REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2634+48 TO 3096+00
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1900
SCALE AS SHOWN
SHEET NO. 1 OF 20

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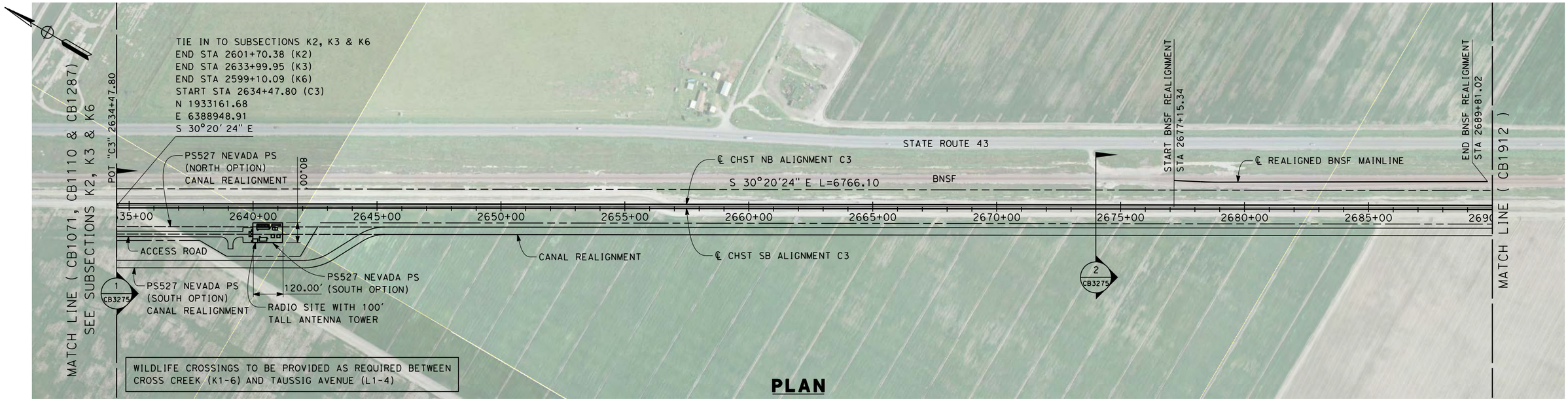
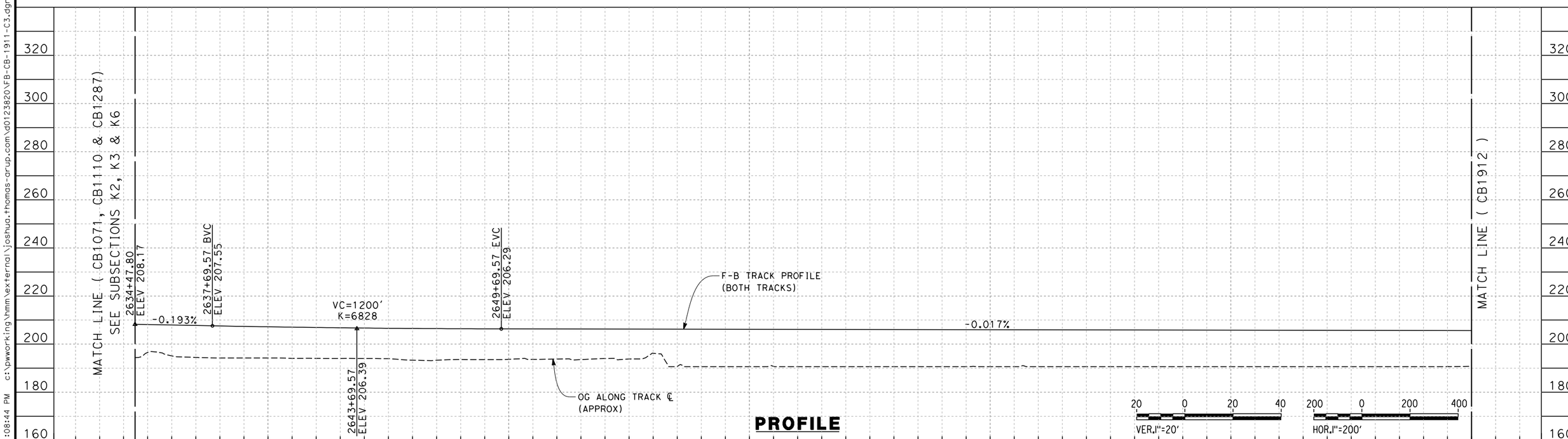


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2634+48 TO 2690+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1911
SCALE AS SHOWN
SHEET NO. 2 OF 20

