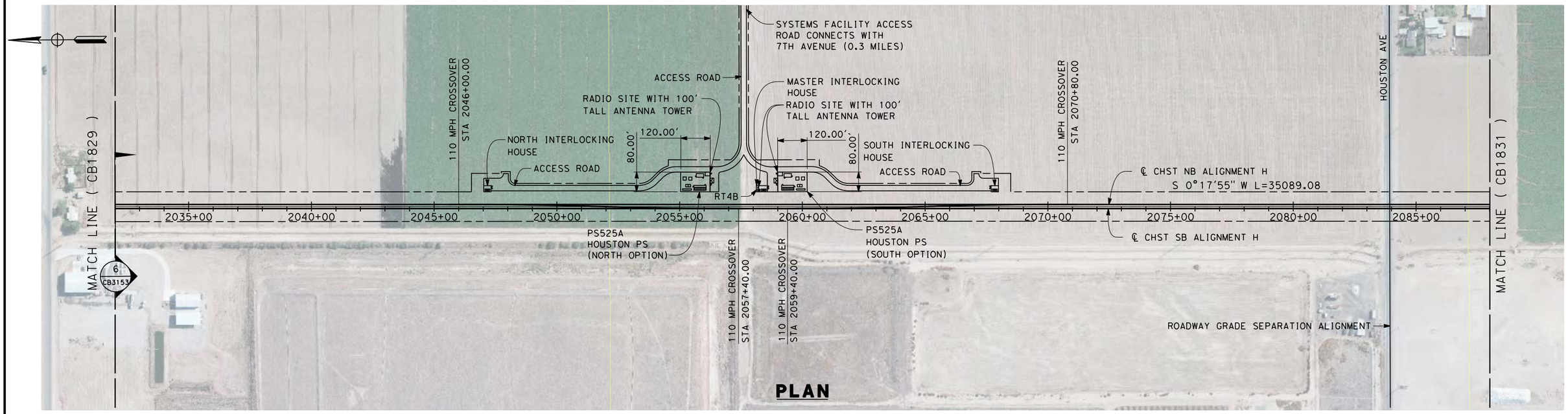
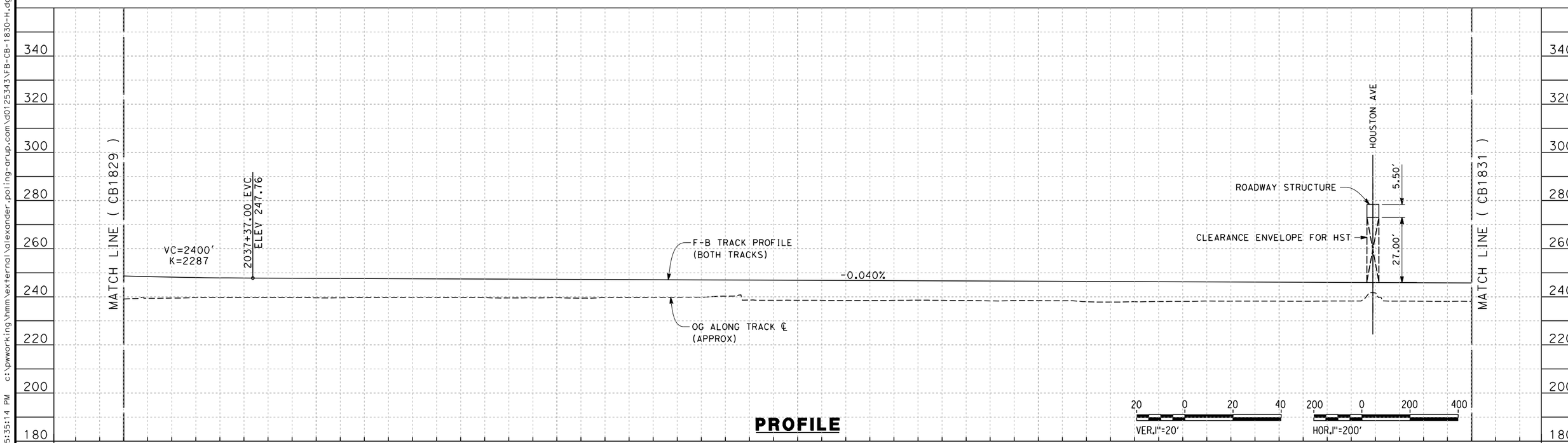



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 2032+00 TO 2088+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1830
SCALE AS SHOWN
SHEET NO. 24 OF 31

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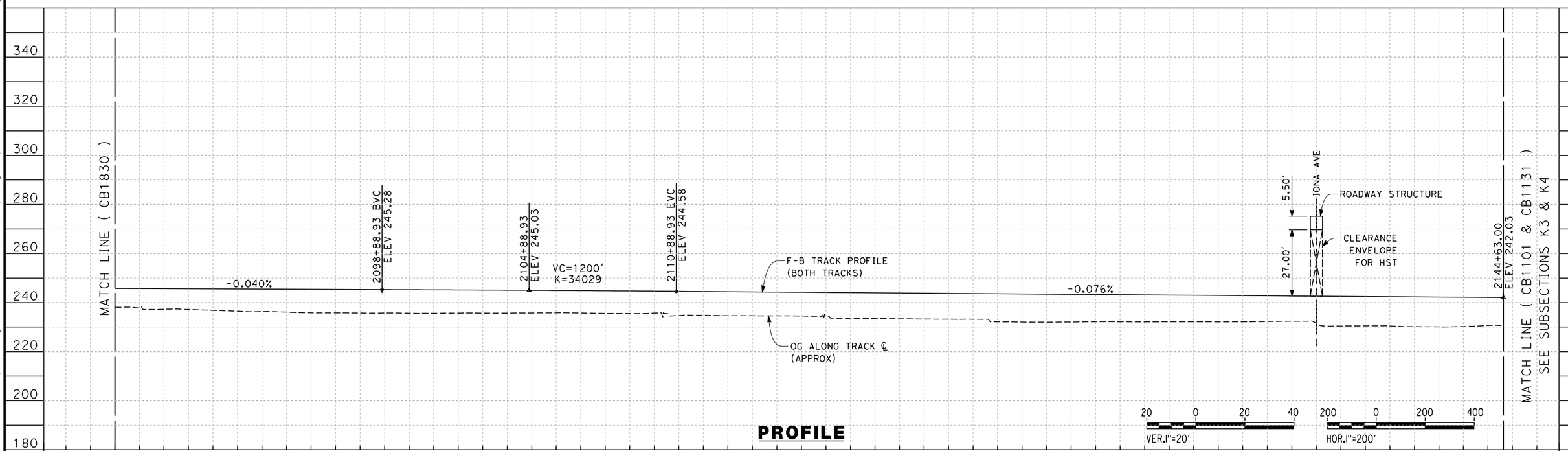
**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
STA. 2088+00 TO 2144+63
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1831
SCALE AS SHOWN
SHEET NO. 25 OF 31

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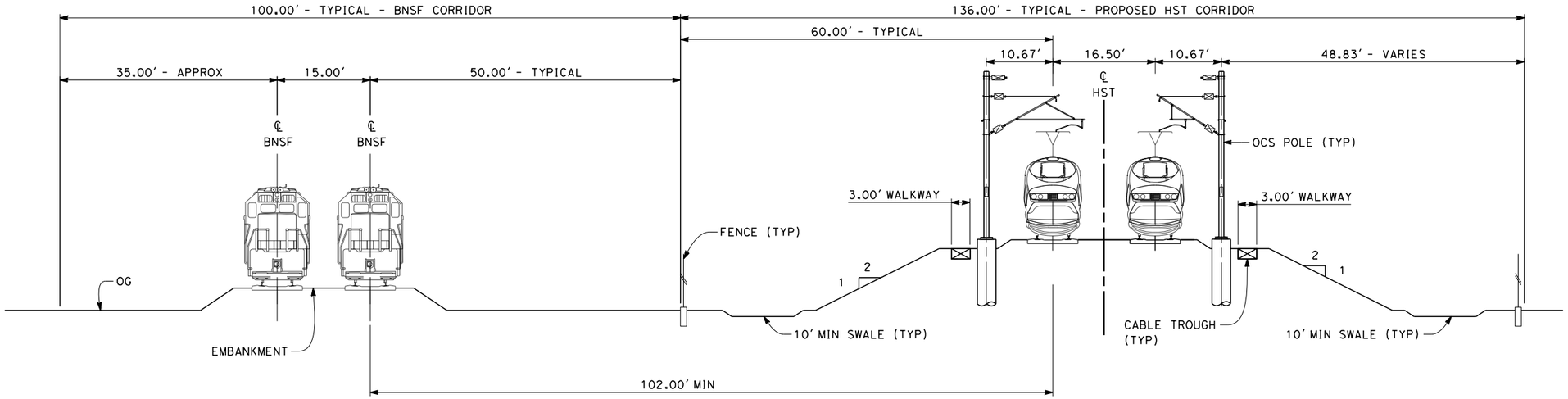
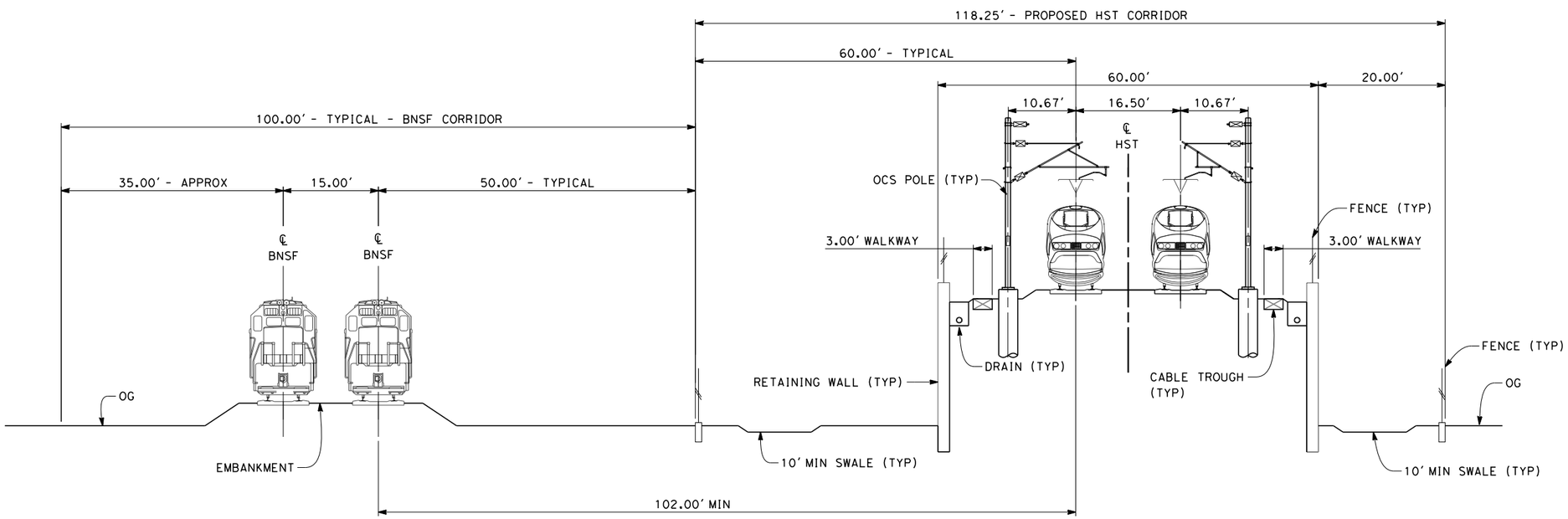
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.




## SECTION 1

TWIN TRACK ADJACENT TO EXISTING BNSF - EMBANKMENT WITH OPEN DRAINAGE
STA 1065+07 THROUGH STA 1086+00




## SECTION 2

TWIN TRACK ADJACENT TO EXISTING BNSF - RETAINED EMBANKMENT WITH OPEN DRAINAGE
STA 1086+00 THROUGH STA 1105+70

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

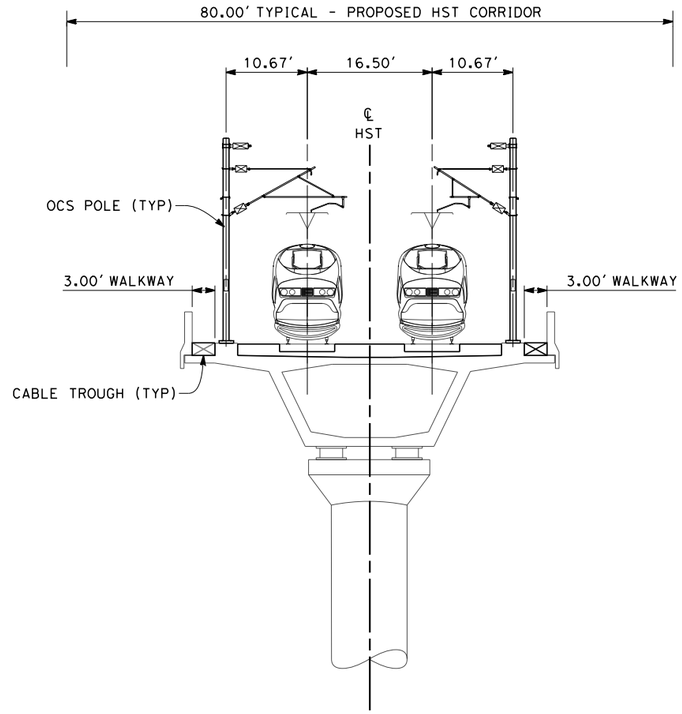
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3151
SCALE AS SHOWN
SHEET NO. 26 OF 31

alexander.poling 12/10/2013 5:36:46 PM c:\pwworking\hmm\external\alexander.poling-arup.com\d0125343\FB-CB-3151-H.dgn

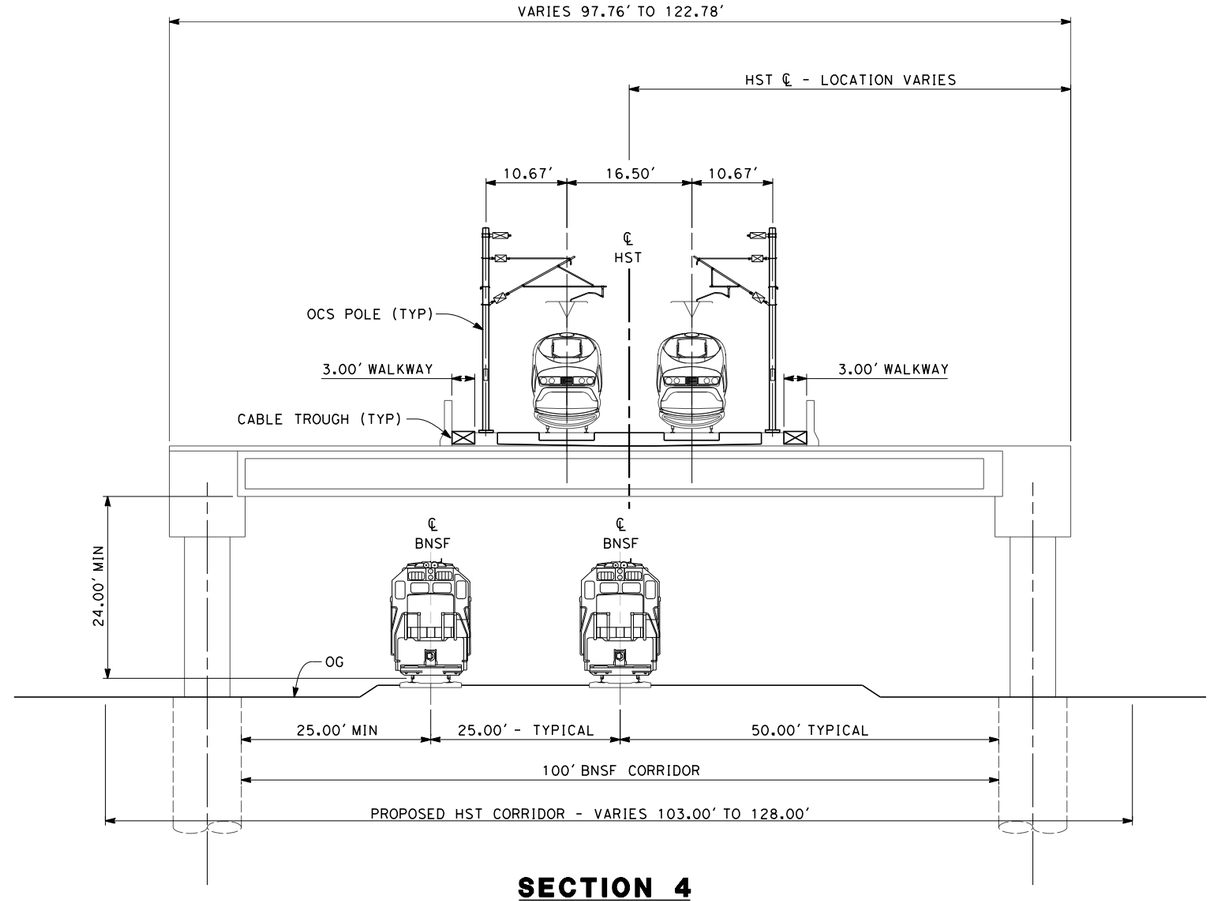
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.




## SECTION 3

TWIN TRACK - AERIAL STRUCTURE
STA 1105+70 THROUGH STA 1120+30
STA 1134+60 THROUGH STA 1156+20
STA 1463+58 THROUGH STA 1464+80
STA 1466+97 THROUGH STA 1485+70
STA 1489+27 THROUGH STA 1518+30
STA 1525+44 THROUGH STA 1580+87
STA 1587+31 THROUGH STA 1593+34
STA 1903+57 THROUGH STA 1919+50
STA 1979+50 THROUGH STA 2008+37




## SECTION 4

TWIN TRACK - ELEVATED SLAB OVER BNSF
STA 1120+30 THROUGH STA 1134+60

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3152
SCALE AS SHOWN
SHEET NO. 27 OF 31

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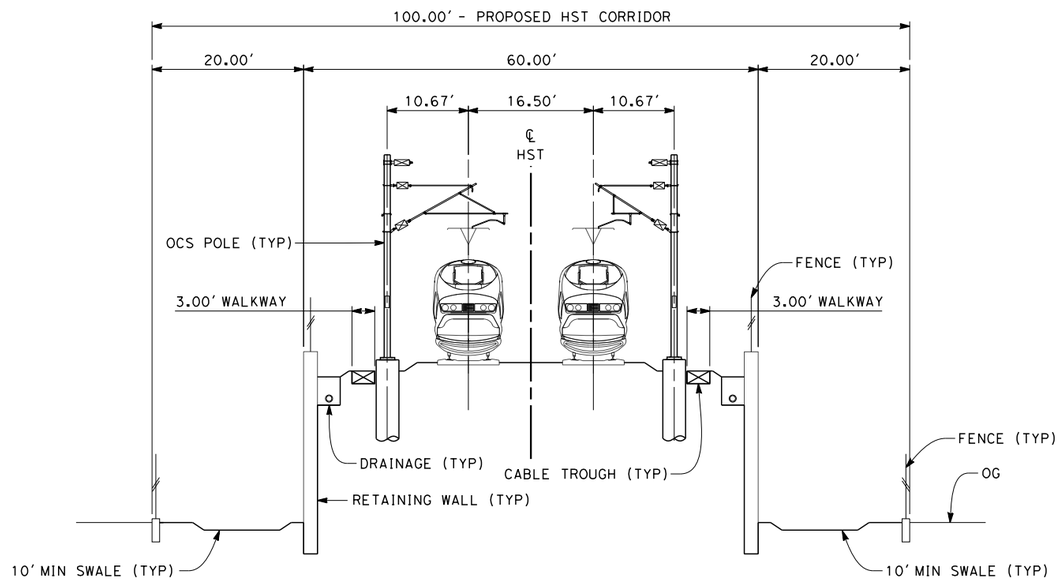
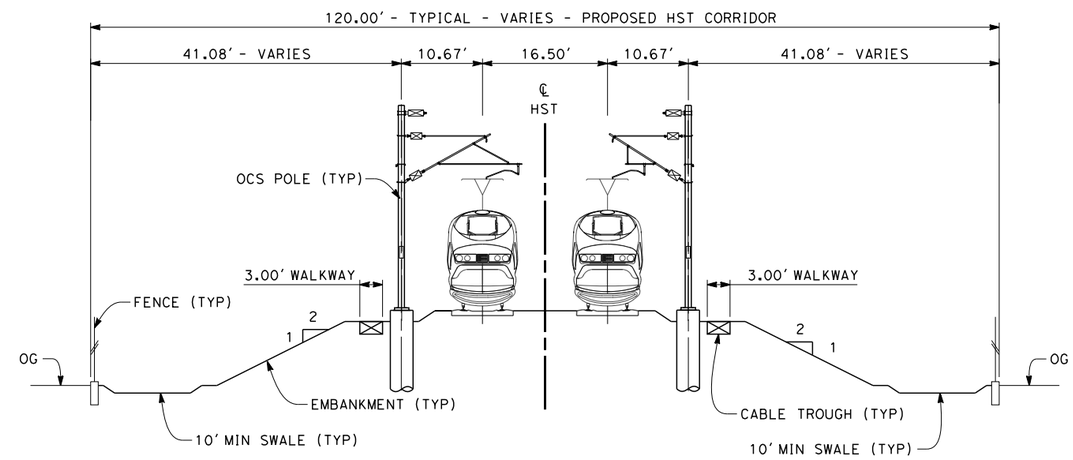
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.
4. LEFT SIDE IS RETAINIED EMBANKMENT WITH OPEN DRAINAGE AND RIGHT SIDE IS EMBANKMENT WITH OPEN DRAINAGE.