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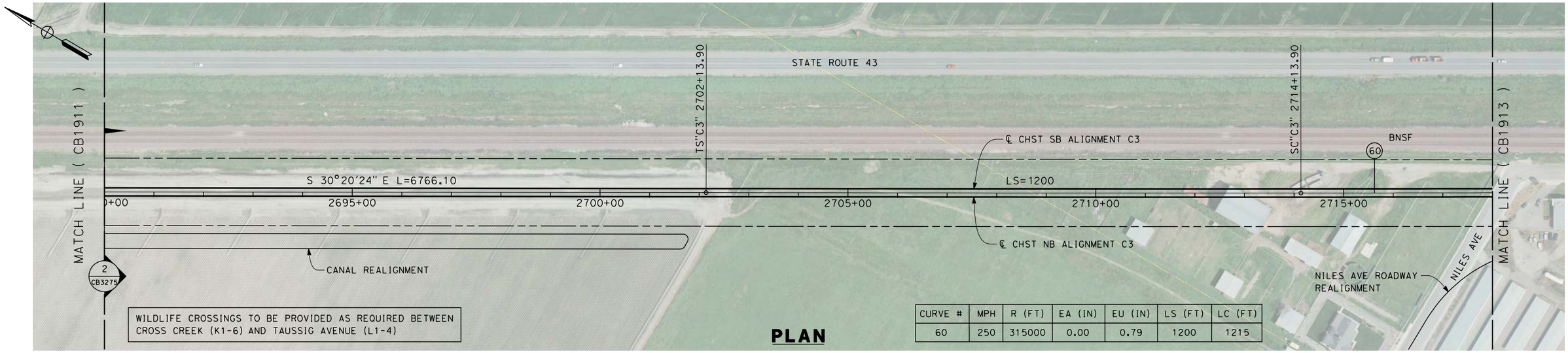
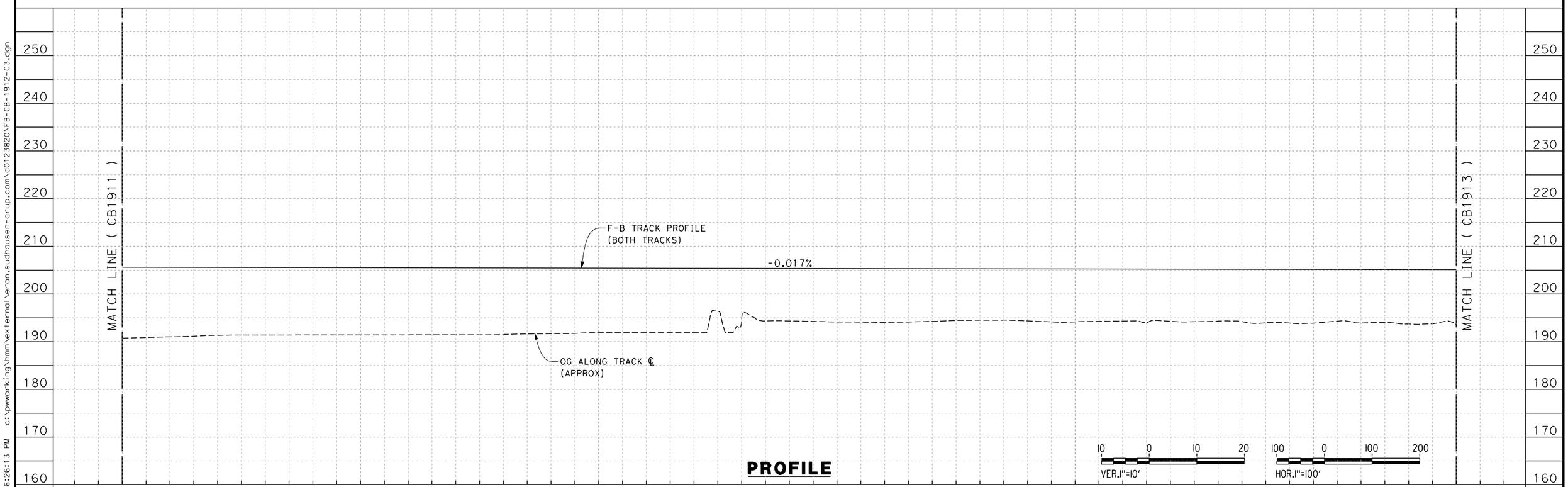


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
60	250	315000	0.00	0.79	1200	1215



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2690+00 TO 2718+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1912
SCALE AS SHOWN
SHEET NO. 3 OF 20

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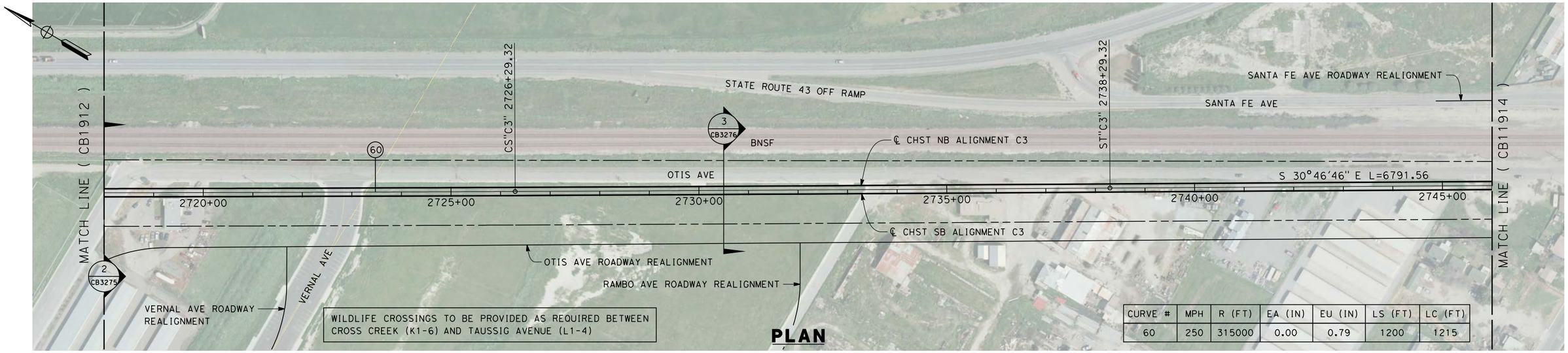
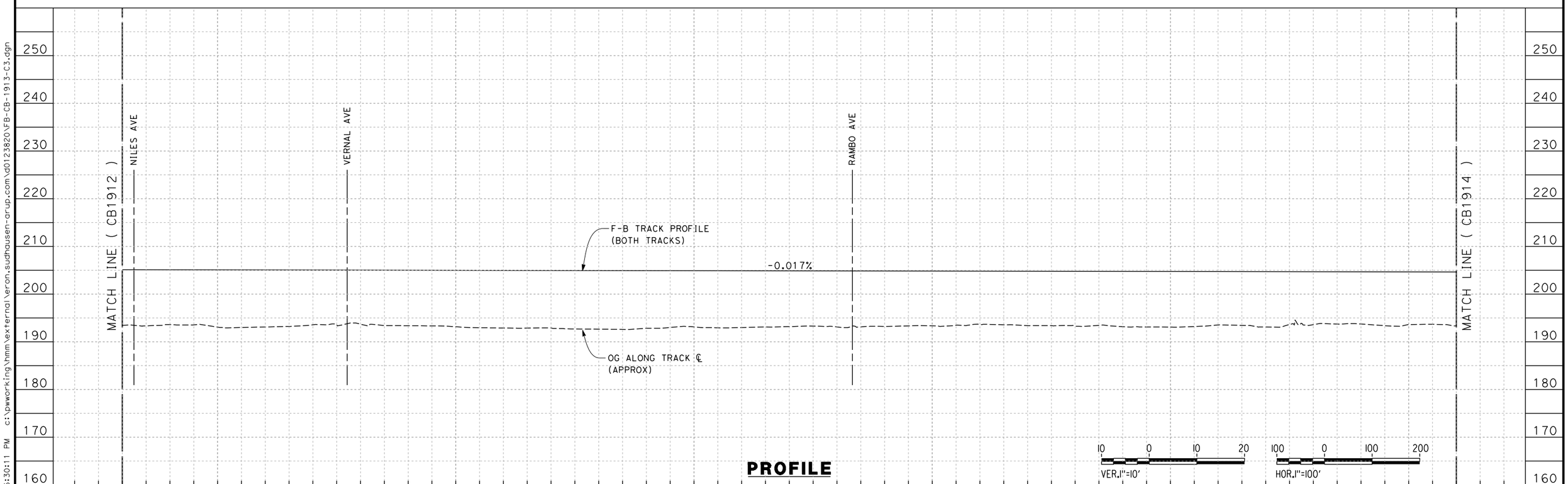


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
60	250	315000	0.00	0.79	1200	1215

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2718+00 TO 2746+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1913
SCALE AS SHOWN
SHEET NO. 4 OF 20

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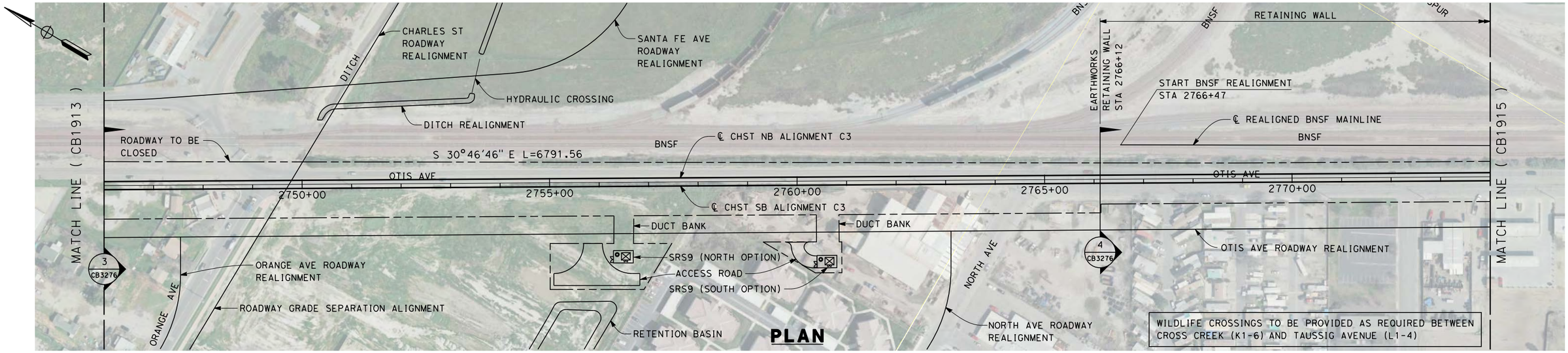

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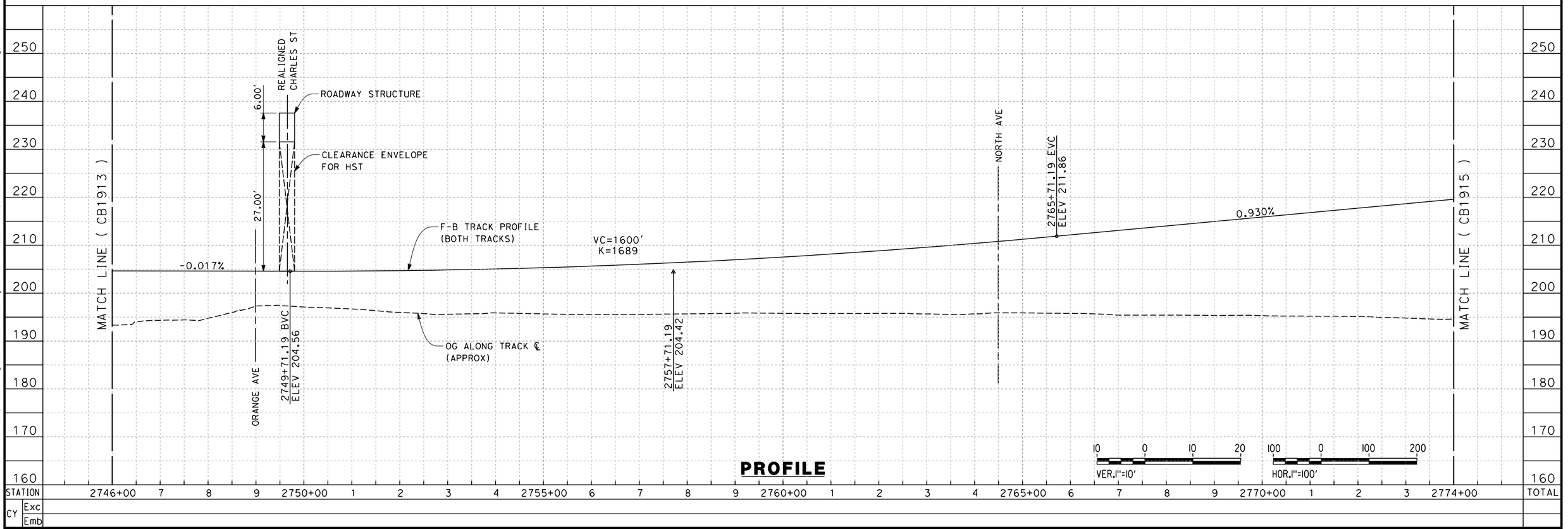

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2746+00 TO 2774+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1914
SCALE AS SHOWN
SHEET NO. 5 OF 20