## SECTION 5

TWIN TRACK - RETAINED EMBANKMENT WITH OPEN DRAINAGE
STA 1156+20 THROUGH STA 1173+50
STA 1439+19 THROUGH STA 1463+58
STA 1596+56 THROUGH STA 1622+50
STA 1850+50 THROUGH STA 1852+50 (SEE NOTE 4)
STA 1885+40 THROUGH STA 1903+57
STA 2008+37 THROUGH STA 2023+48




## SECTION 6

TWIN TRACK - EMBANKMENT WITH OPEN DRAINAGE
STA 1173+50 THROUGH STA 1439+19
STA 1622+50 THROUGH STA 1850+50
STA 1852+50 THROUGH STA 1885+40
STA 2023+48 THROUGH STA 2144+63

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 03/19/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

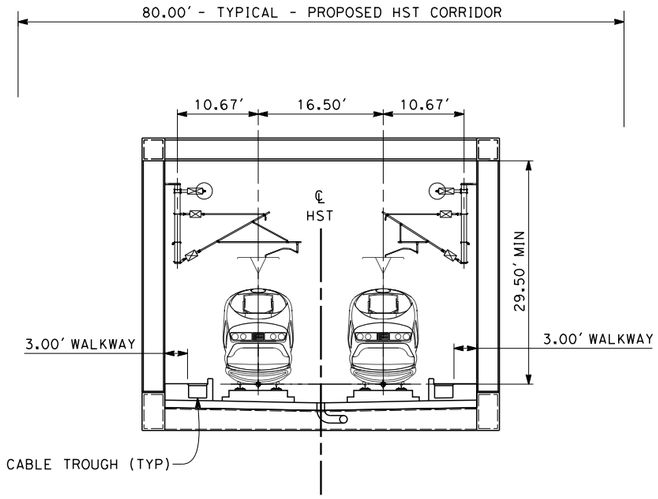
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3153
SCALE AS SHOWN
SHEET NO. 28 OF 31

eron.sudhausen 3/10/2014 5:40:45 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\d0125343\FB-CB-3153-H.dgn

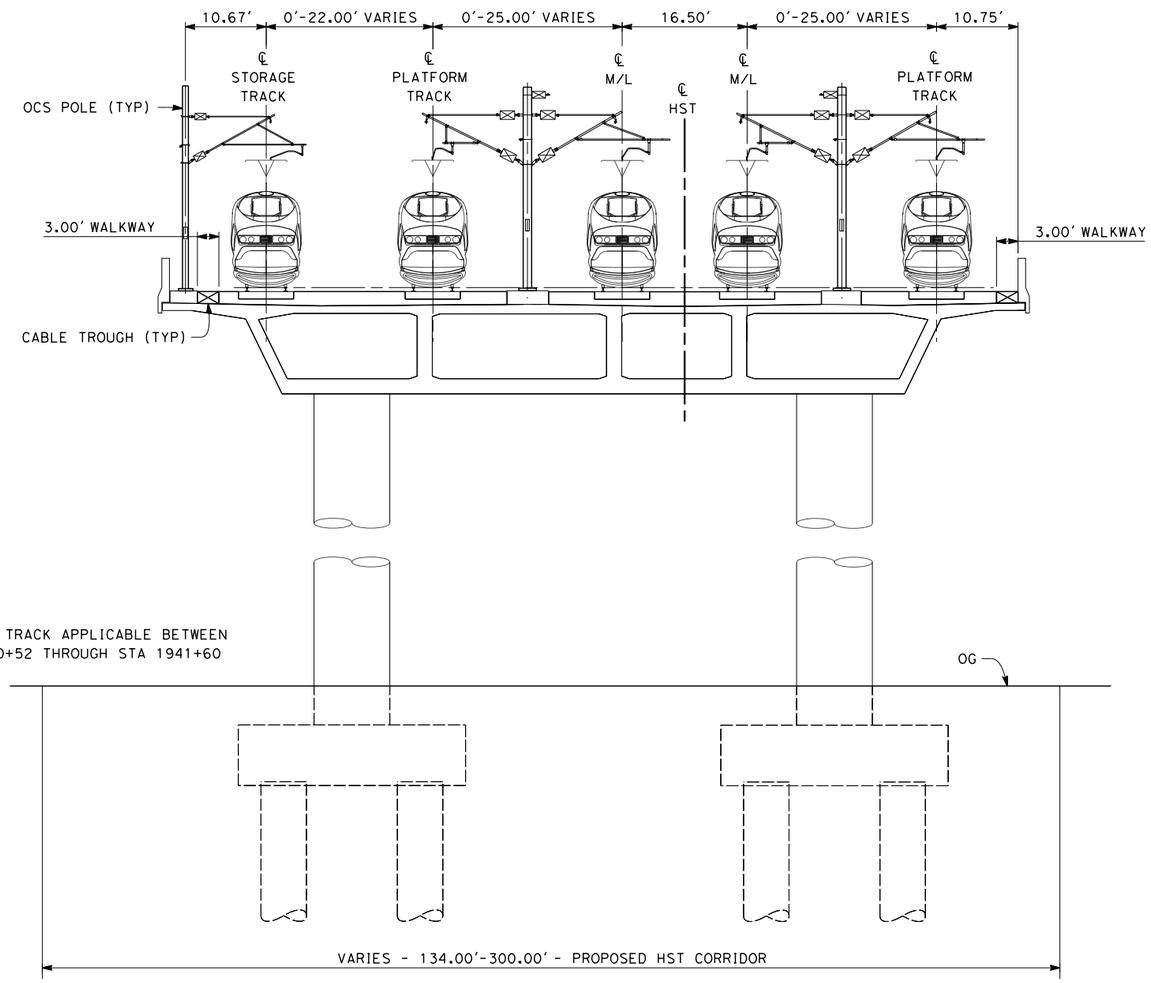
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.




## SECTION 7

TWIN TRACK- AERIAL STEEL TRUSS
STA 1464+80 THROUGH STA 1466+97
STA 1485+70 THROUGH STA 1489+27
STA 1518+30 THROUGH STA 1525+44
STA 1580+87 THROUGH STA 1587+31
STA 1593+34 THROUGH STA 1596+56




NOTE:
STORAGE TRACK APPLICABLE BETWEEN
STA 1920+52 THROUGH STA 1941+60

## SECTION 8

5 TRACK ELEVATED STATION APPROACH
STA 1919+50 THROUGH STA 1942+27

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3154
SCALE AS SHOWN
SHEET NO. 29 OF 31

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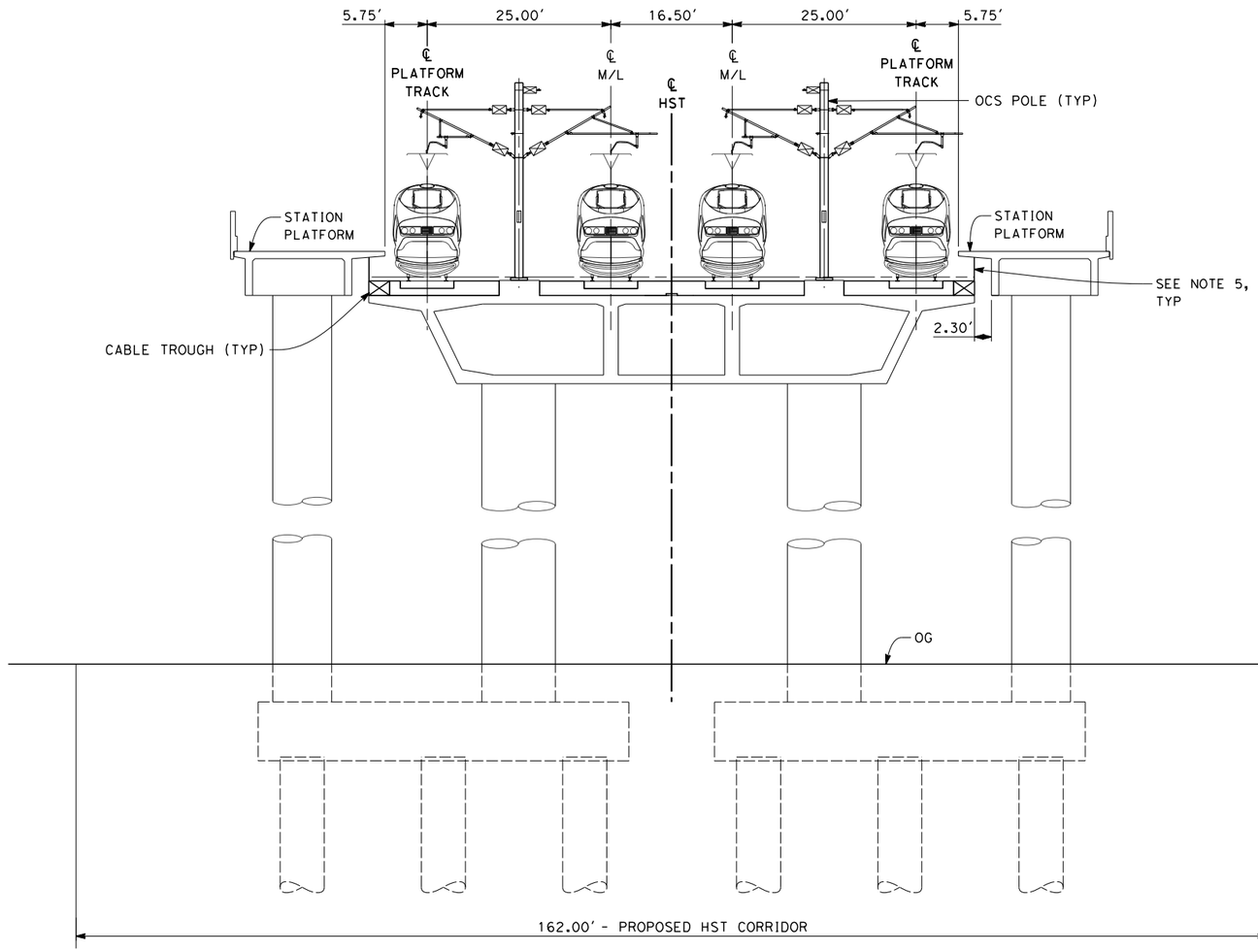
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.
4. HST CORRIDOR WIDTH VARIES THROUGH THE STATION ACCORDING TO THE STATION FACILITIES PROVIDED. SEE STATION DRAWINGS FOR DETAILS.
5. MESH FENCE TO BE PROVIDED BETWEEN VIADUCT AND PLATFORM AS FALL PREVENTION BARRIER.




## SECTION 9

4 TRACK ELEVATED PLATFORMS
STA 1942+27 THROUGH STA 1956+67

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DATE 12/31/13

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URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3155
SCALE AS SHOWN
SHEET NO. 30 OF 31

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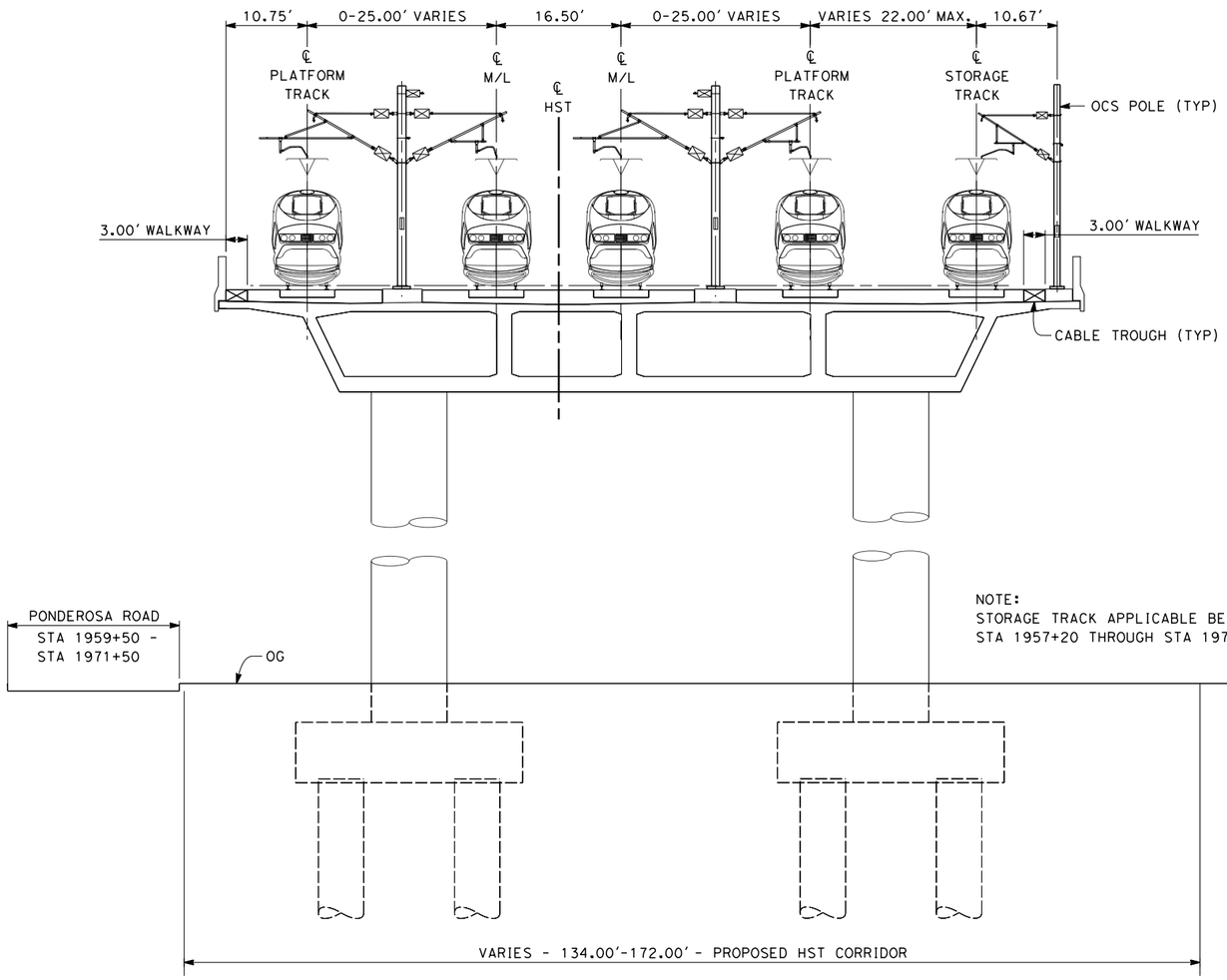
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
3. SUPERELEVATION IS NOT SHOWN IN CROSS SECTIONS. FOR DETAILS OF SUPERELEVATION SEE CURVE TABLES.




NOTE:
STORAGE TRACK APPLICABLE BETWEEN
STA 1957+20 THROUGH STA 1978+28

## SECTION 10

5 TRACK ELEVATED STATION APPROACH
STA 1956+67 THROUGH STA 1979+50

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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CHECKED BY K. SEYMOUR
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

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CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD SUBSECTION
ALIGNMENT H
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3156
SCALE AS SHOWN
SHEET NO. 31 OF 31

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| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

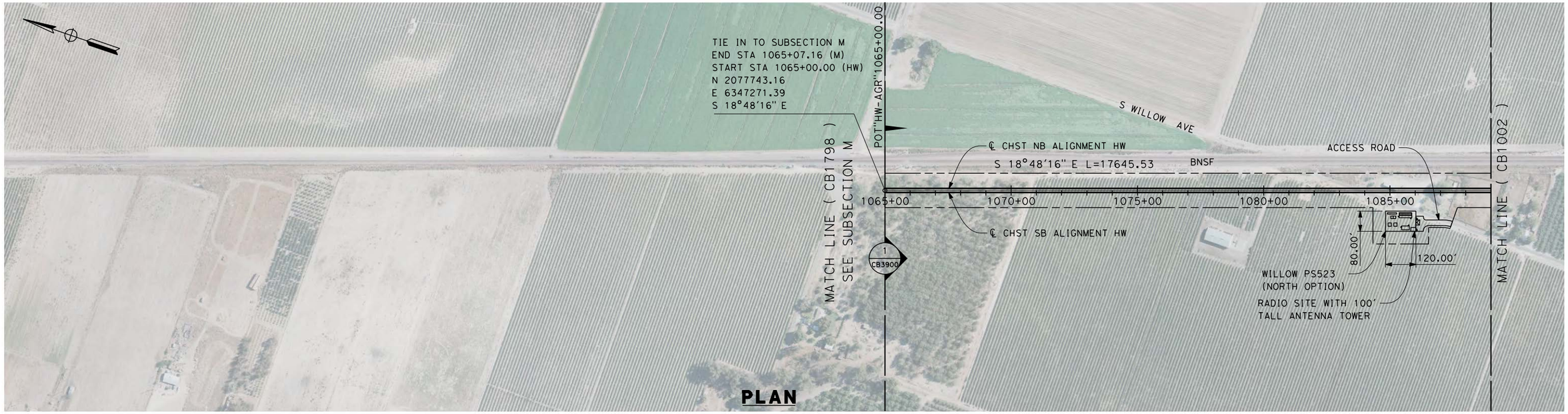
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

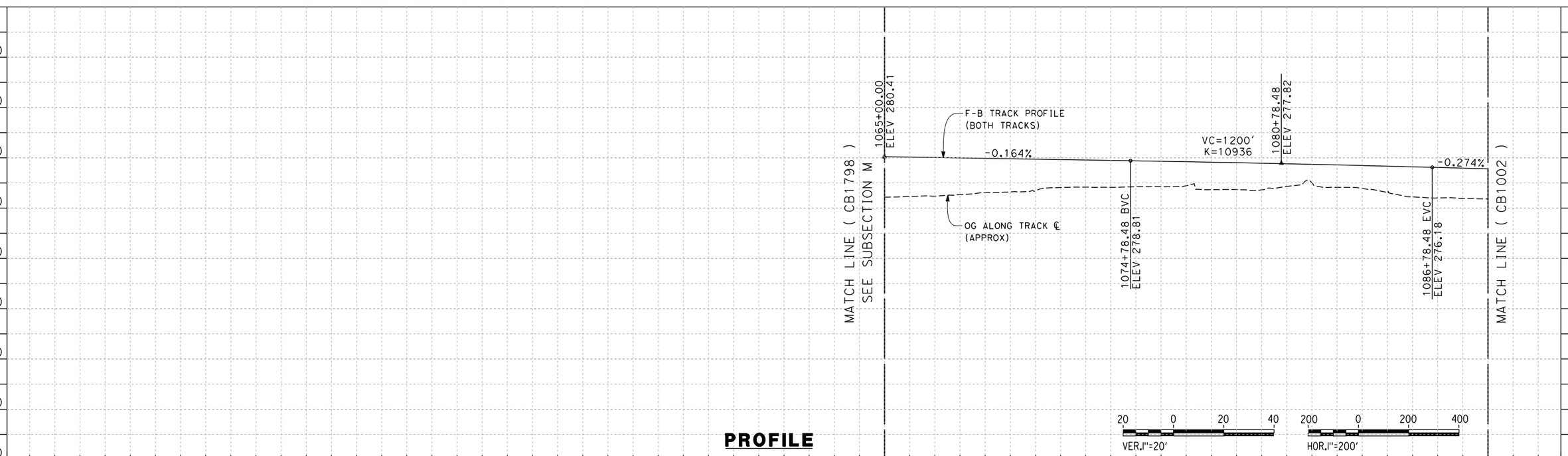
# CALIFORNIA HIGH-SPEED TRAIN PROJECT FRESNO TO BAKERSFIELD

HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1065+00 TO 2029+61
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1000
SCALE AS SHOWN
SHEET NO. 1 OF 29