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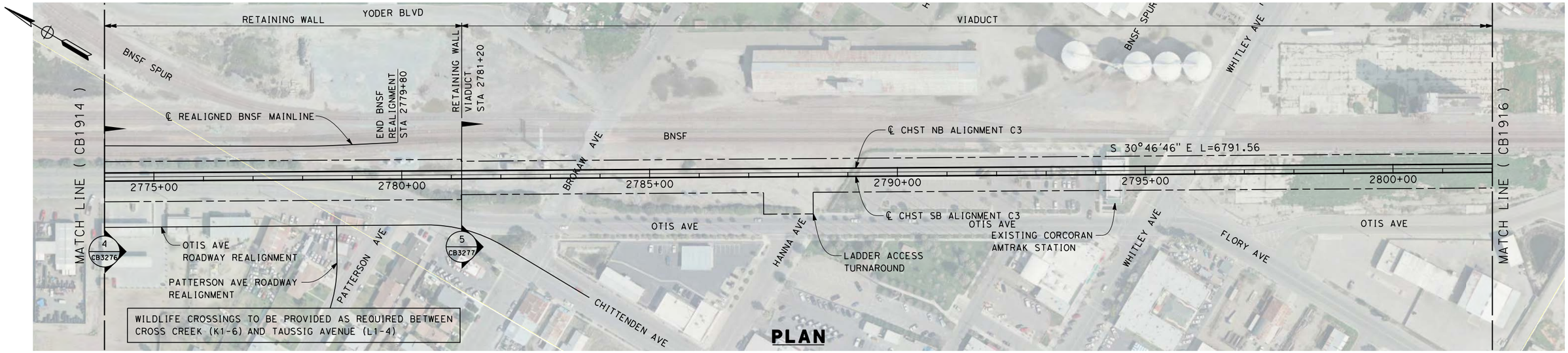
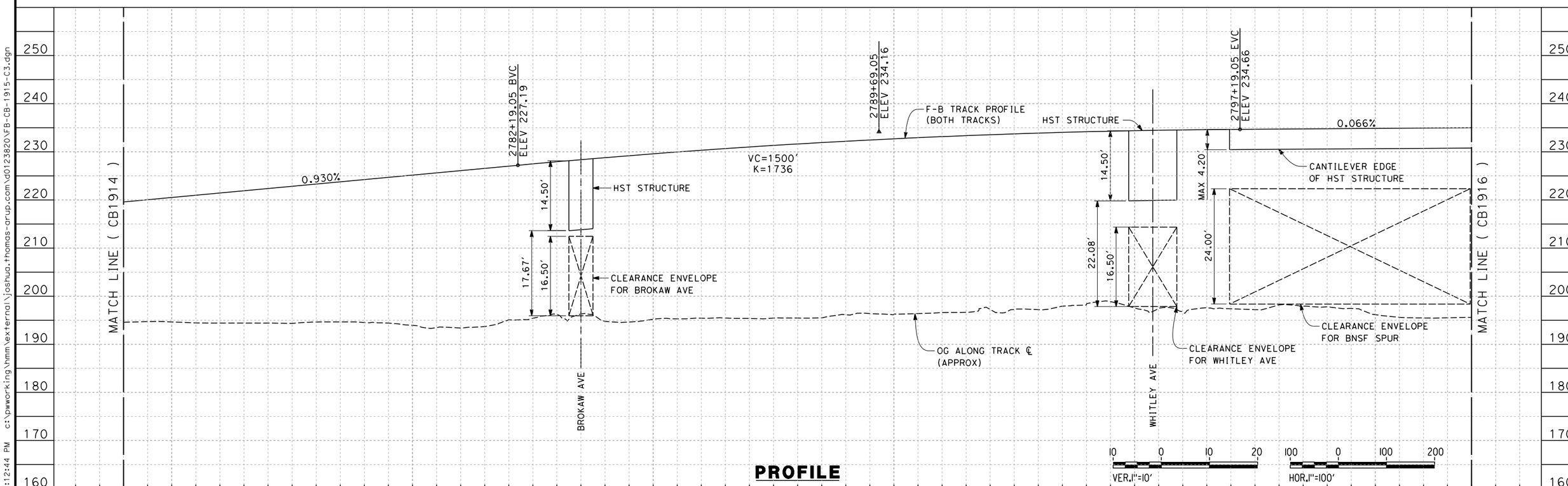


PLAN



PROFILE

STATION	2774+00	2775+00	6	7	8	9	2780+00	1	2	3	4	2785+00	6	7	8	9	2790+00	1	2	3	4	2795+00	6	7	8	9	2800+00	1	2802+00	TOTAL
CY Exc																														
CY Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2774+00 TO 2802+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1915
SCALE AS SHOWN
SHEET NO. 6 OF 20

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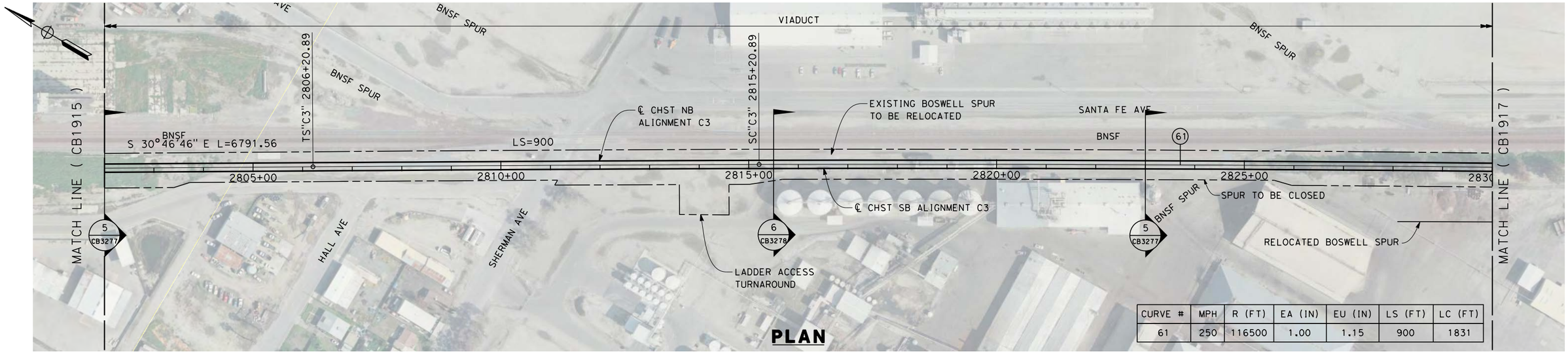
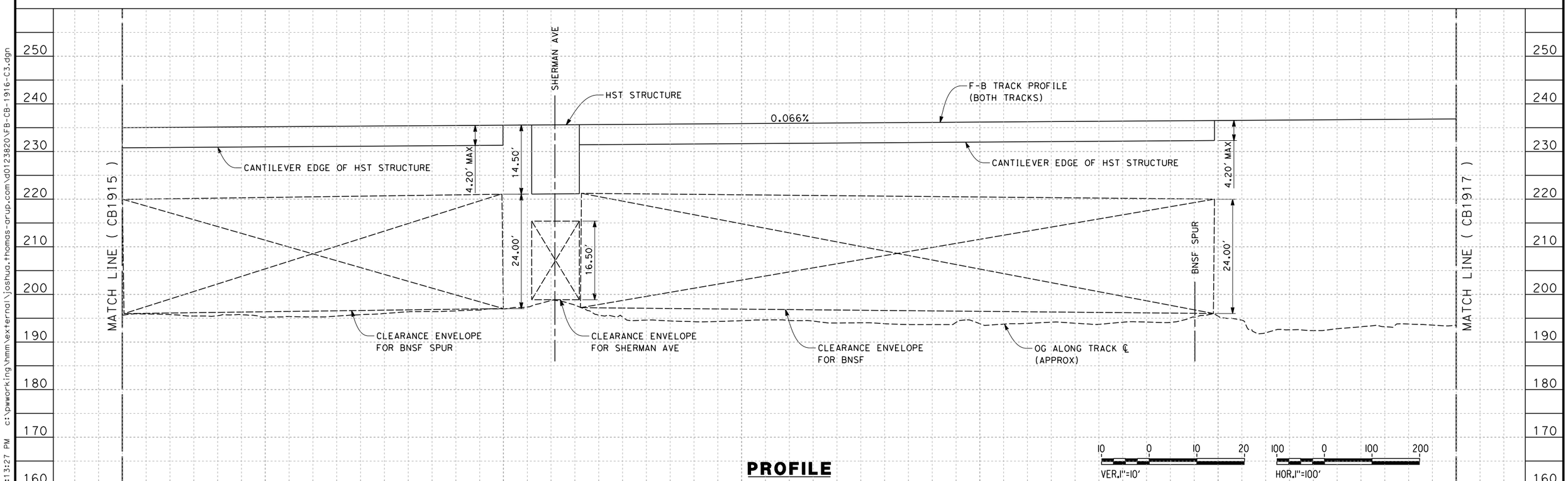


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
61	250	116500	1.00	1.15	900	1831

PLAN



PROFILE

STATION	2802+00	3	4	2805+00	6	7	8	9	2810+00	1	2	3	4	2815+00	6	7	8	9	2820+00	1	2	3	4	2825+00	6	7	8	9	2830+00	TOTAL
CY Exc																														
CY Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2802+00 TO 2830+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1916
SCALE AS SHOWN
SHEET NO. 7 OF 20

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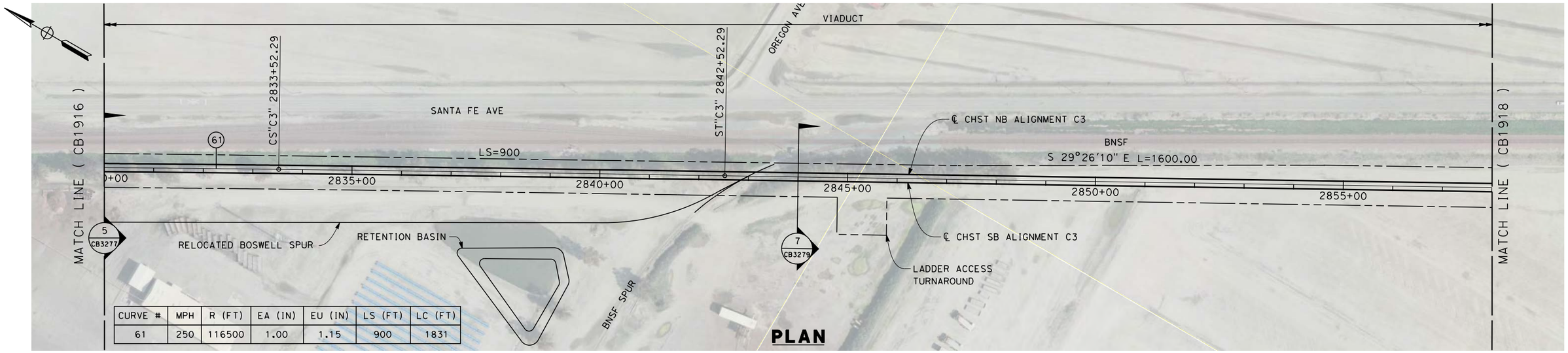
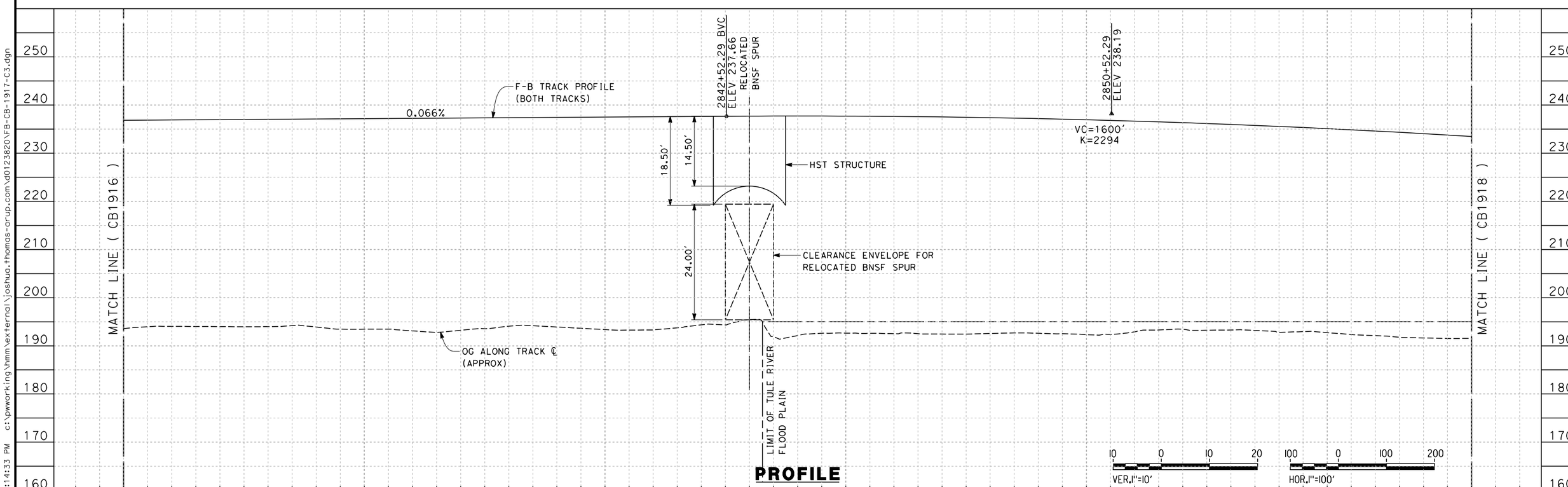