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J.BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1065+00 TO 1089+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1001
SCALE AS SHOWN
SHEET NO. 2 OF 29

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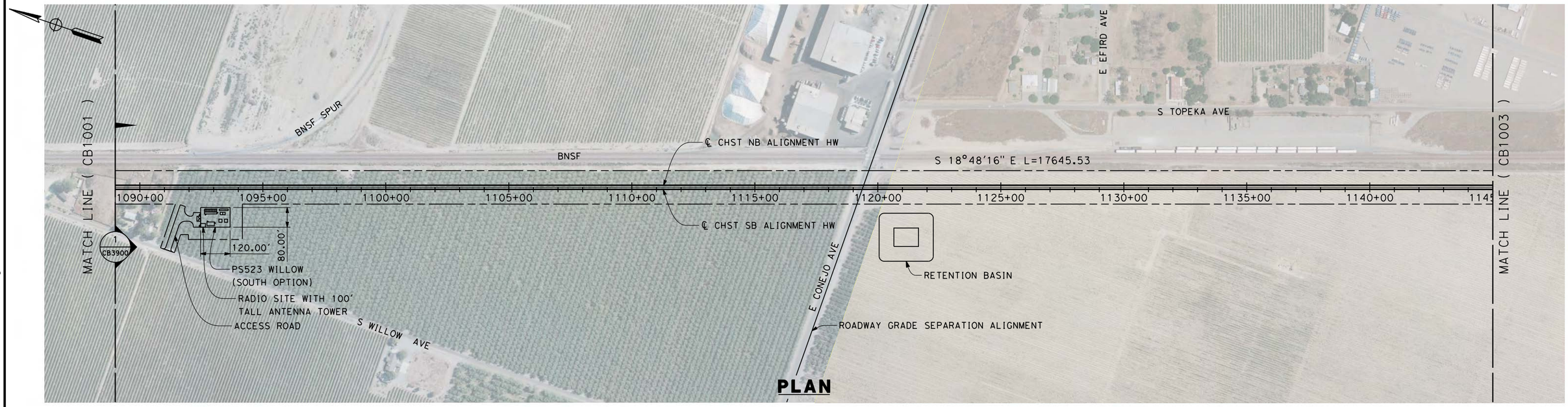
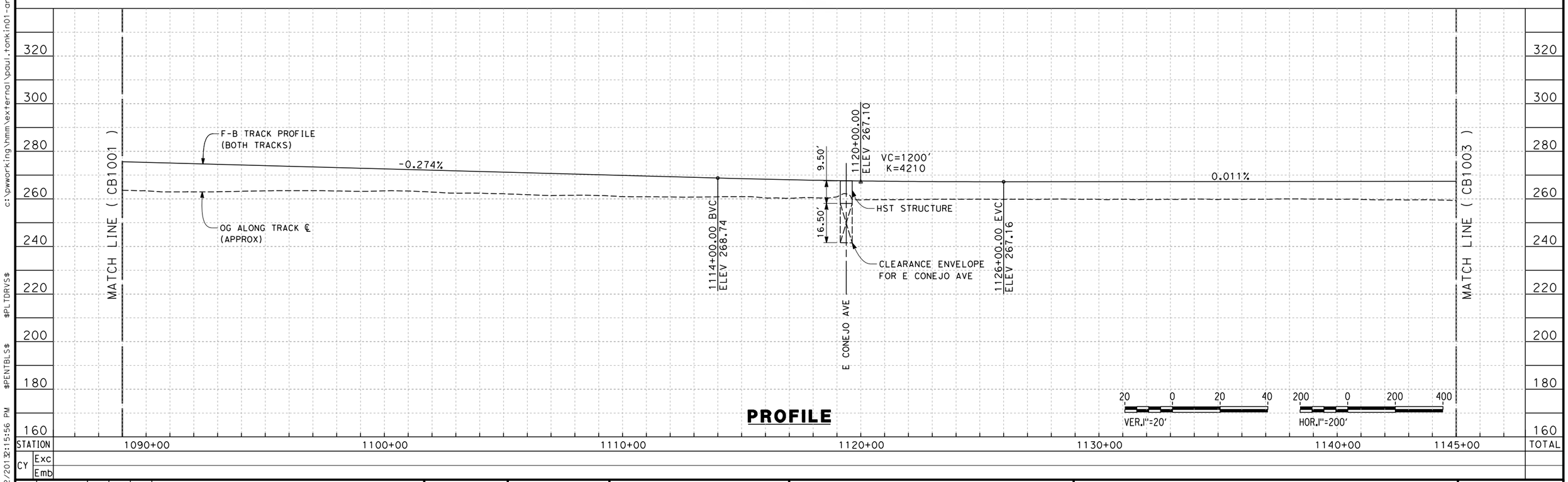



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1089+00 TO 1145+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1002
SCALE AS SHOWN
SHEET NO. 3 OF 29

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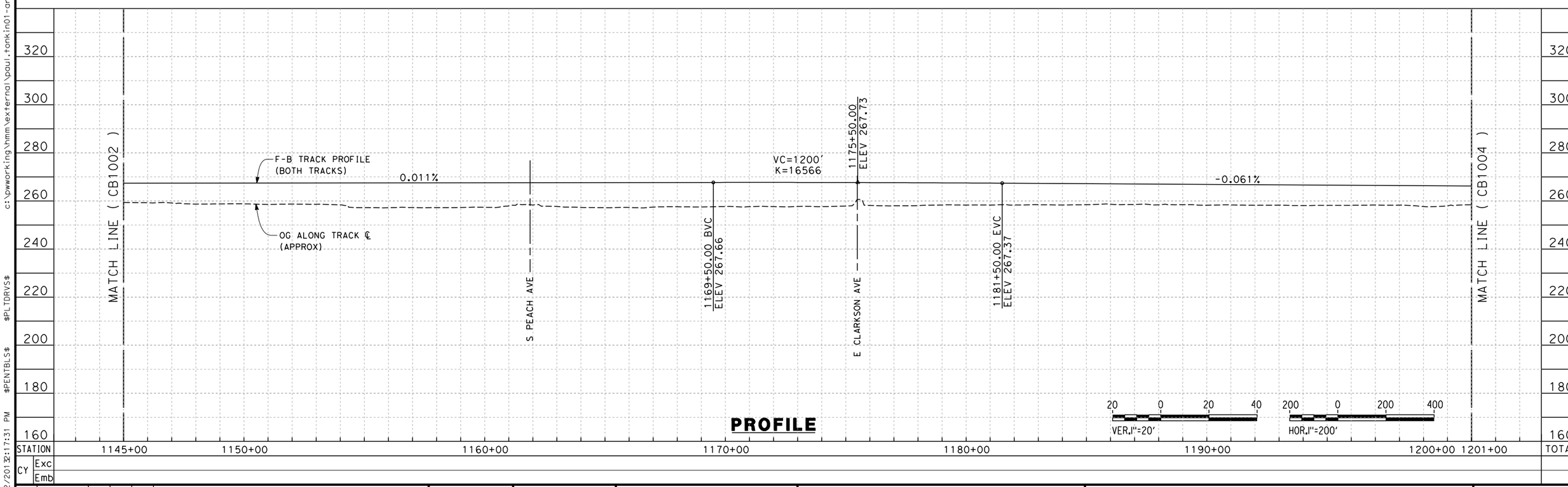
**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1145+00 TO 1201+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1003
SCALE AS SHOWN
SHEET NO. 4 OF 29

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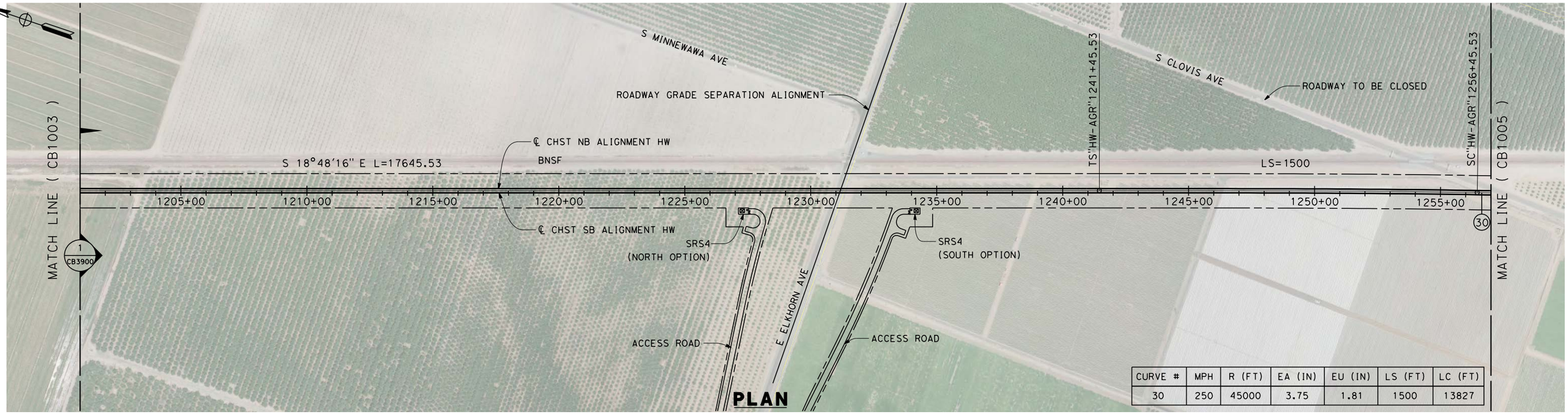
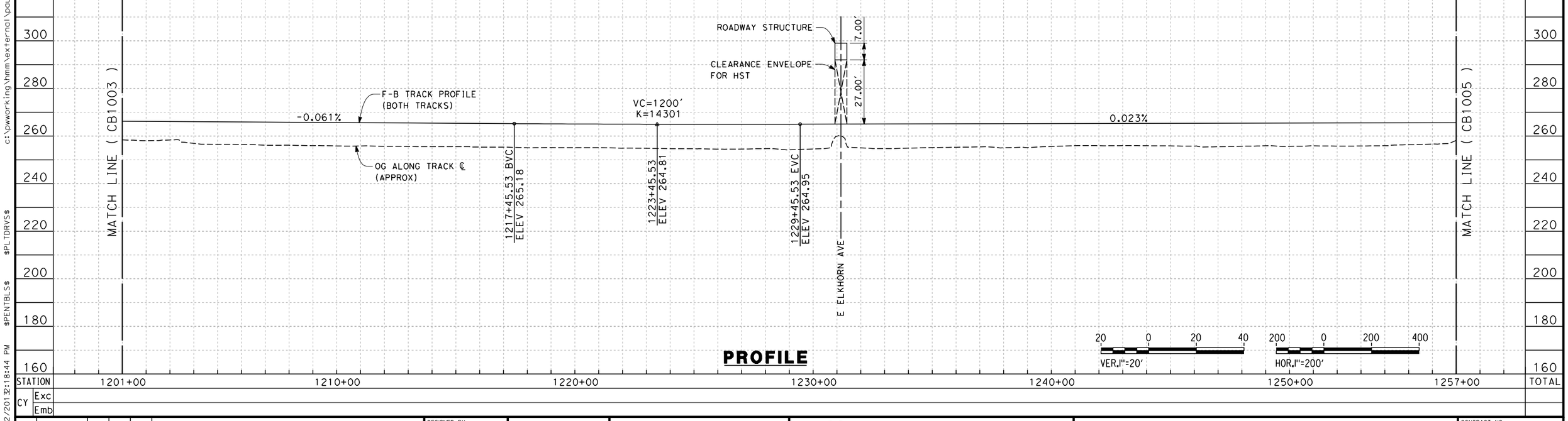



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 30 | 250 | 45000 | 3.75 | 1.81 | 1500 | 13827 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1201+00 TO 1257+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1004
SCALE AS SHOWN
SHEET NO. 5 OF 29

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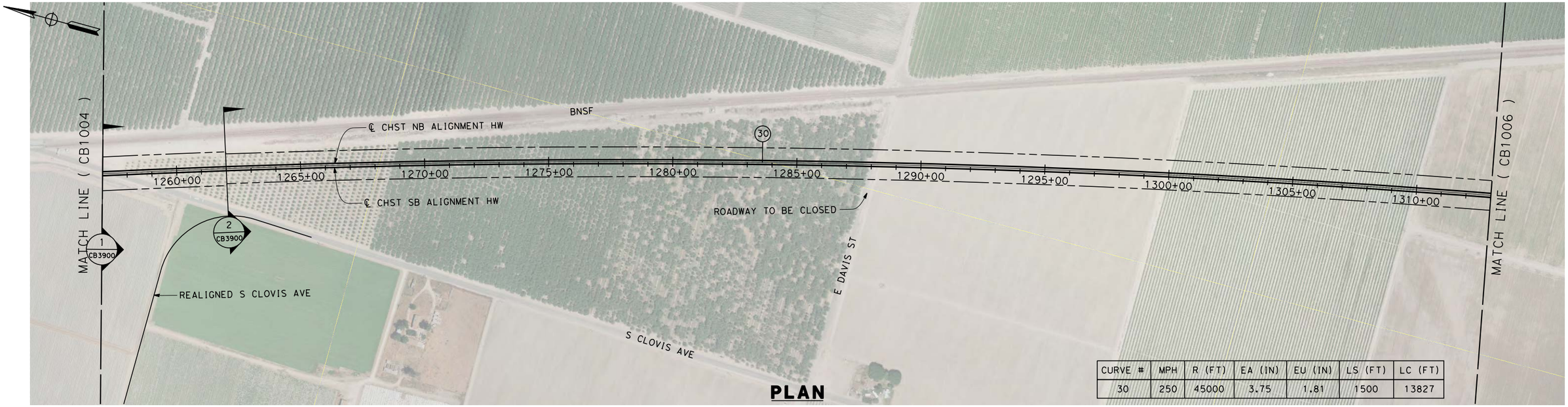


| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
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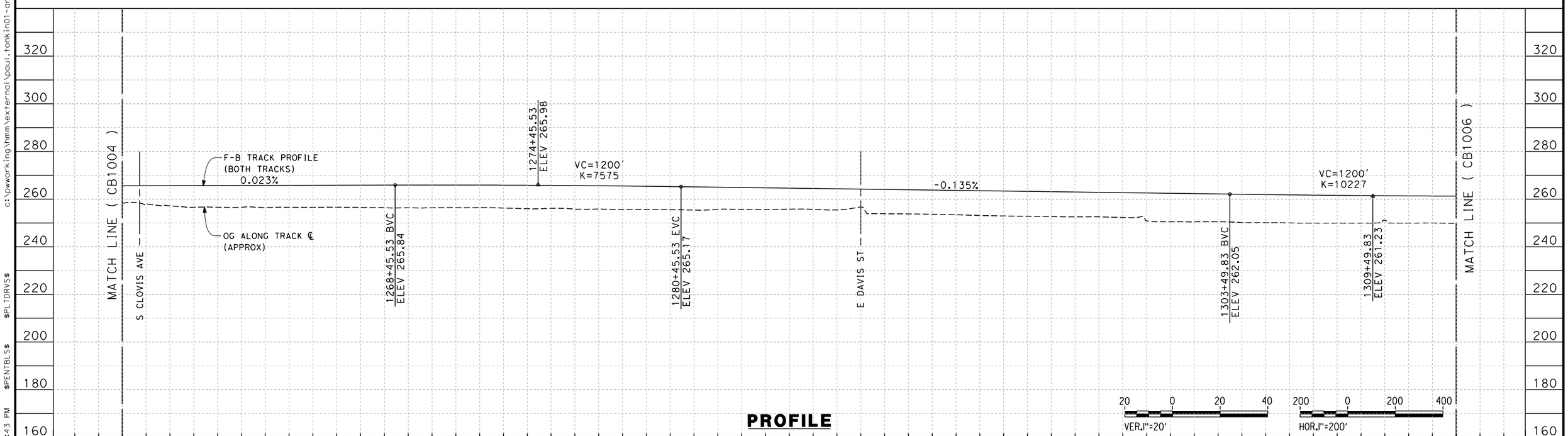
**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1257+00 TO 1313+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1005
SCALE AS SHOWN
SHEET NO. 6 OF 29

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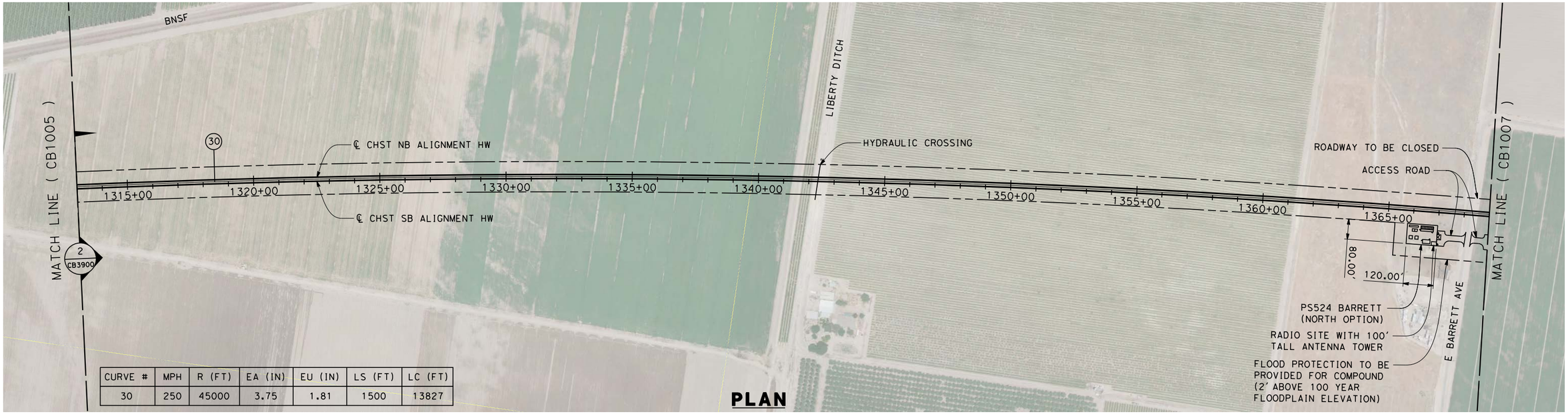
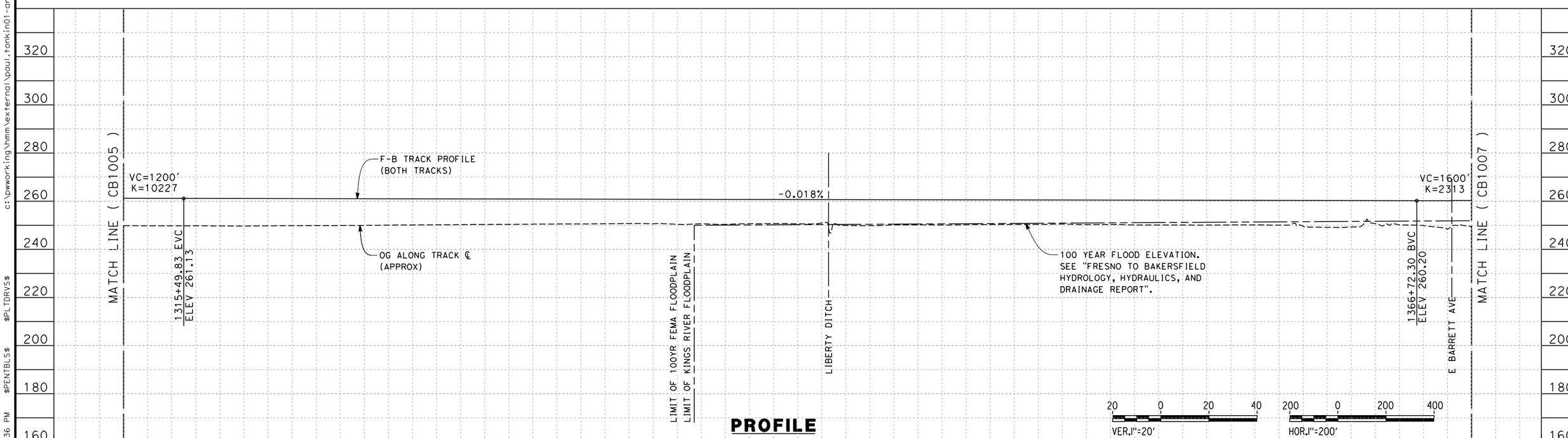