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
61	250	116500	1.00	1.15	900	1831

PLAN



PROFILE

STATION	2830+00	1	2	3	4	2835+00	6	7	8	9	2840+00	1	2	3	4	2845+00	6	7	8	9	2850+00	1	2	3	4	2855+00	6	7	2858+00	TOTAL
CY Exc																														
CY Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2830+00 TO 2858+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1917
SCALE AS SHOWN
SHEET NO. 8 OF 20

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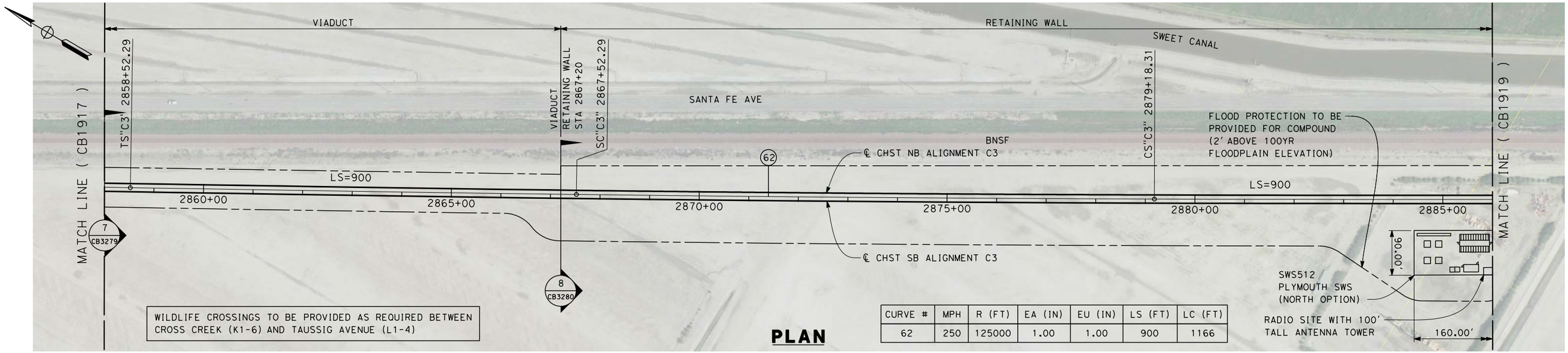

WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
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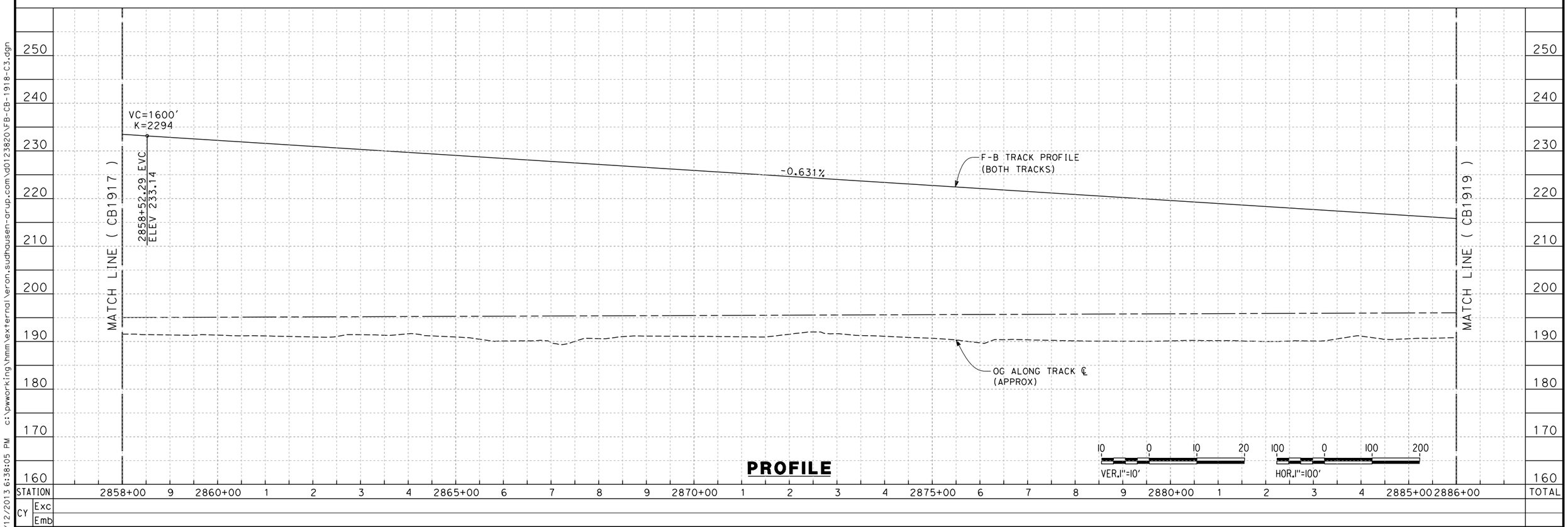

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2858+00 TO 2886+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1918
SCALE AS SHOWN
SHEET NO. 9 OF 20