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 30 | 250 | 45000 | 3.75 | 1.81 | 1500 | 13827 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1313+00 TO 1369+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1006
SCALE AS SHOWN
SHEET NO. 7 OF 29

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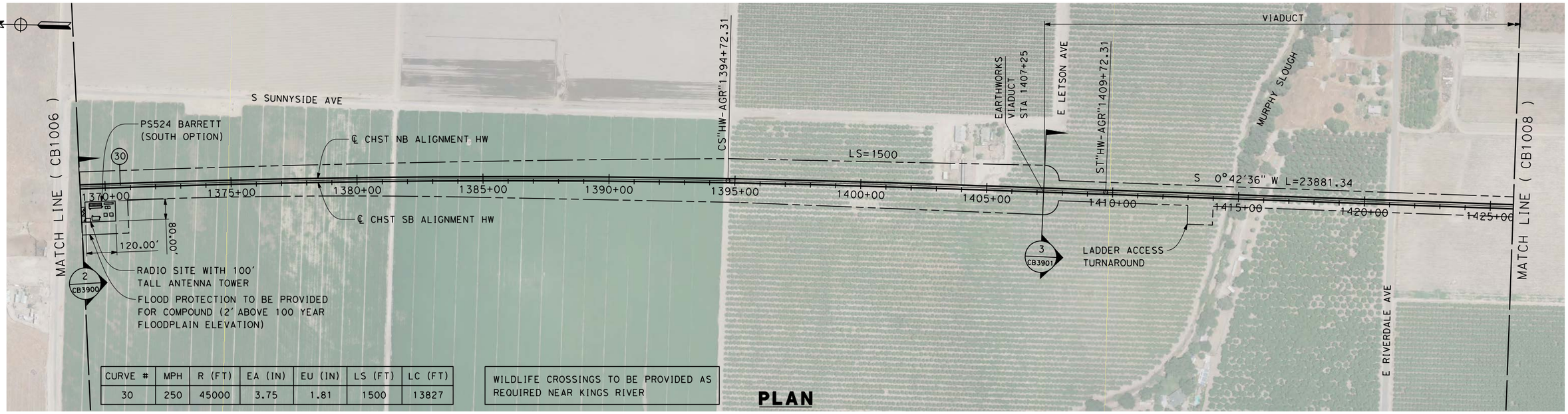
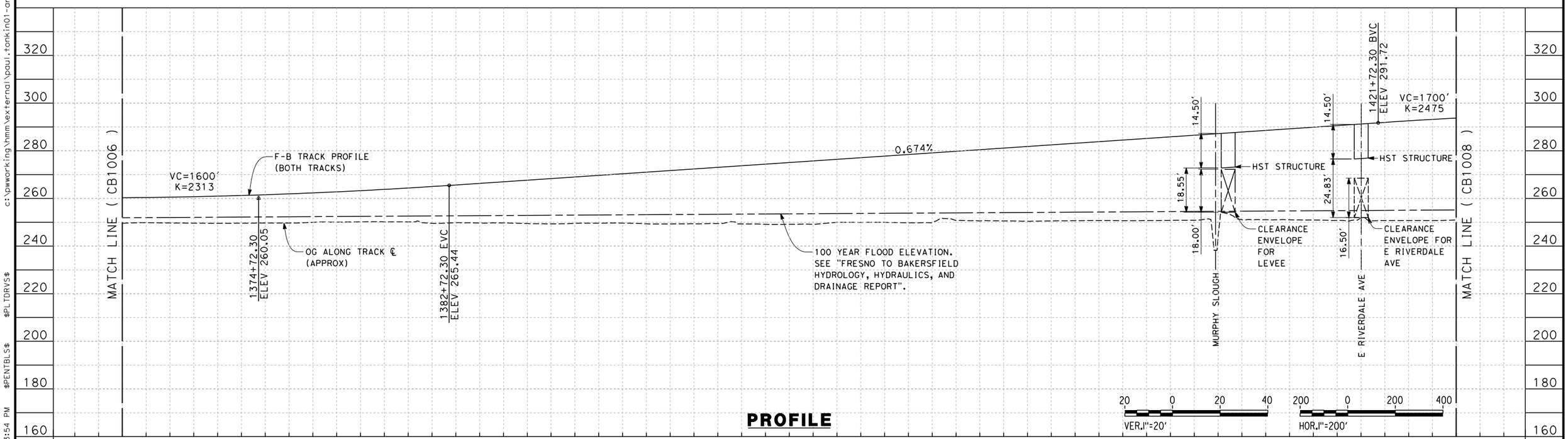



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 30 | 250 | 45000 | 3.75 | 1.81 | 1500 | 13827 |

WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED NEAR KINGS RIVER

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1369+00 TO 1425+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1007
SCALE AS SHOWN
SHEET NO. 8 OF 29

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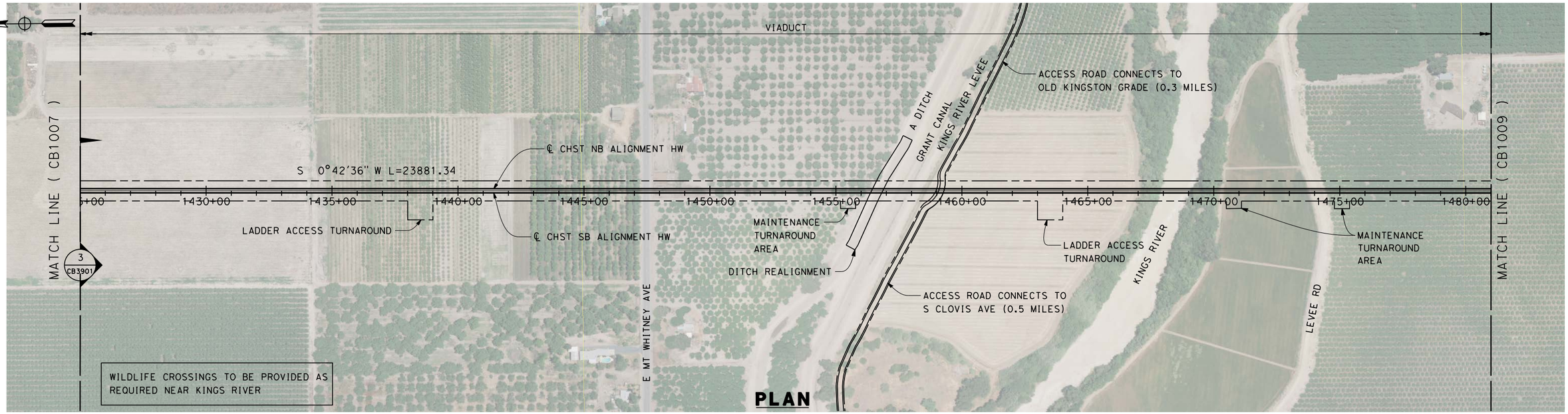
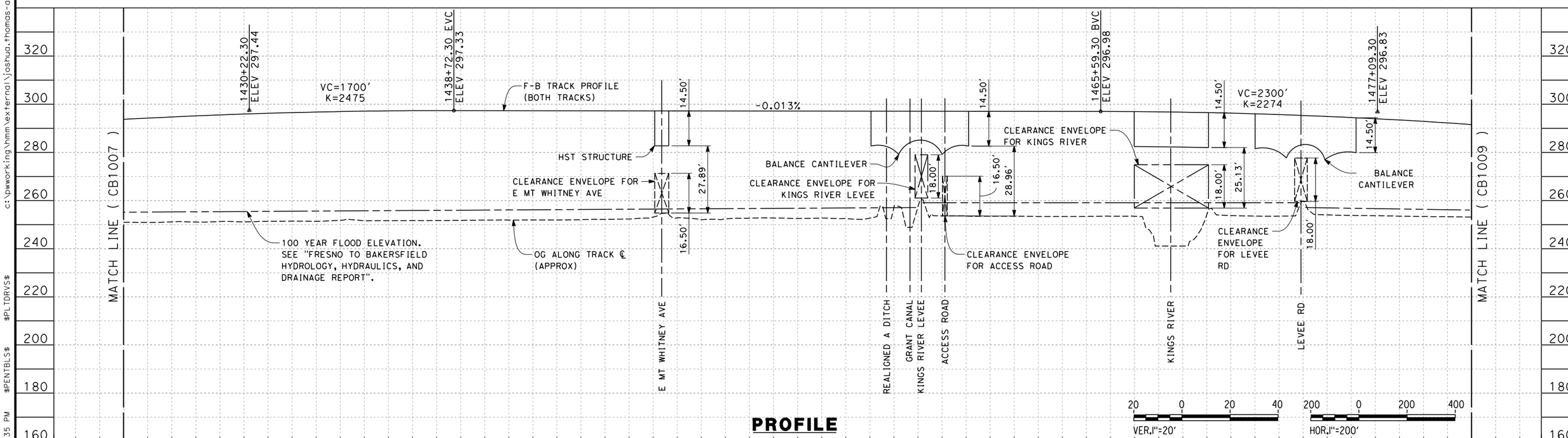



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

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DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

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URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1425+00 TO 1481+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1008
SCALE AS SHOWN
SHEET NO. 9 OF 29

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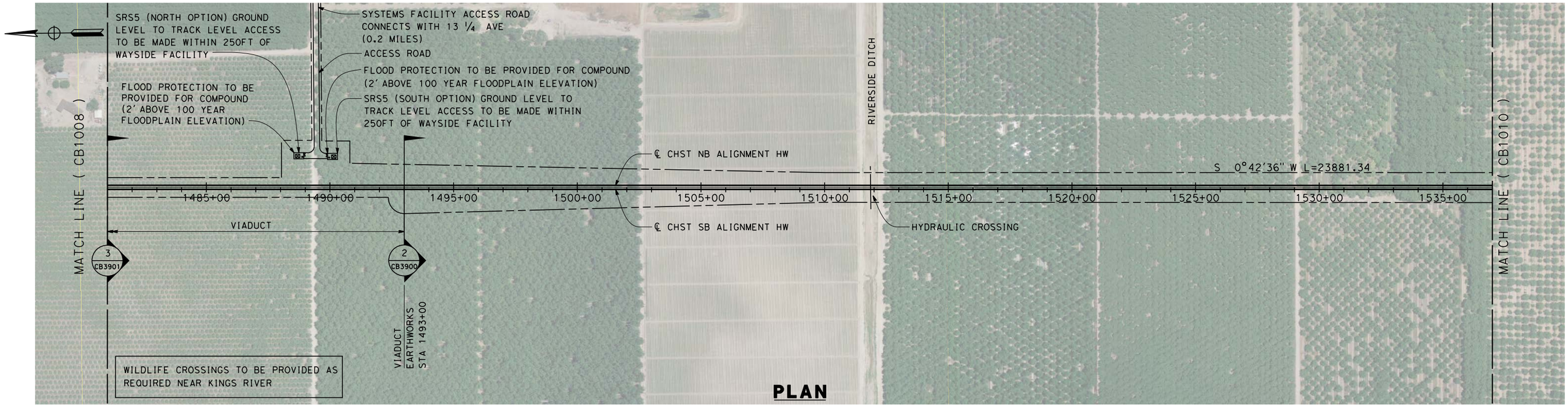


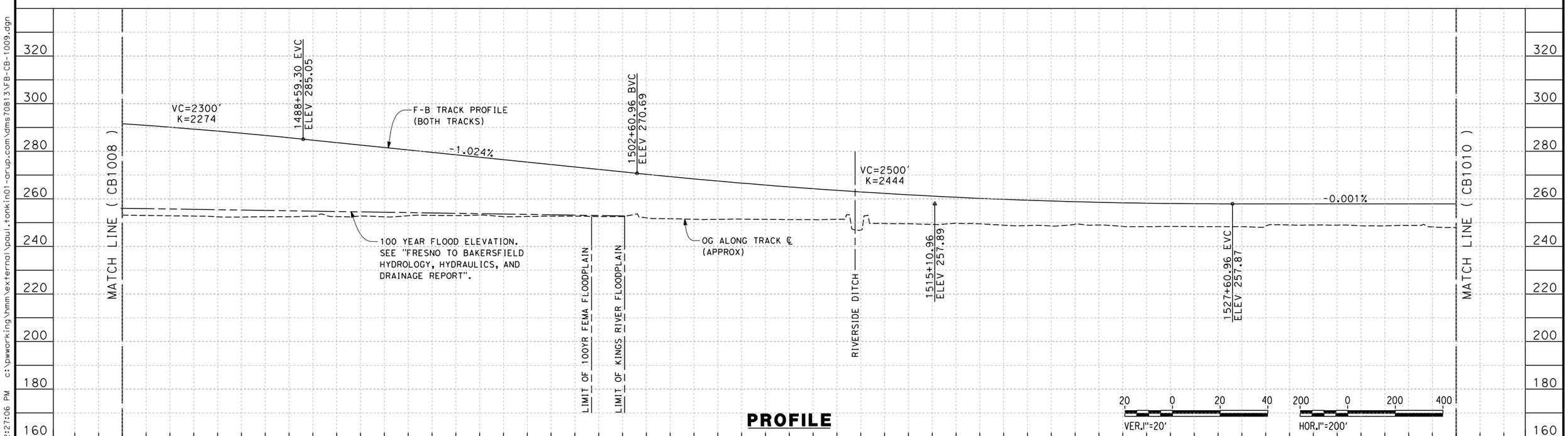


| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT GRADE)
STA. 1481+00 TO 1537+00
PLAN AND PROFILE

CONTRACT NO. HSR-06-003
DRAWING NO. CB1009
SCALE AS SHOWN
SHEET NO. 10 OF 29

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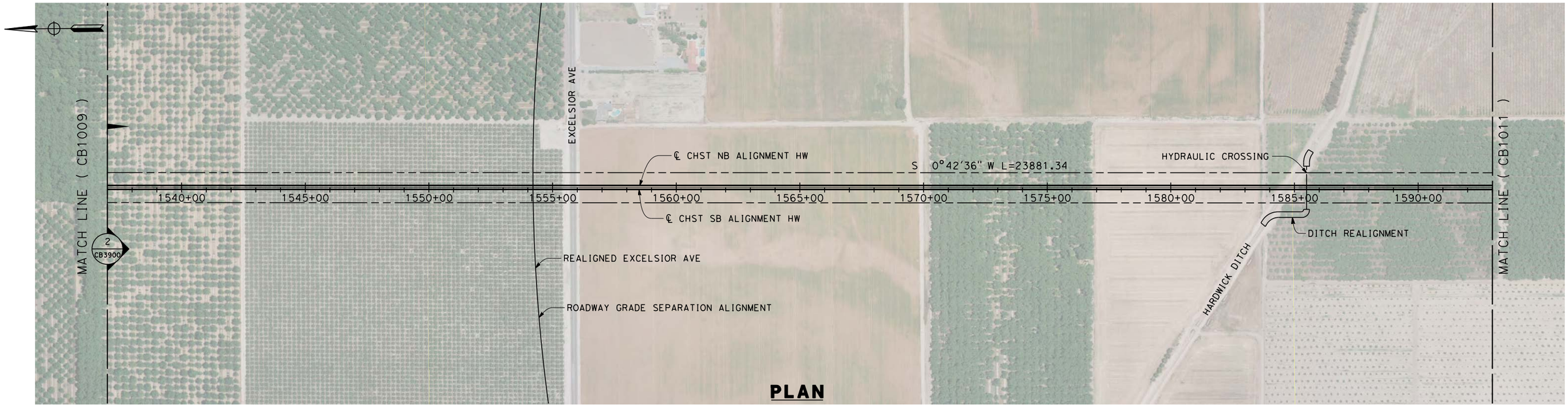
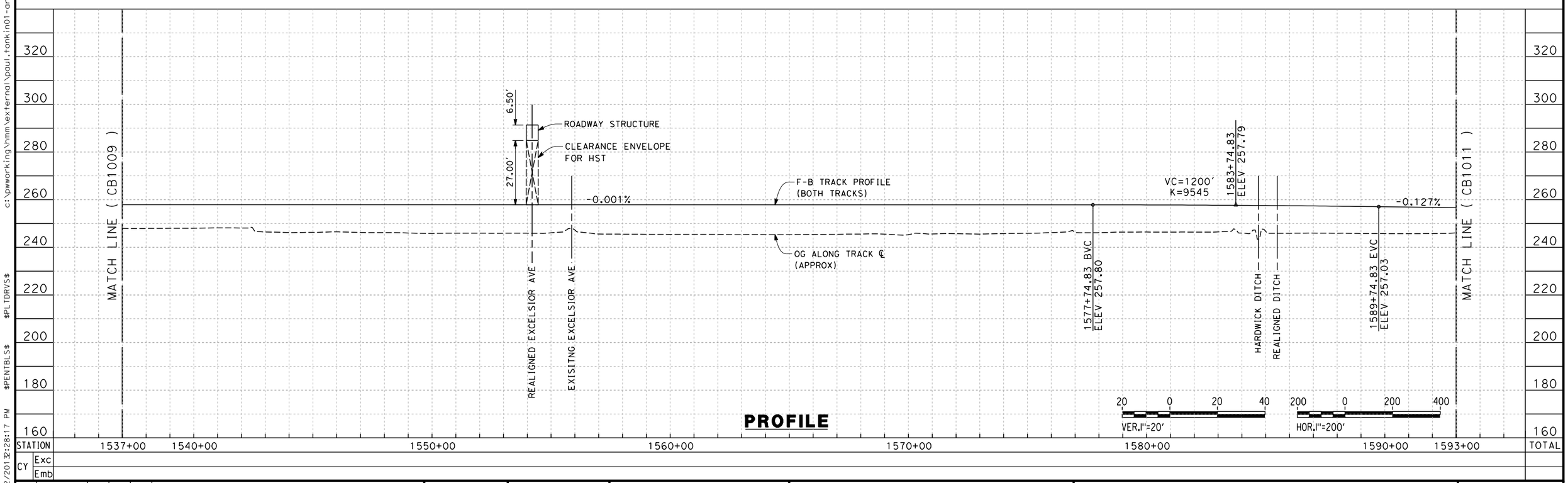



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A.POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1537+00 TO 1593+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1010
SCALE AS SHOWN
SHEET NO. 11 OF 29

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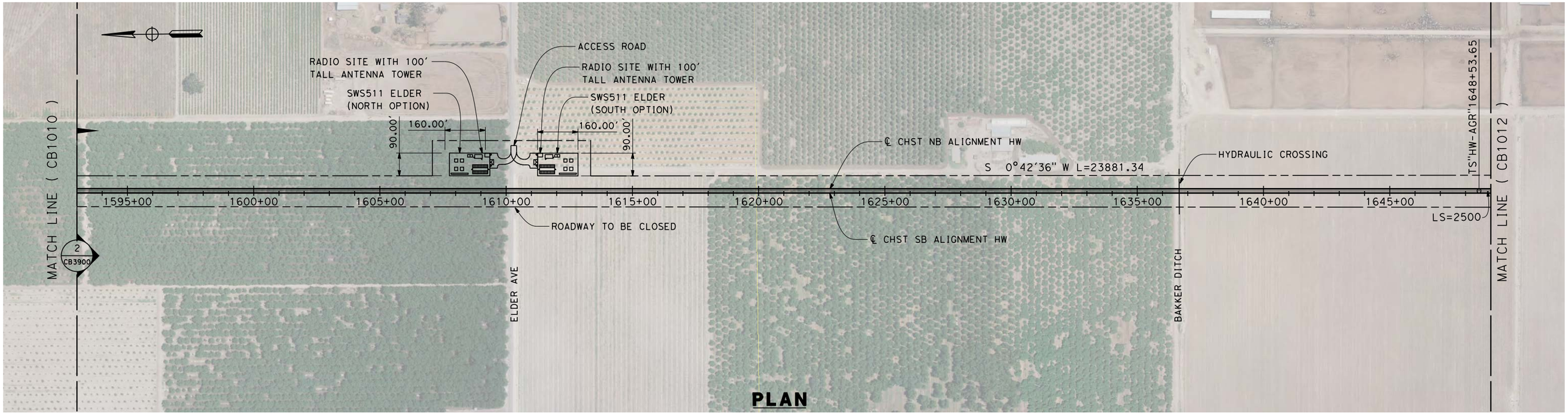
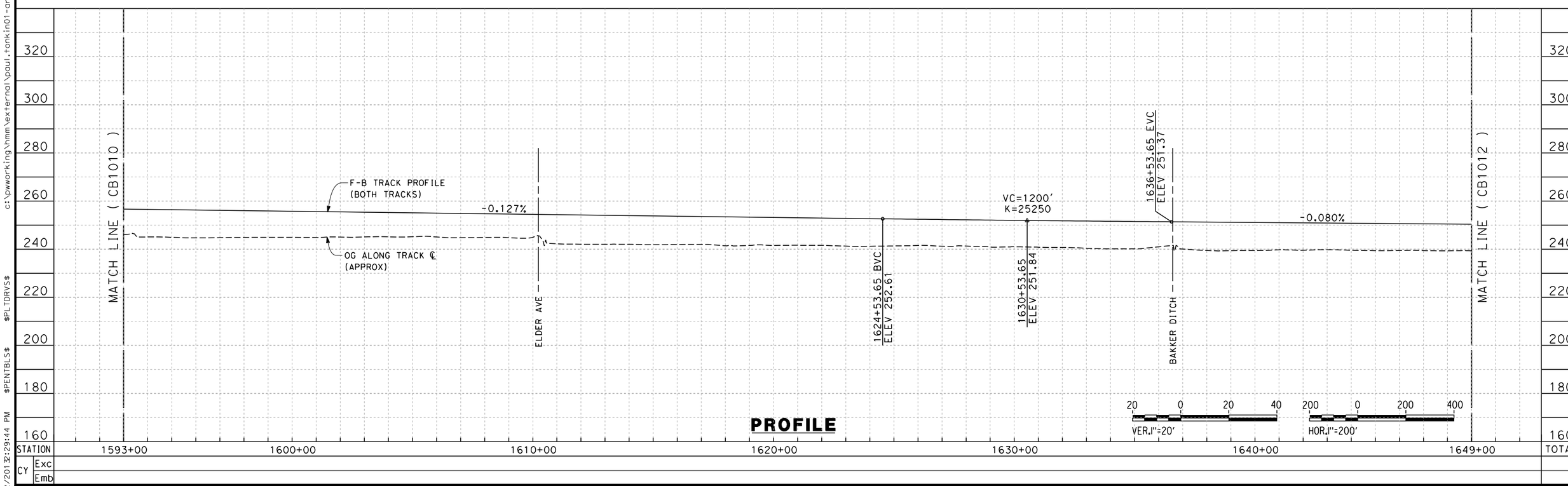



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1593+00 TO 1649+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1011
SCALE AS SHOWN
SHEET NO. 12 OF 29

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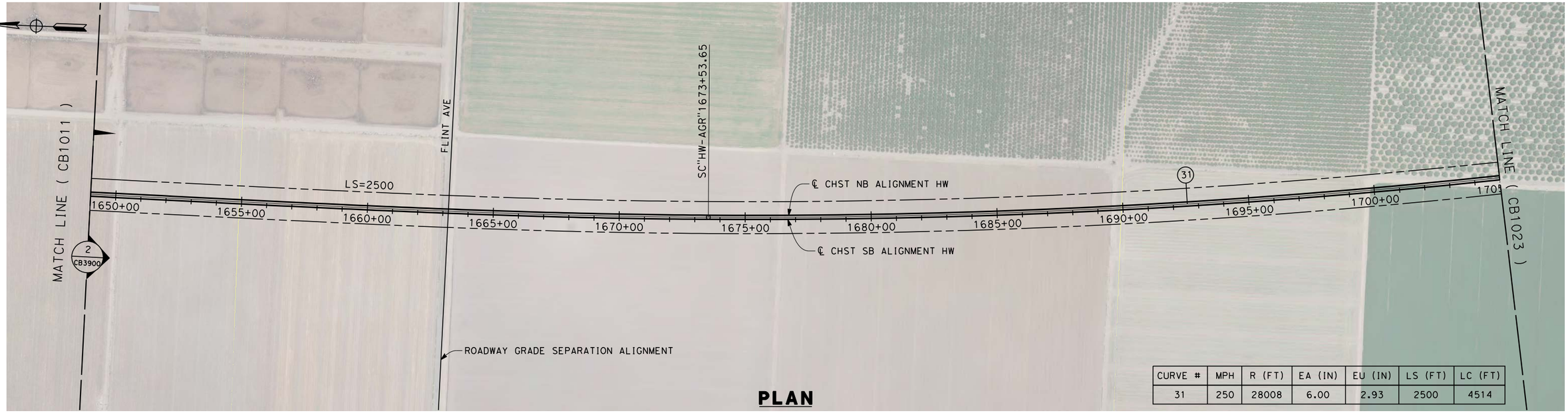
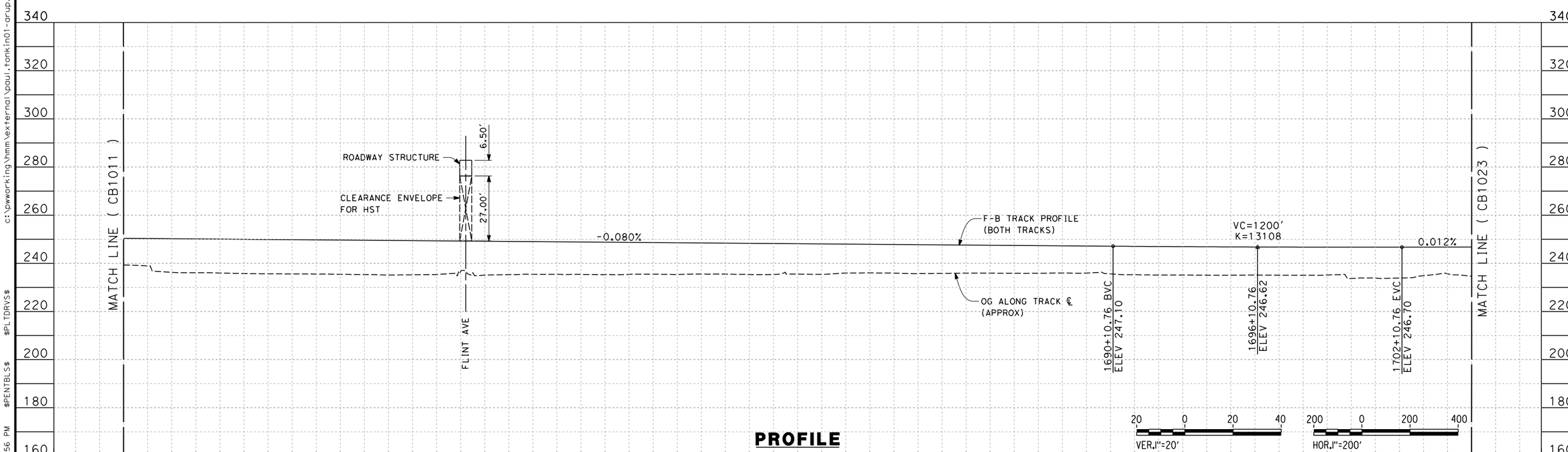



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 31 | 250 | 28008 | 6.00 | 2.93 | 2500 | 4514 |

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G.MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1649+00 TO 1705+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1012
SCALE AS SHOWN
SHEET NO. 13 OF 29

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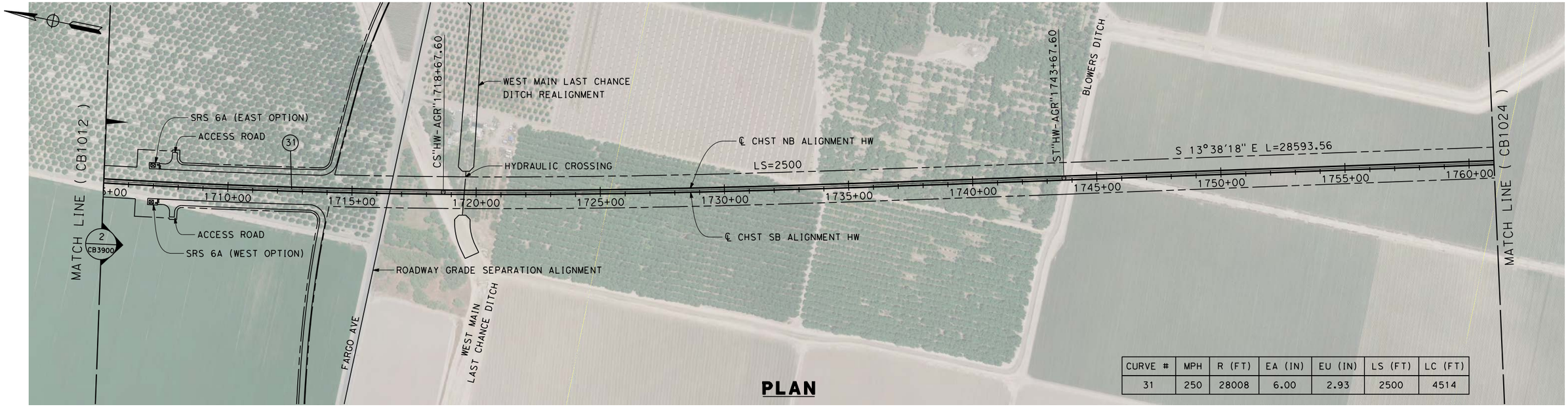
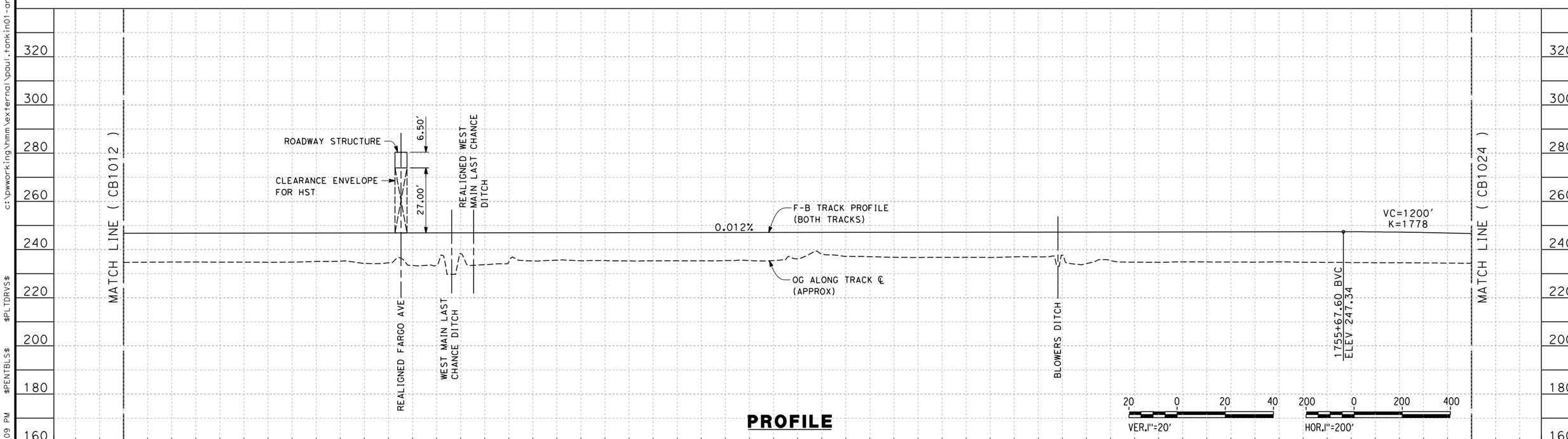



| CURVE # | MPH | R (FT) | EA (IN) | EU (IN) | LS (FT) | LC (FT) |
|---|---|---|---|---|---|---|
| 31 | 250 | 28008 | 6.00 | 2.93 | 2500 | 4514 |

## PLAN




## PROFILE

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

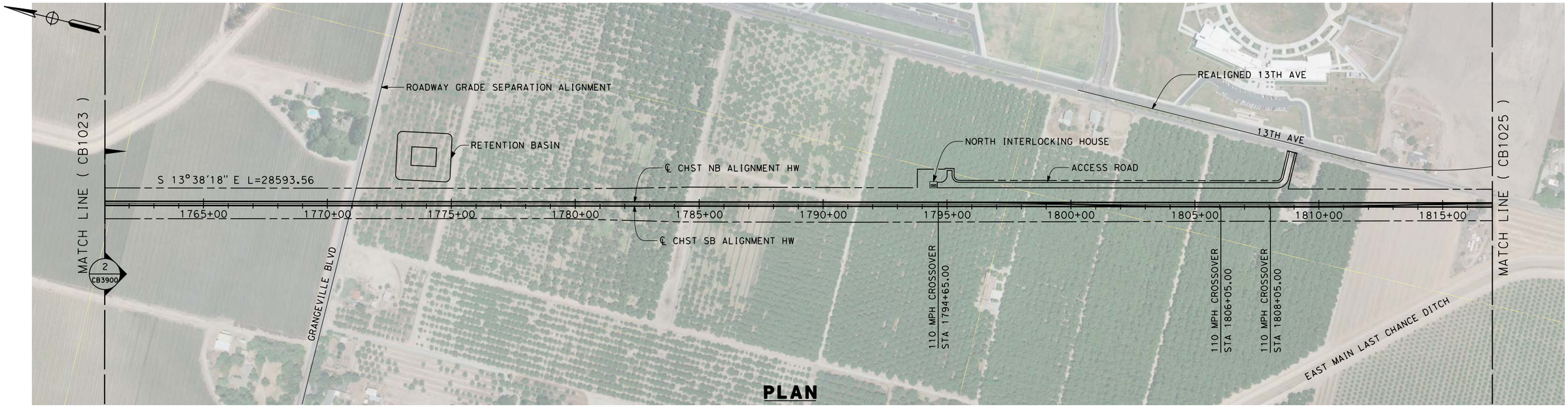
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

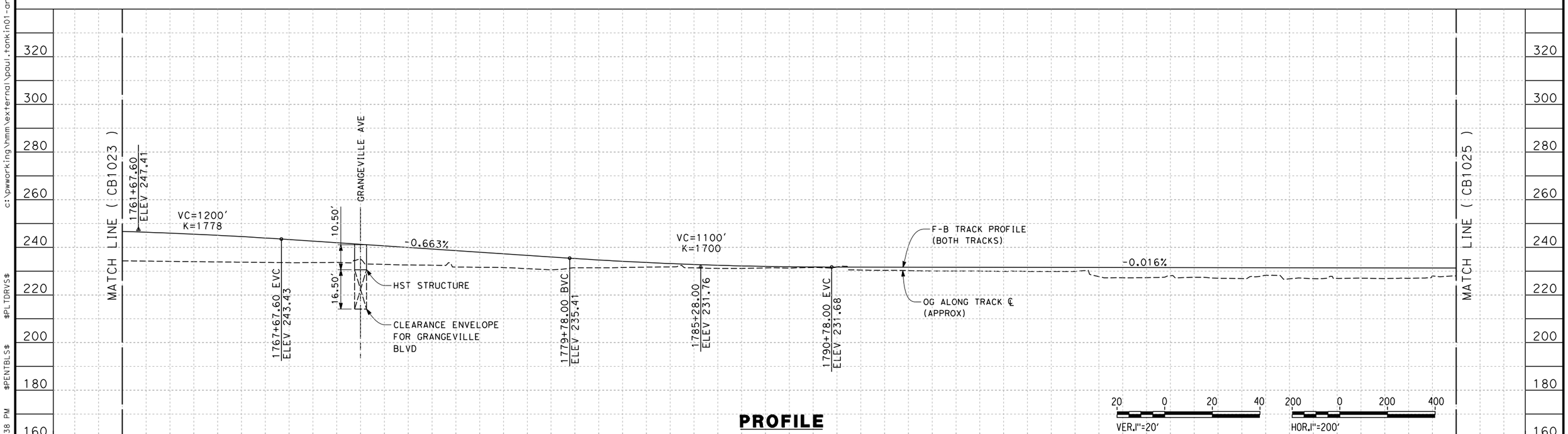
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1705+00 TO 1761+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1023
SCALE AS SHOWN
SHEET NO. 14 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1023.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:32:09 PM paul.tonkin




**PLAN**




**PROFILE**

| STATION | 1761+00 | 1770+00 | 1780+00 | 1790+00 | 1800+00 | 1810+00 | 1817+00 | TOTAL |
|---|---|---|---|---|---|---|---|---|
| CY Exc | | | | | | | | |
| CY Emb | | | | | | | | |

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1761+00 TO 1817+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1024
SCALE AS SHOWN
SHEET NO. 15 OF 29

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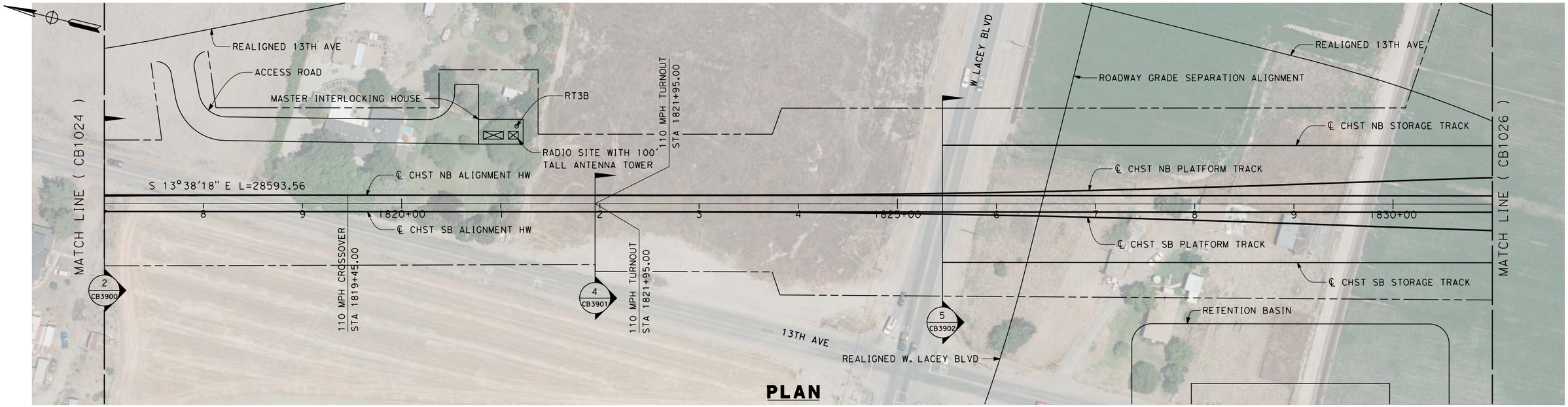
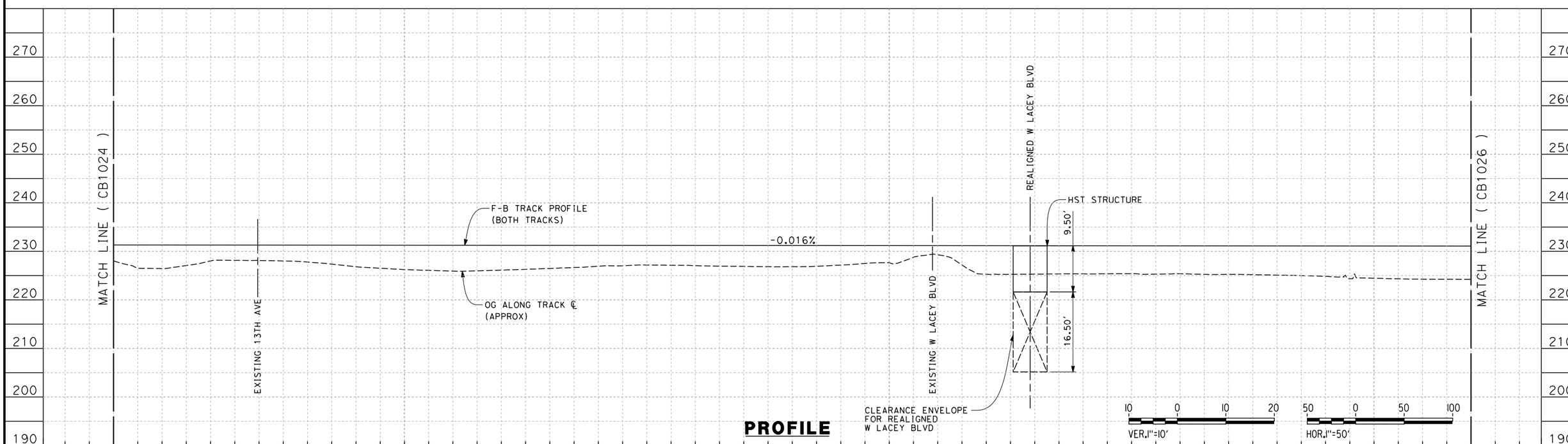