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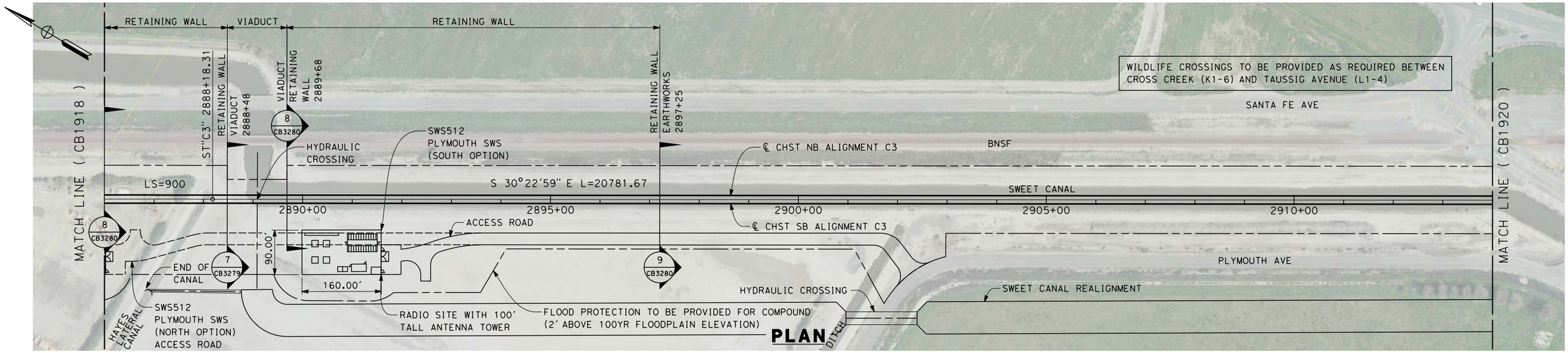
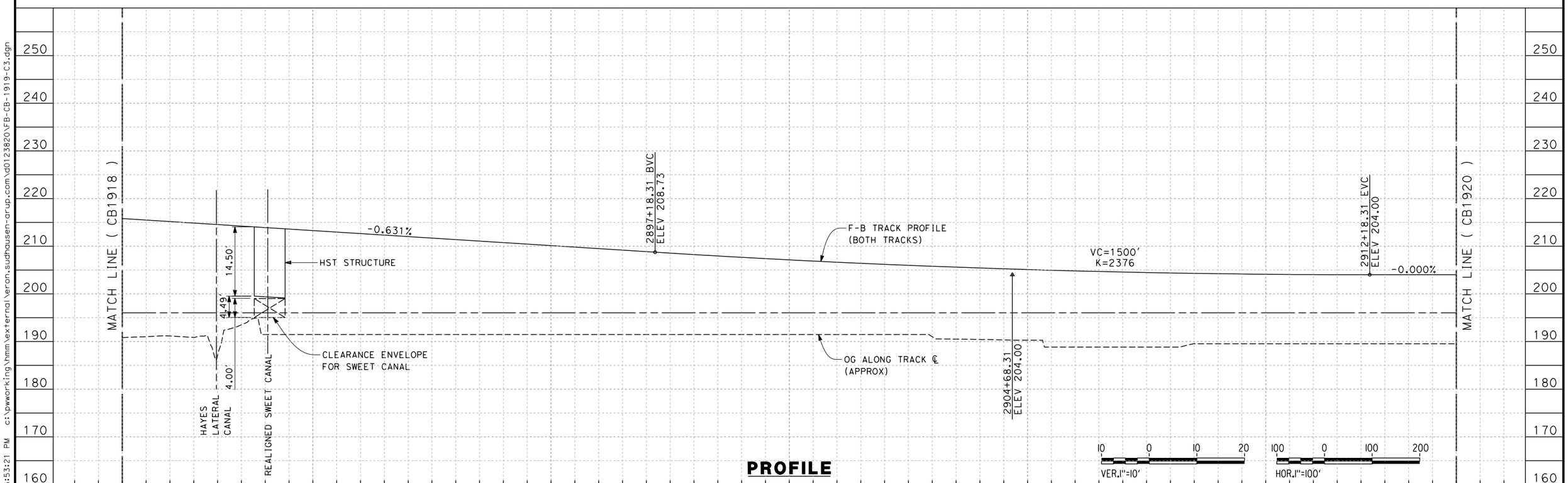


PLAN



PROFILE

STATION	2886+00	7	8	9	2890+00	1	2	3	4	2895+00	6	7	8	9	2900+00	1	2	3	4	2905+00	6	7	8	9	2910+00	1	2	3	2914+00	TOTAL
CY Exc																														
CY Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2886+00 TO 2914+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1919
SCALE AS SHOWN
SHEET NO. 10 OF 20

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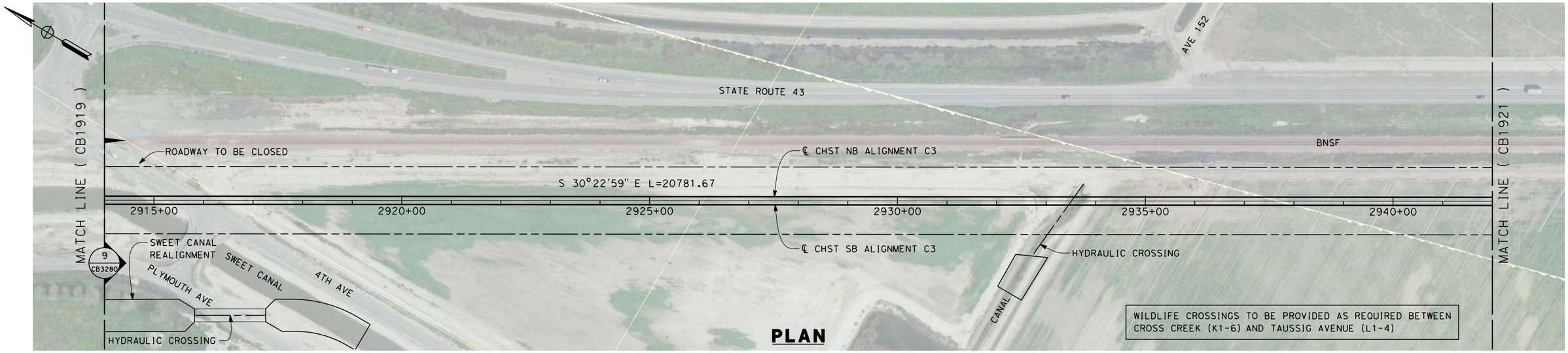
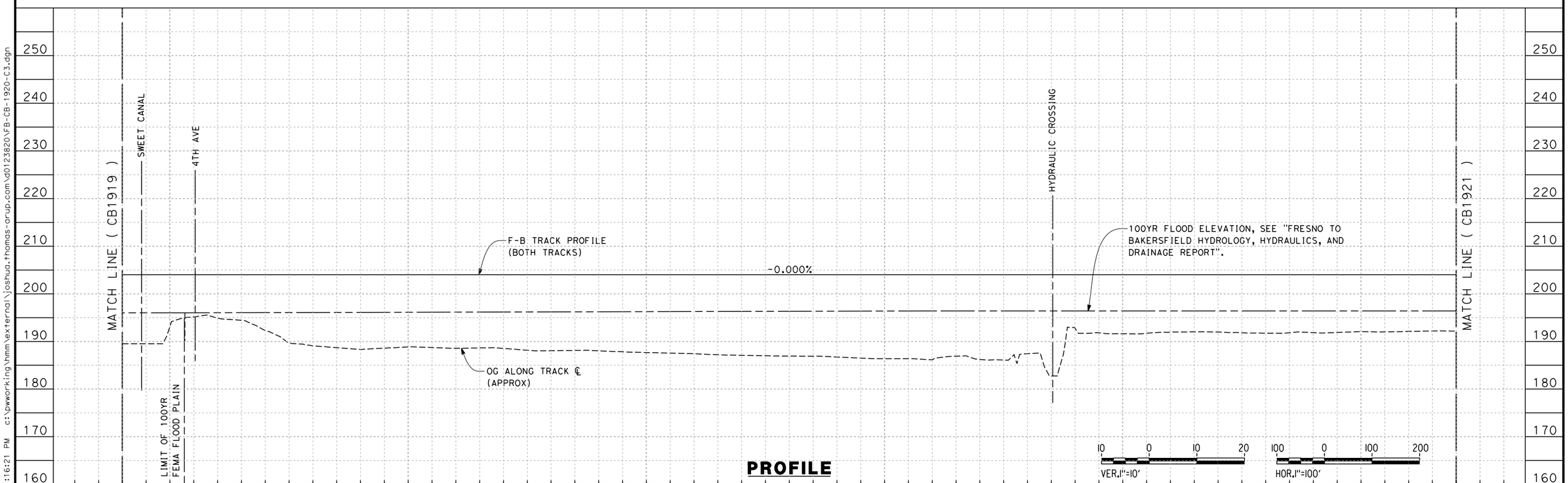