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

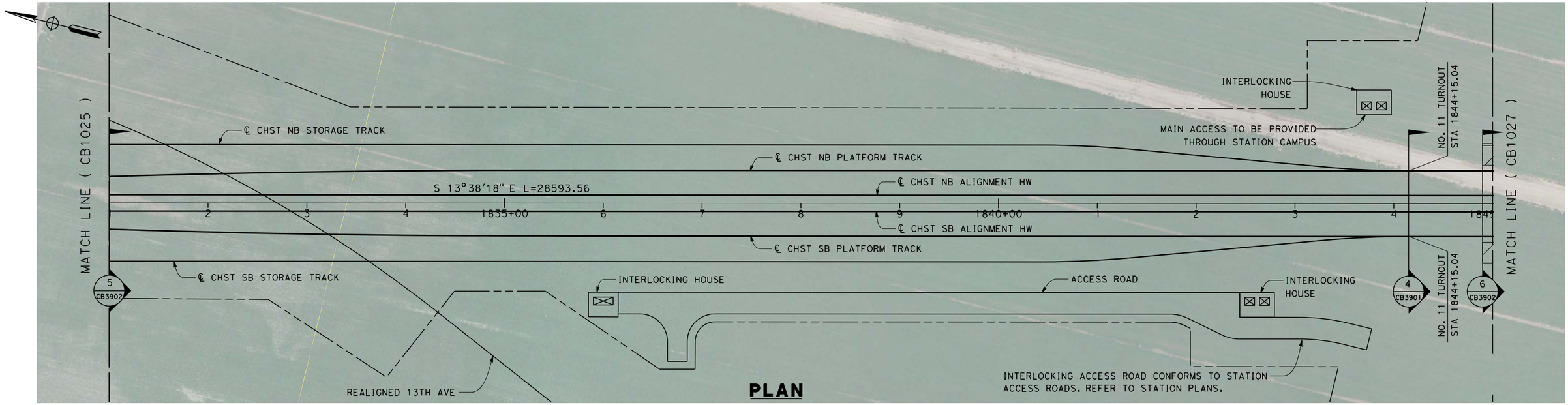
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

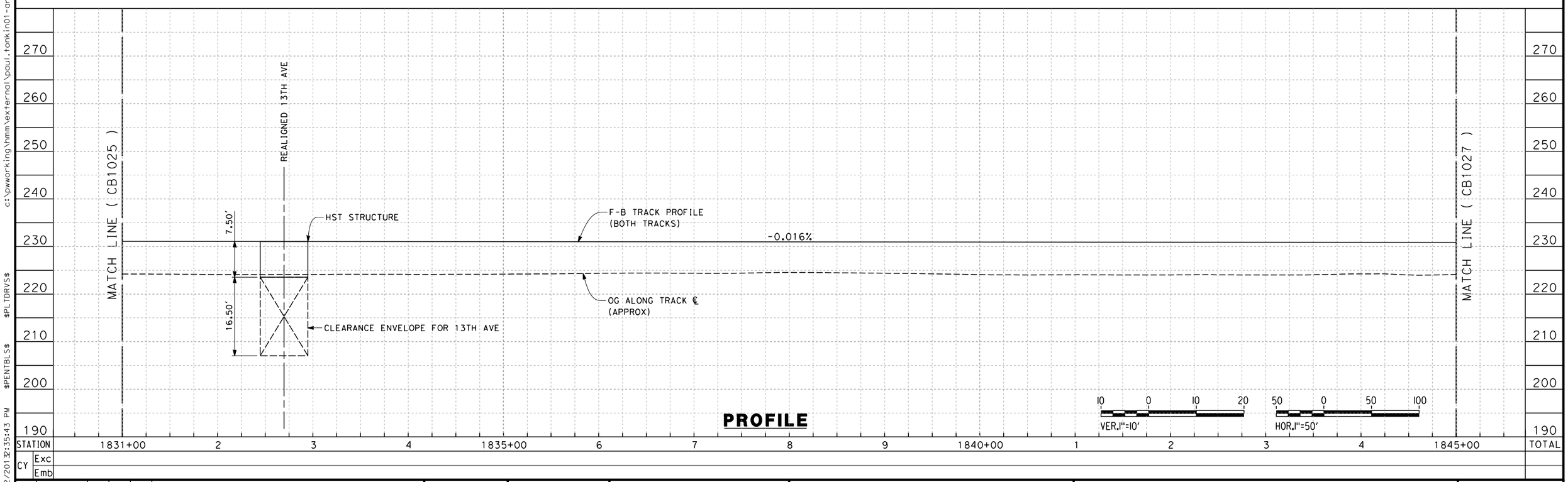
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1817+00 TO 1831+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1025
SCALE AS SHOWN
SHEET NO. 16 OF 29

$FILE$ $PLTDRVS$ $PENTBLS$ $TIME$ $DATE$ $USER$




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1831+00 TO 1845+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1026
SCALE AS SHOWN
SHEET NO. 17 OF 29

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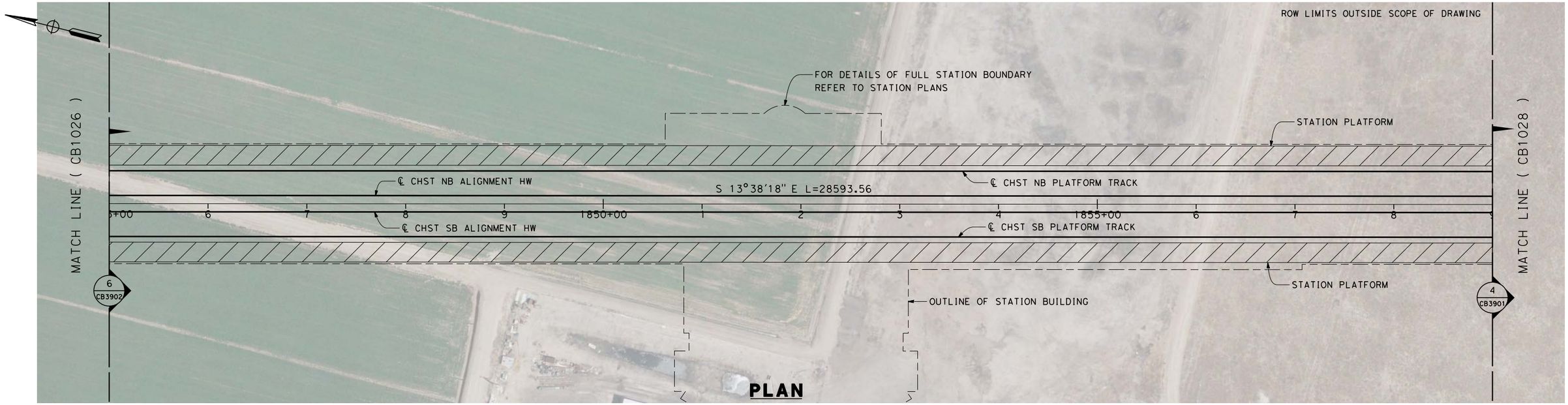
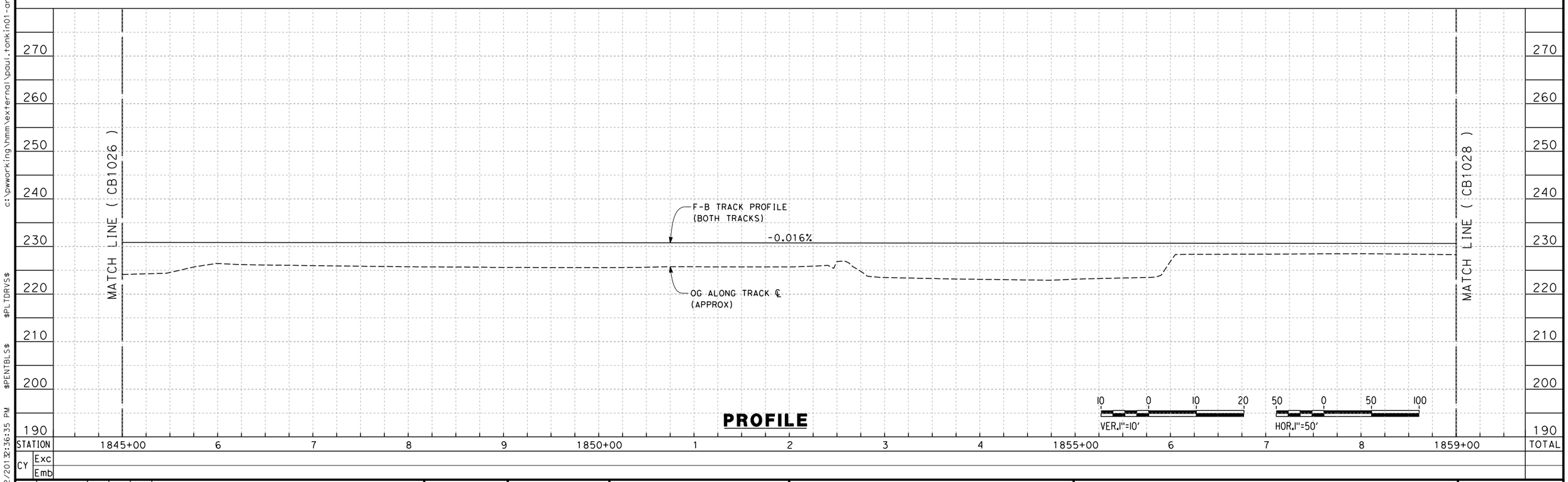



| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

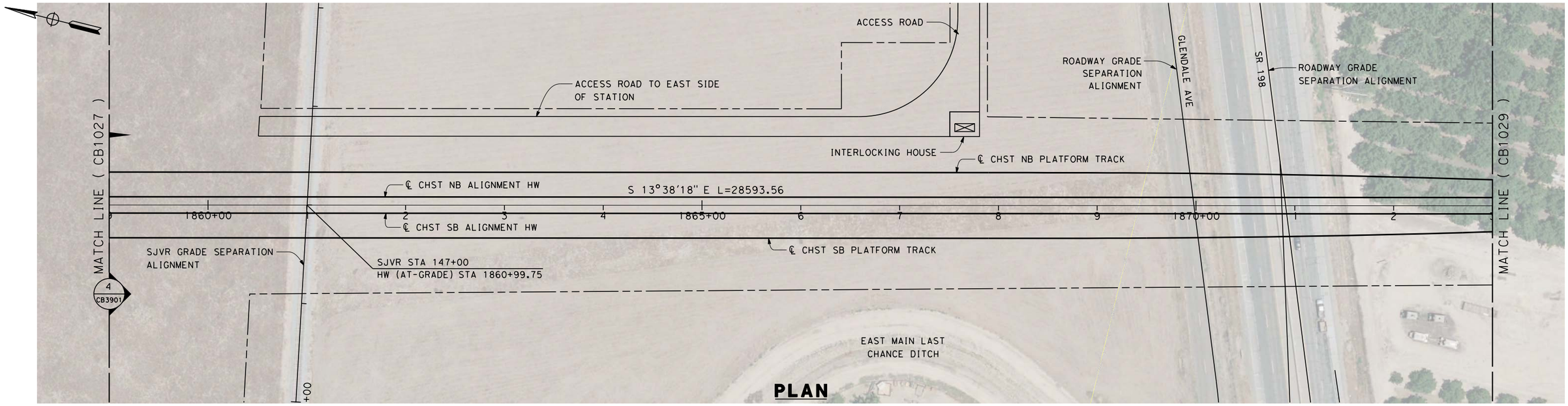
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

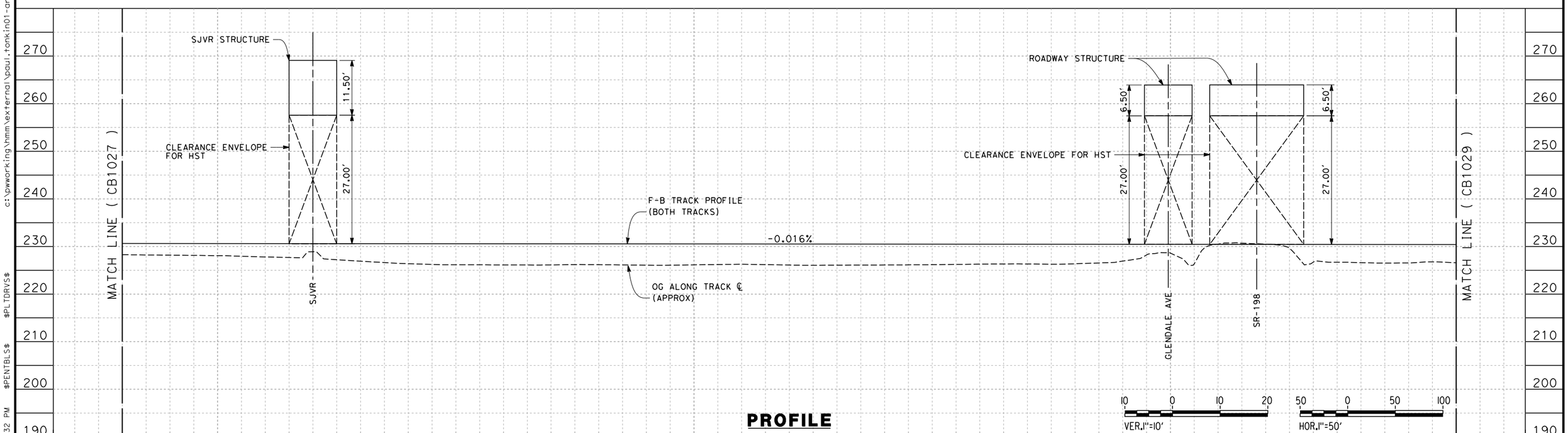
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1845+00 TO 1859+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1027
SCALE AS SHOWN
SHEET NO. 18 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1027.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:36:35 PM paul.tonkin




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

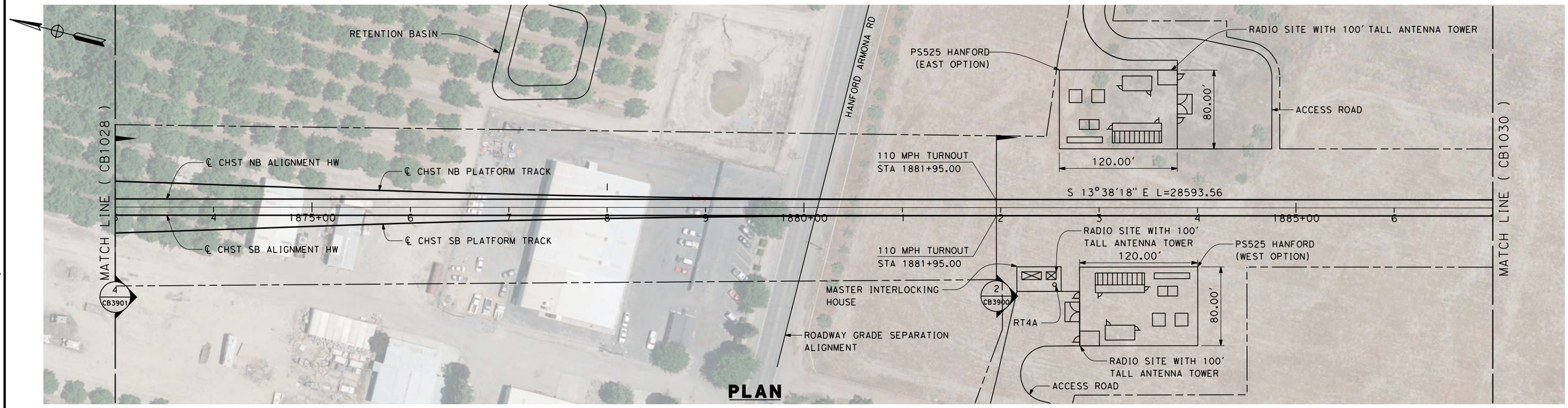
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

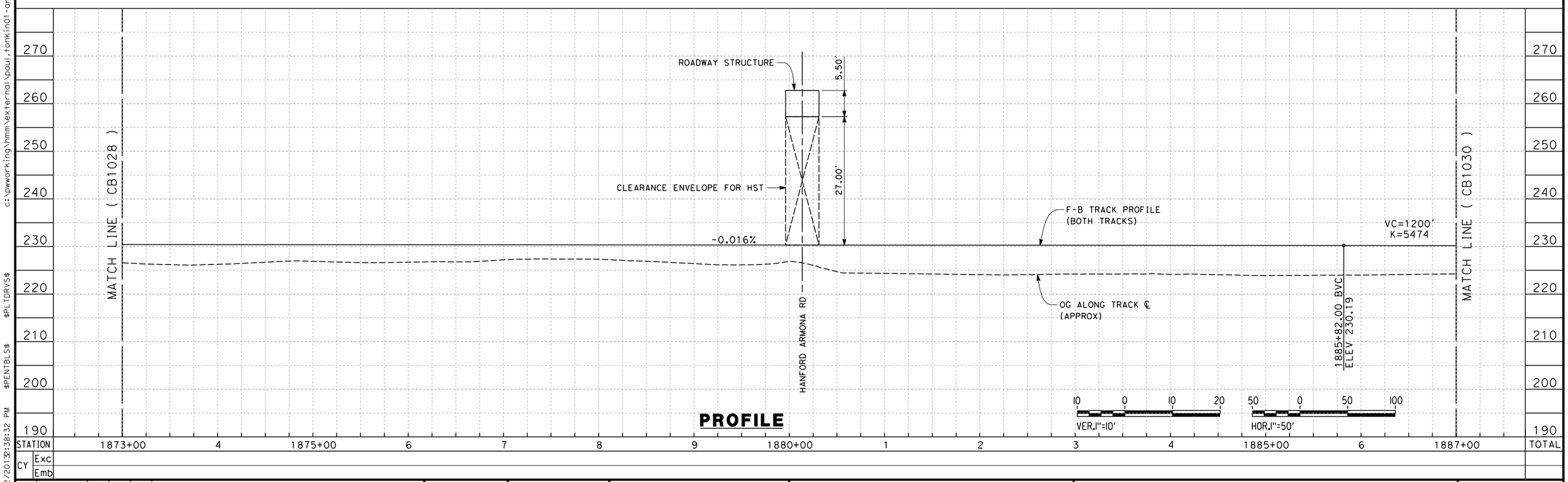
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1859+00 TO 1873+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1028
SCALE AS SHOWN
SHEET NO. 19 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1028.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:37:32 PM paul.tonkin




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

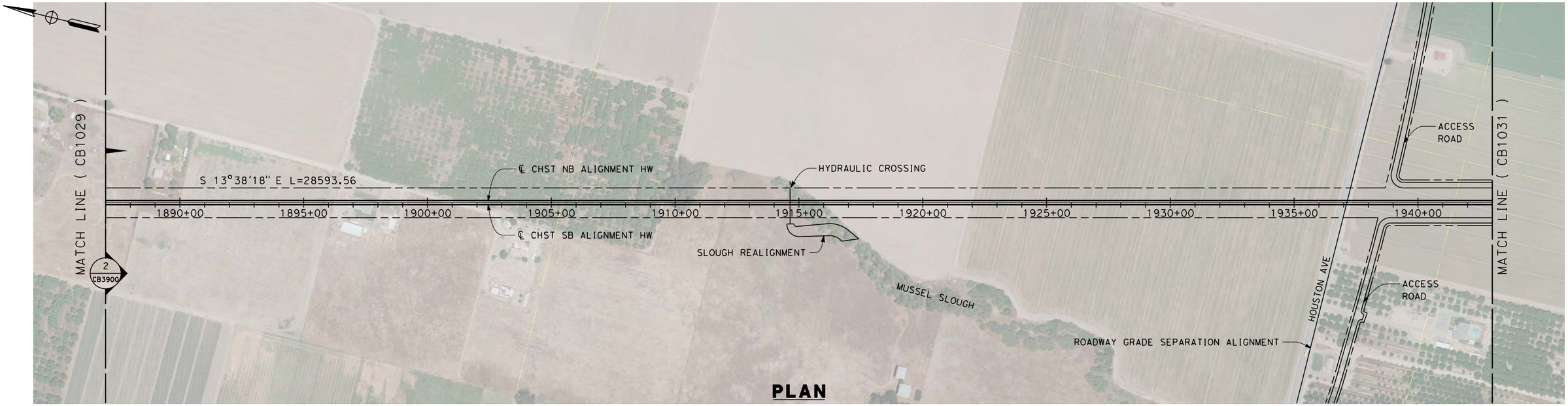
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1873+00 TO 1887+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1029
SCALE AS SHOWN
SHEET NO. 20 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1029.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:38:32 PM paul.tonkin

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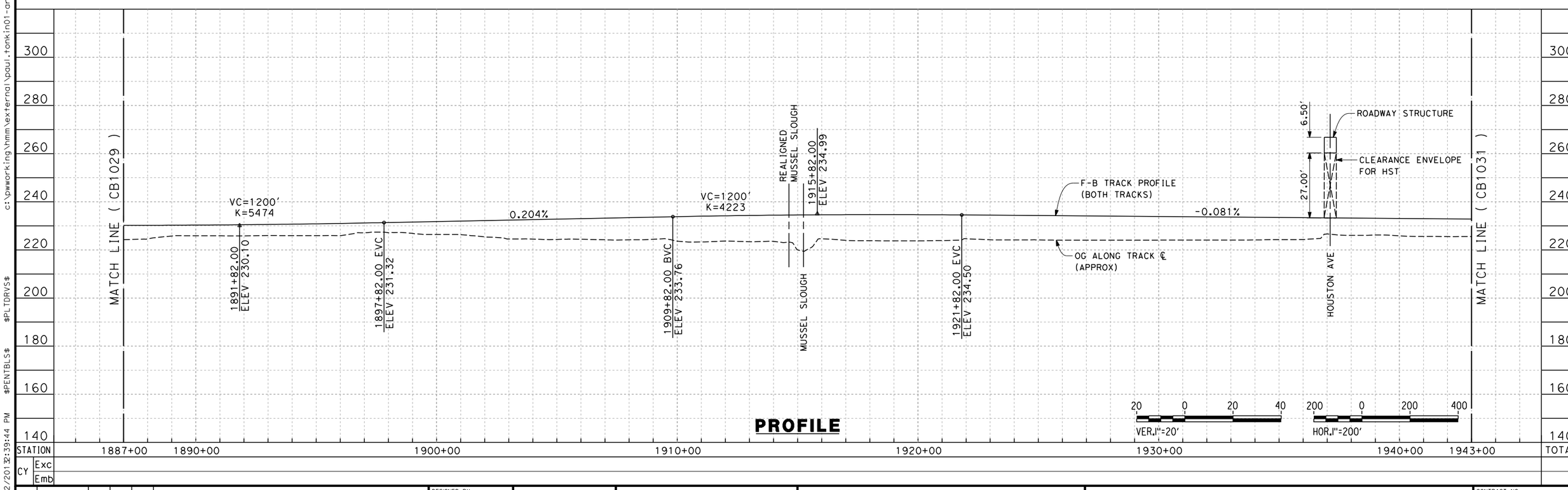


**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1887+00 TO 1943+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1030
SCALE AS SHOWN
SHEET NO. 21 OF 29

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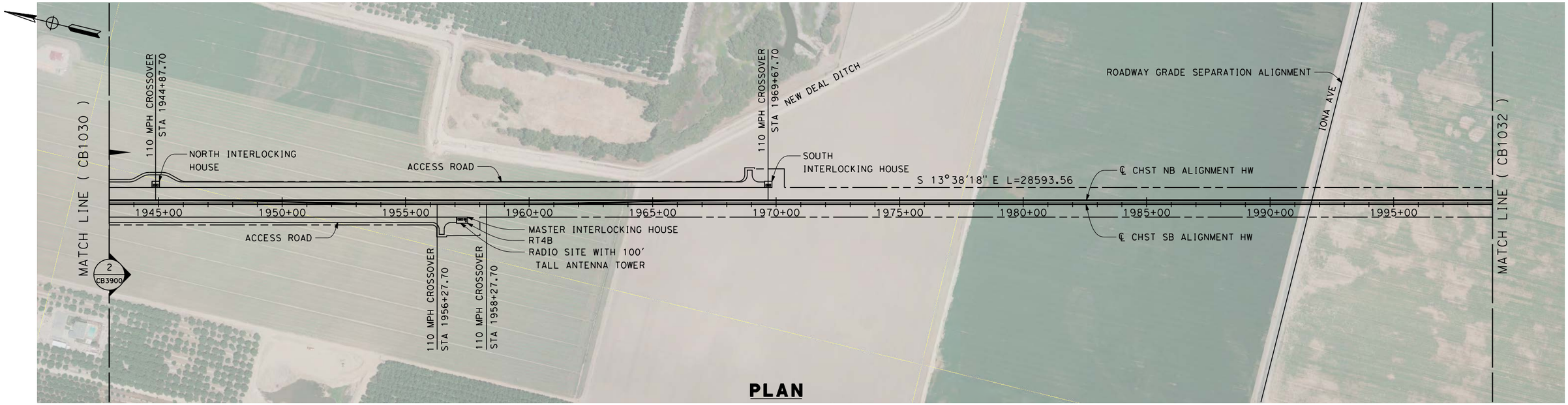
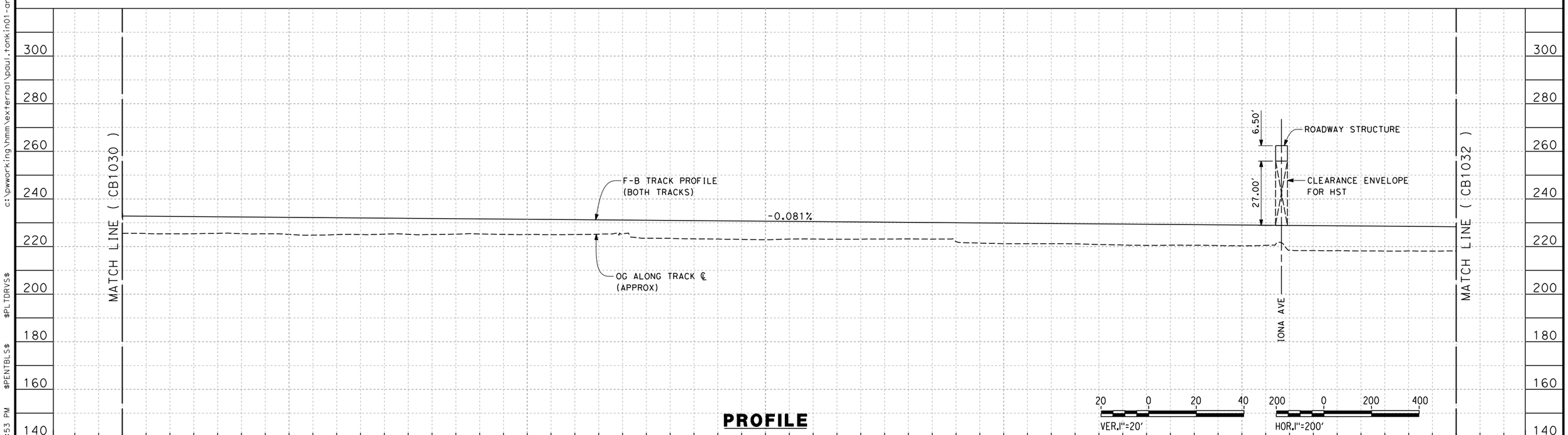



**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

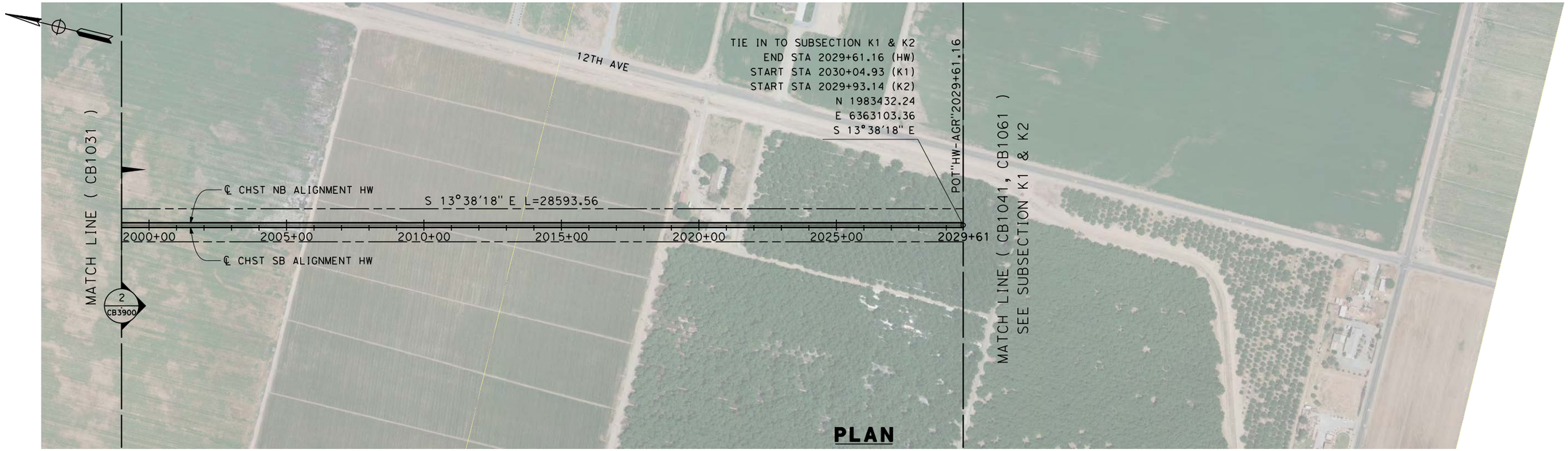
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

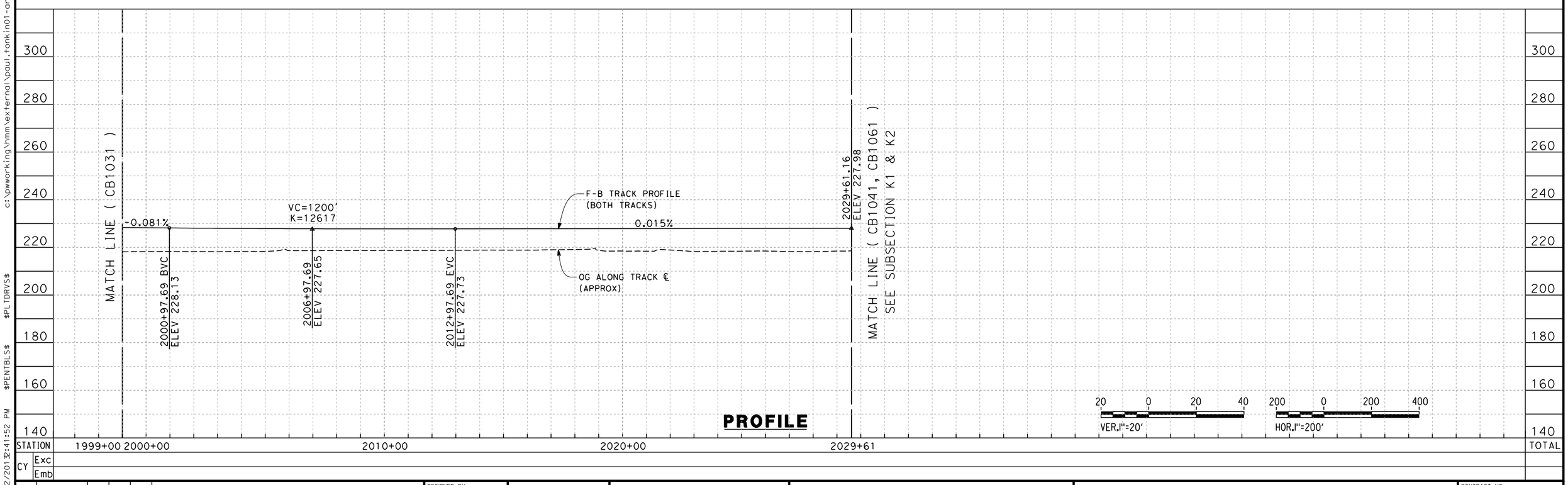
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1943+00 TO 1999+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1031
SCALE AS SHOWN
SHEET NO. 22 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1031.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:40:53 PM paul.tonkin




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

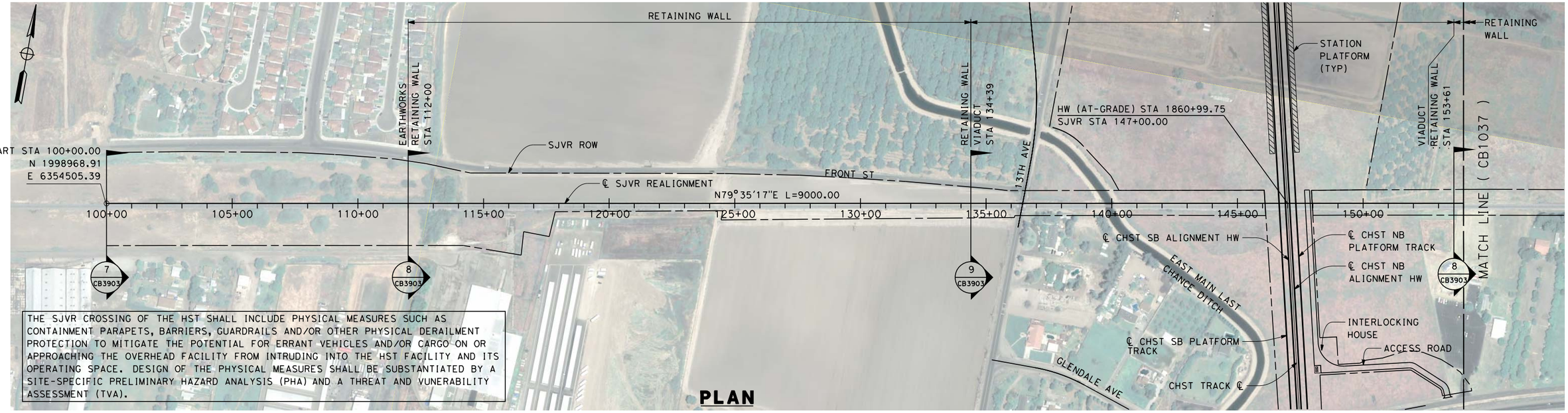
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

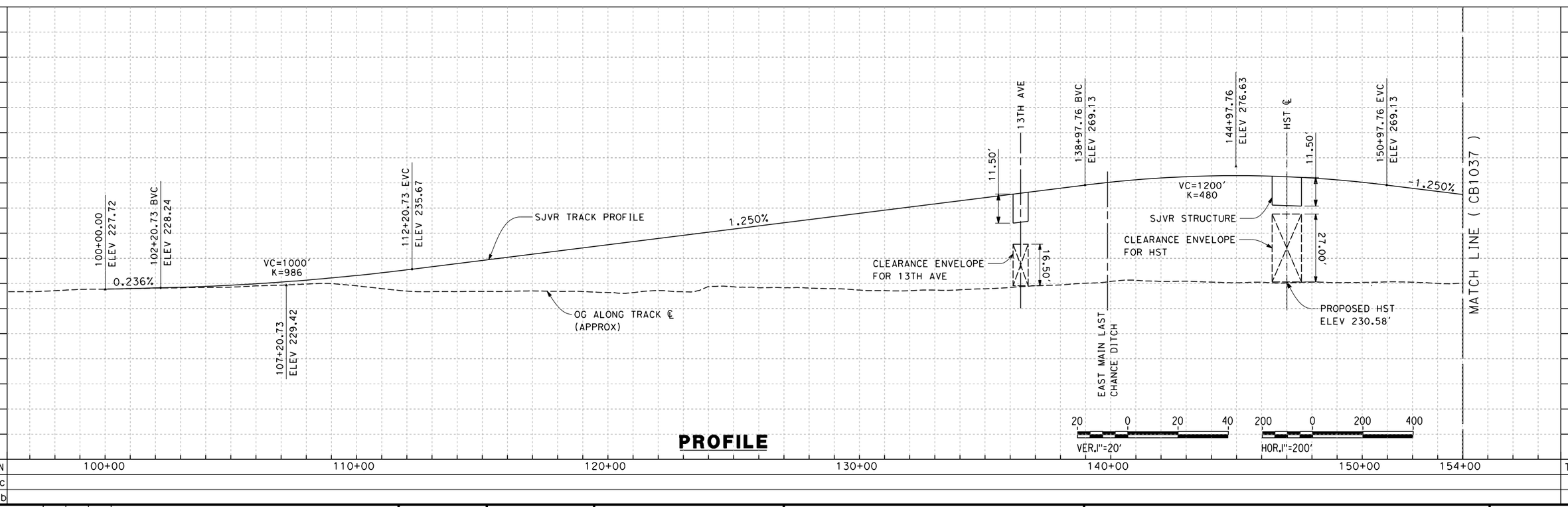
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
STA 1999+00 TO 2029+61
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1032
SCALE AS SHOWN
SHEET NO. 23 OF 29

c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-1032.dgn $PLTDRVS$ $PENTBLS$ 12/12/2013 2:41:52 PM paul.tonkin




**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|
| | | | | | |

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
SJVR SPUR REALIGNMENT
STA 100+00 TO 154+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1036
SCALE AS SHOWN
SHEET NO. 24 OF 29

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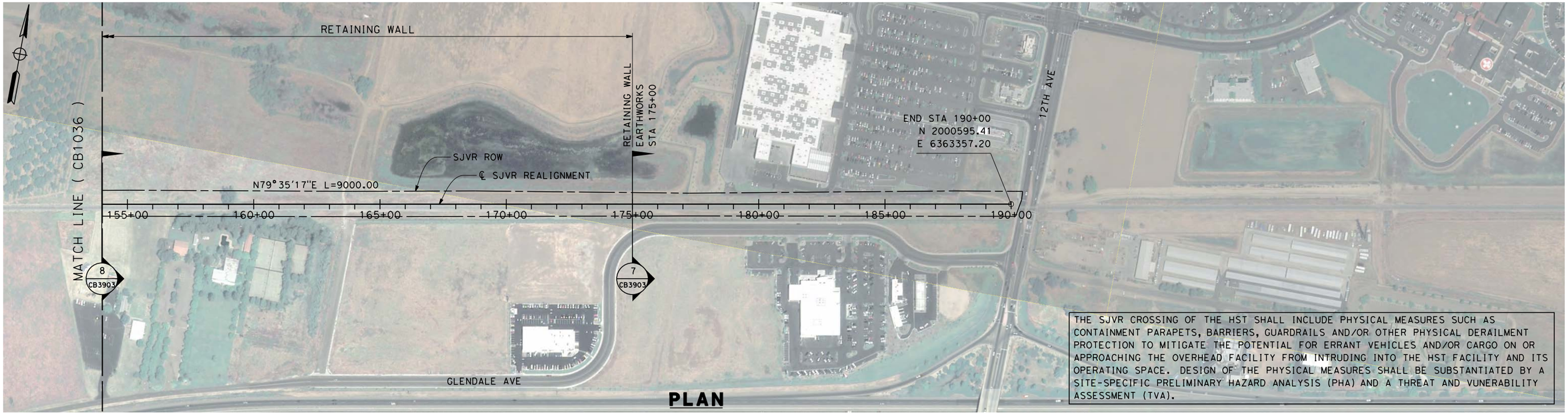
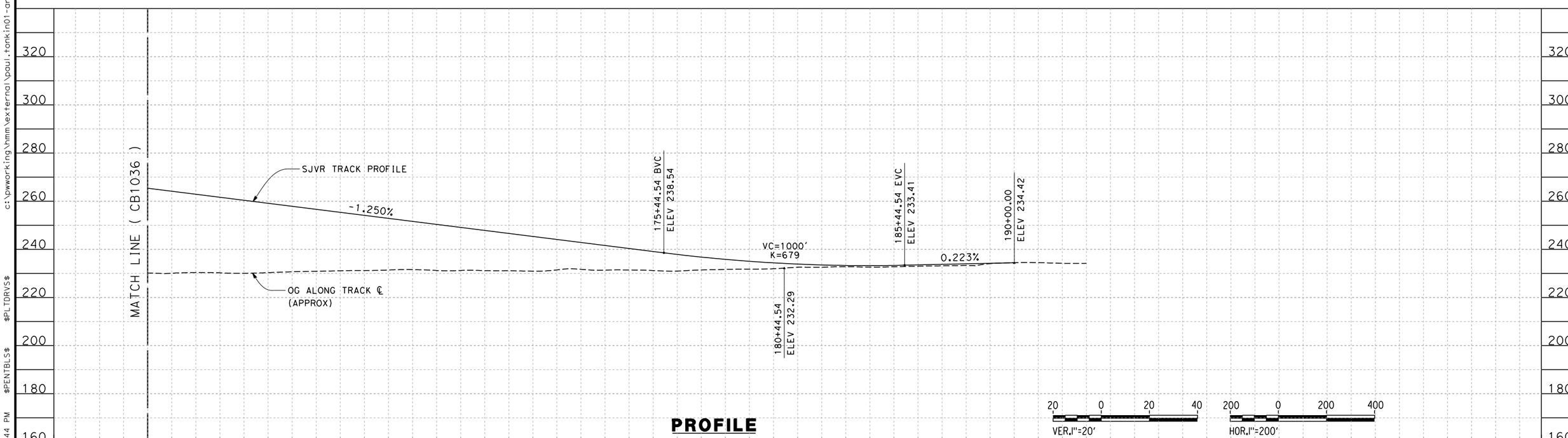



THE SJVR CROSSING OF THE HST SHALL INCLUDE PHYSICAL MEASURES SUCH AS CONTAINMENT PARAPETS, BARRIERS, GUARDRAILS AND/OR OTHER PHYSICAL DERAILMENT PROTECTION TO MITIGATE THE POTENTIAL FOR ERRANT VEHICLES AND/OR CARGO ON OR APPROACHING THE OVERHEAD FACILITY FROM INTRUDING INTO THE HST FACILITY AND ITS OPERATING SPACE. DESIGN OF THE PHYSICAL MEASURES SHALL BE SUBSTANTIATED BY A SITE-SPECIFIC PRELIMINARY HAZARD ANALYSIS (PHA) AND A THREAT AND VUNERABILITY ASSESSMENT (TVA).

**PLAN**




**PROFILE**

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION**

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
SJVR SPUR REALIGNMENT
STA 154+00 TO 190+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1037
SCALE AS SHOWN
SHEET NO. 25 OF 29

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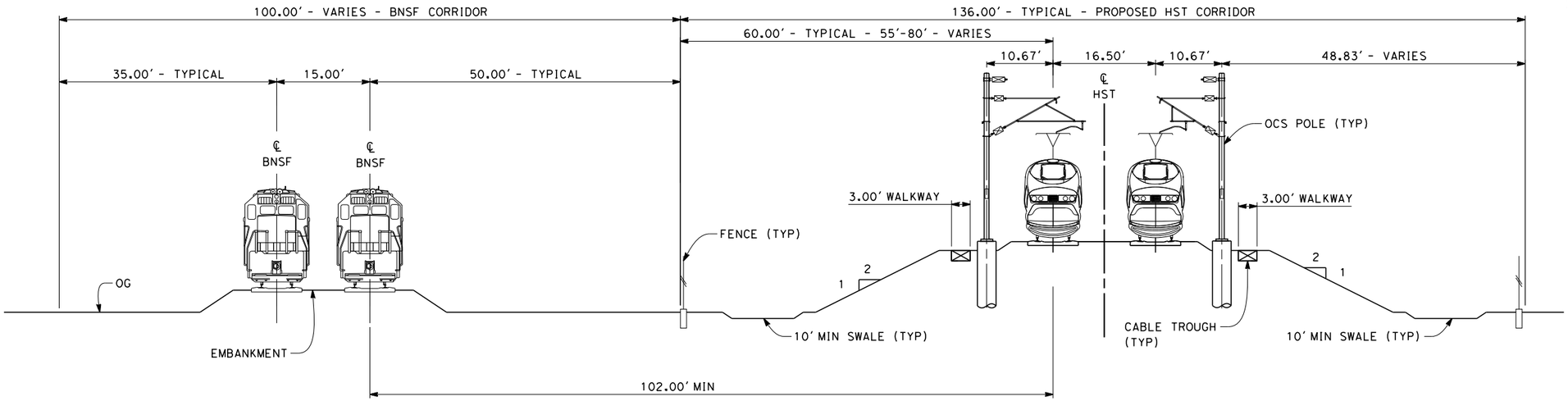
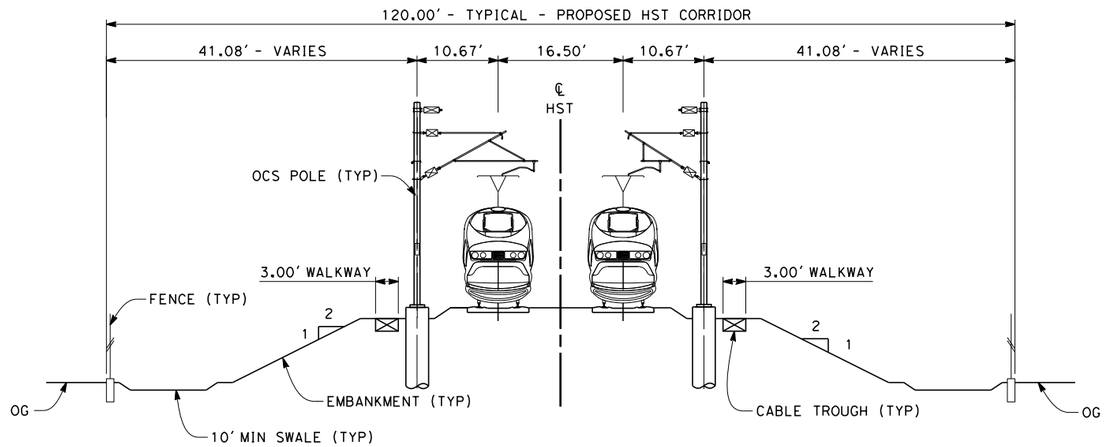
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.




## SECTION 1

TWIN TRACK ADJACENT TO BNSF
STA 1065+00 THROUGH 1262+00




## SECTION 2

TWIN TRACK AT GRADE
STA 1262+00 THROUGH 1407+25
STA 1493+00 THROUGH 1821+95
STA 1881+95 THROUGH 2029+61

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

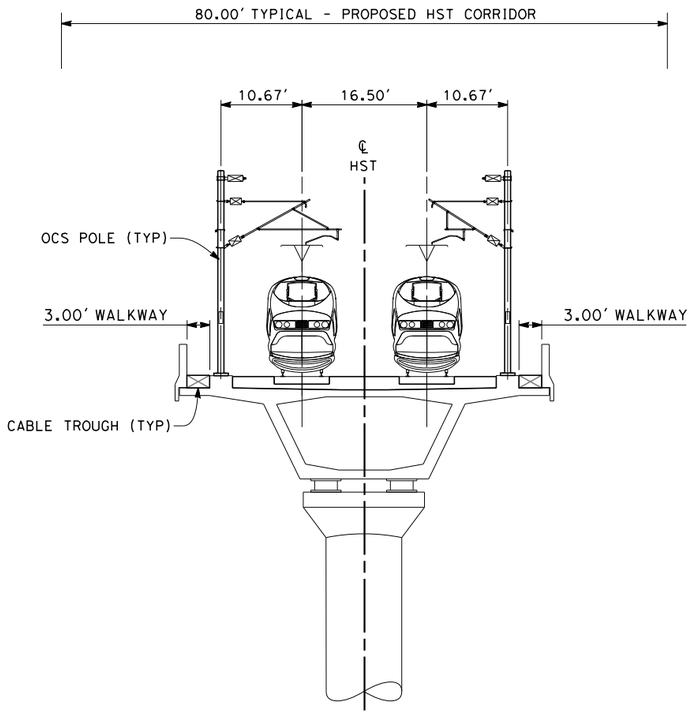
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3900
SCALE AS SHOWN
SHEET NO. 26 OF 29

paul.tonkin 12/12/2013 2:44:40 PM $PENTBLS$ $PLTDRVS$ c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-3900.dgn

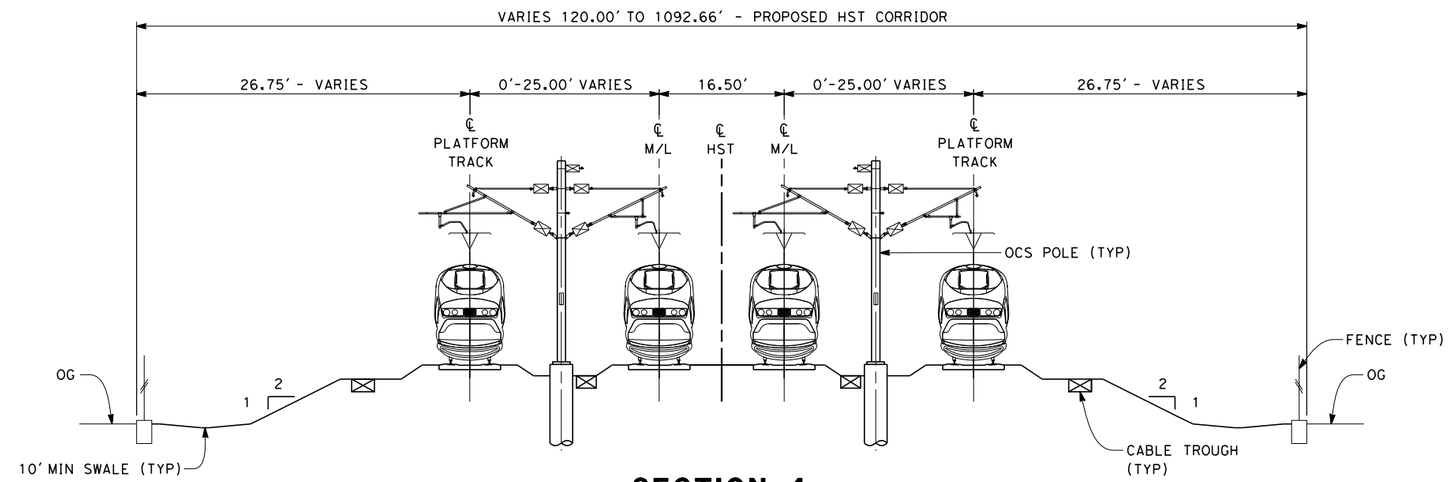
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.




## SECTION 3

TWIN TRACK AERIAL VIADUCT
STA 1407+25 THROUGH 1493+00




## SECTION 4

4 TRACK AT GRADE
STA 1821+95 THROUGH 1825+45
STA 1844+15 THROUGH 1844+90
STA 1859+00 THROUGH 1881+95

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

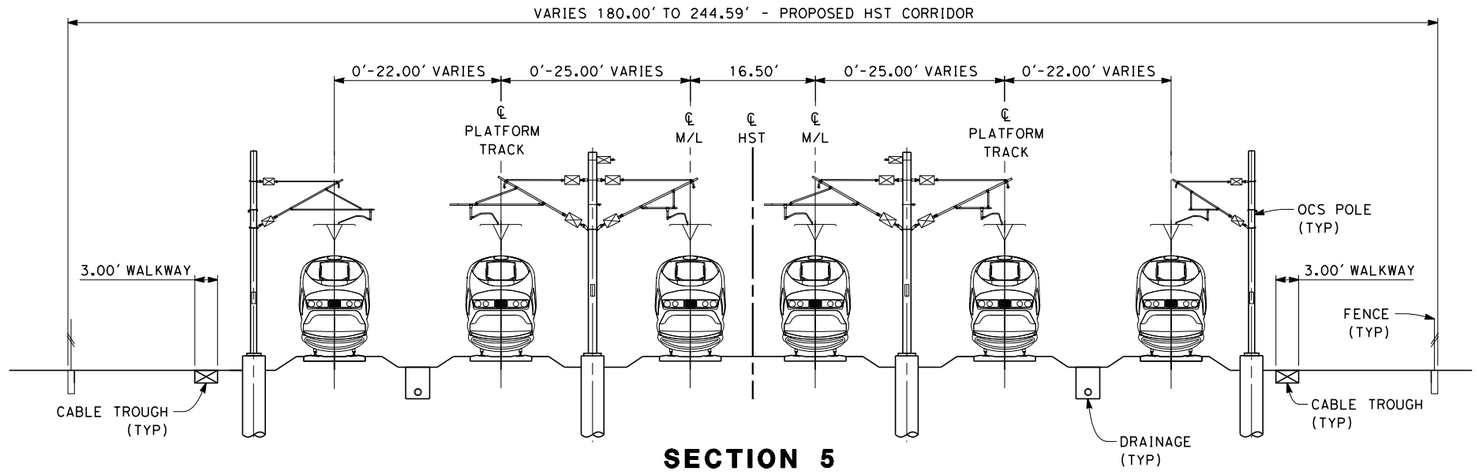
**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3901
SCALE AS SHOWN
SHEET NO. 27 OF 29

paul.tonkin 12/12/2013 2:45:35 PM $PENTBLS$ $PLTDRVS$ c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-3901.dgn

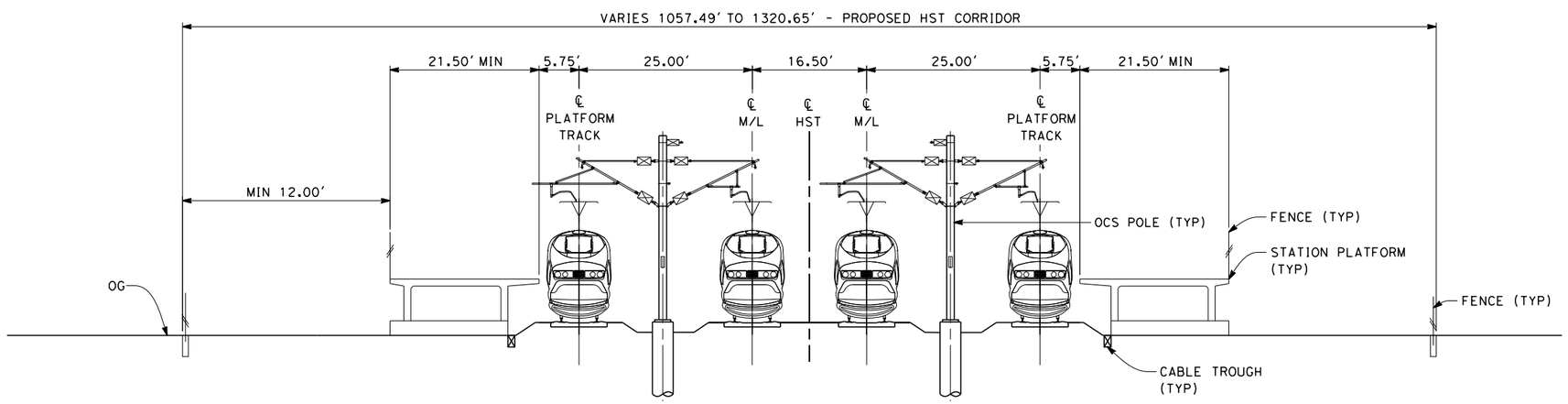
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. HST CORRIDOR WIDTH VARIES THROUGH THE STATION ACCORDING TO THE STATION FACILITIES PROVIDED. SEE STATION DRAWINGS FOR DETAILS.




## SECTION 5

4 TRACK AT GRADE INCLUDING STORAGE TRACKS
STA 1825+45 THROUGH 1844+15




## SECTION 6

4 TRACK AT GRADE INCLUDING PLATFORMS
STA 1844+90 THROUGH 1859+00

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

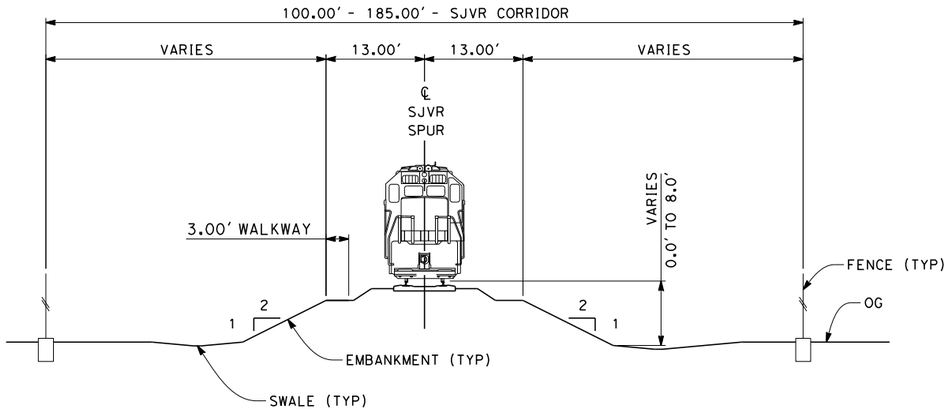
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
ALIGNMENT HW (AT-GRADE)
TYPICAL SECTIONS

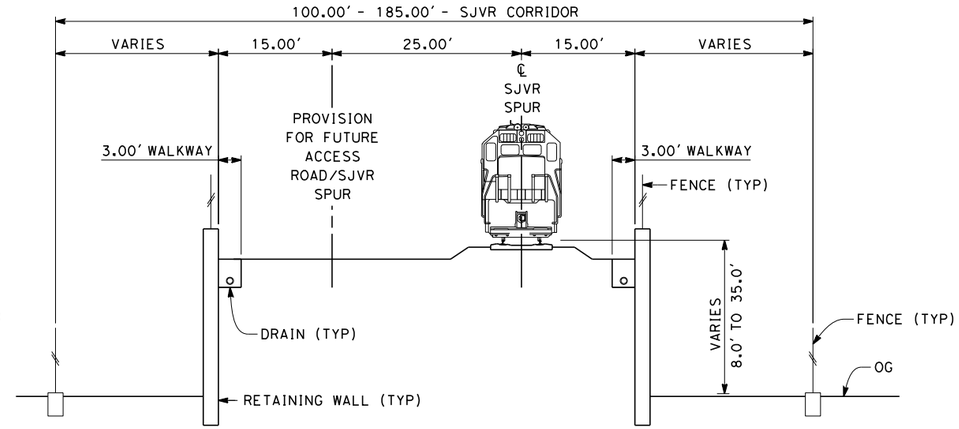
CONTRACT NO. HSR 06-0003
DRAWING NO. CB3902
SCALE AS SHOWN
SHEET NO. 28 OF 29

paul.tonkin 12/12/2013 2:47:02 PM $PENTBLS$ $PLTDRVS$ c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-3902.dgn




## SECTION 7

1 TRACK AT GRADE
STA 100+00 THROUGH 112+00
STA 175+00 THROUGH 190+00

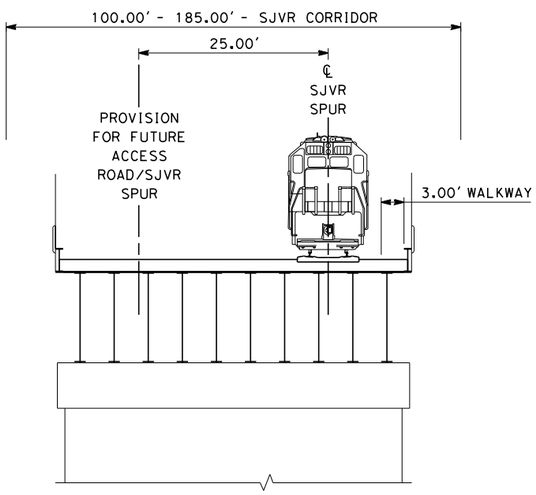



## SECTION 8

1 TRACK - RETAINED EMBANKMENT
STA 112+00 THROUGH 134+39
STA 153+61 THROUGH 175+00

NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.
3. THE SJVR CROSSING OF THE HST SHALL INCLUDE PHYSICAL MEASURES SUCH AS CONTAINMENT PARAPETS, BARRIERS, GUARDRAILS AND/OR OTHER PHYSICAL DERAILMENT PROTECTION TO MITIGATE THE POTENTIAL FOR ERRANT VEHICLES AND/OR CARGO ON OR APPROACHING THE OVERHEAD FACILITY FROM INTRUDING INTO THE HST FACILITY AND ITS OPERATING SPACE. DESIGN OF THE PHYSICAL MEASURES SHALL BE SUBSTANTIATED BY A SITE-SPECIFIC PRELIMINARY HAZARD ANALYSIS (PHA) AND A THREAT AND VUNERABILITY ASSESSMENT (TVA).




## SECTION 9

1 TRACK - AERIAL STRUCTURE
STA 134+39 THROUGH 153+61

10 0 10 20
1"=10'

| REV | DATE | BY | CHK | APP | DESCRIPTION |
|---|---|---|---|---|---|

DESIGNED BY A. POLING
DRAWN BY J. BORGHESI
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

**CALIFORNIA HIGH-SPEED TRAIN PROJECT**
**FRESNO TO BAKERSFIELD**
HANFORD WEST BYPASS SUBSECTION
SJVR SPUR REALIGNMENT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3903
SCALE AS SHOWN
SHEET NO. 29 OF 29

paul.tonkin 12/12/2013 2:48:51 PM $PENTBLS$ $PLTDRVS$ c:\pwworking\hmm\external\paul.tonkin01-arup.com\dms70813\FB-CB-3903.dgn