PLAN



PROFILE

STATION	2914+00	2915+00	6	7	8	9	2920+00	1	2	3	4	2925+00	6	7	8	9	2930+00	1	2	3	4	2935+00	6	7	8	9	2940+00	1	2942+00	TOTAL
CY Exc																														
CY Emb																														

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2914+00 TO 2942+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1920
SCALE AS SHOWN
SHEET NO. 11 OF 20

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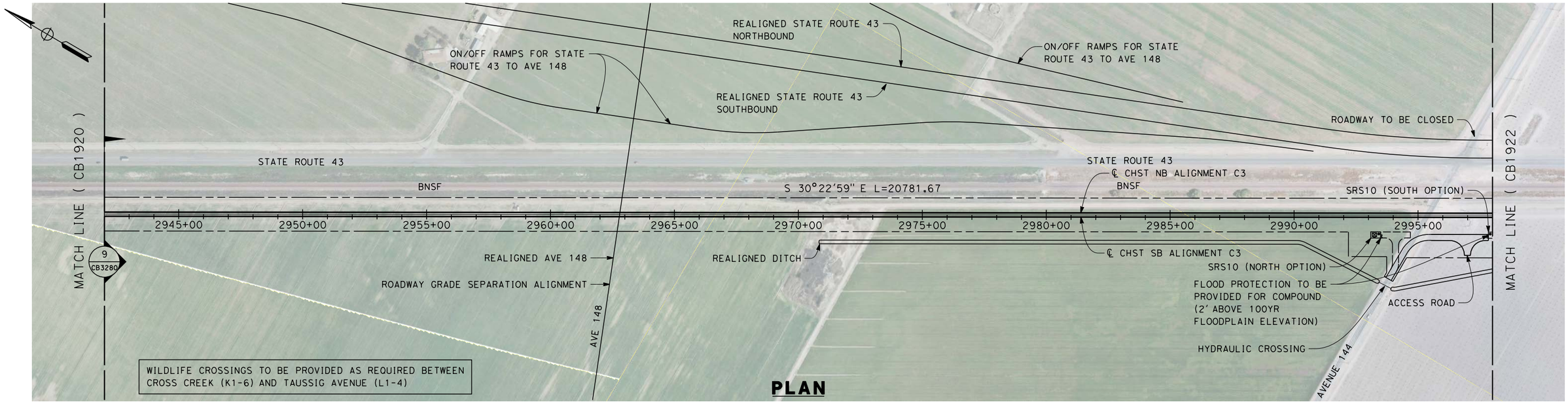
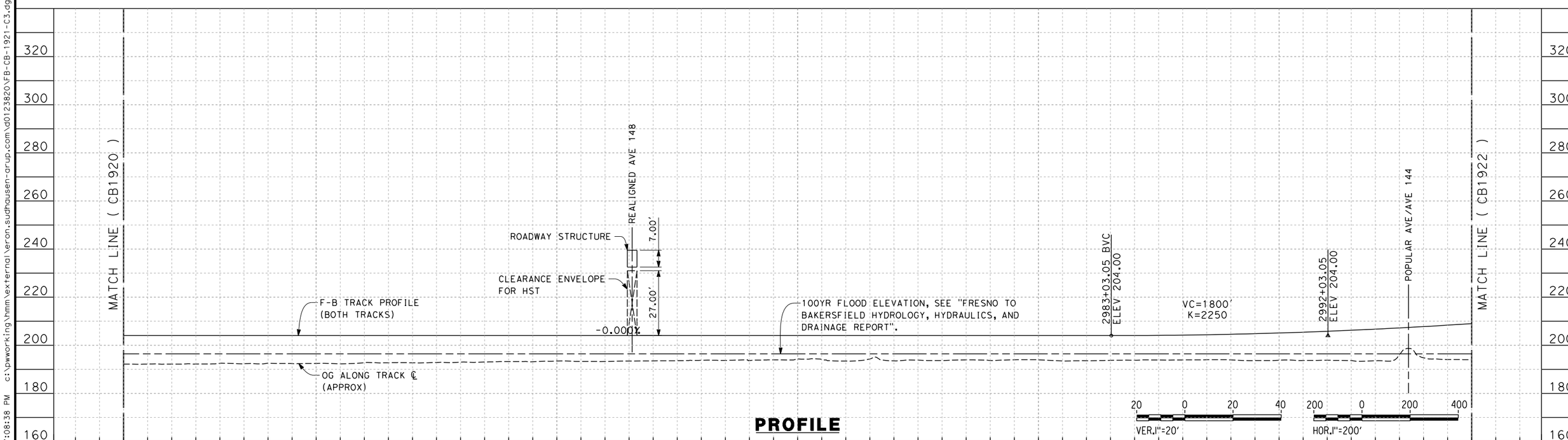


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2942+00 TO 2998+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1921
SCALE AS SHOWN
SHEET NO. 12 OF 20

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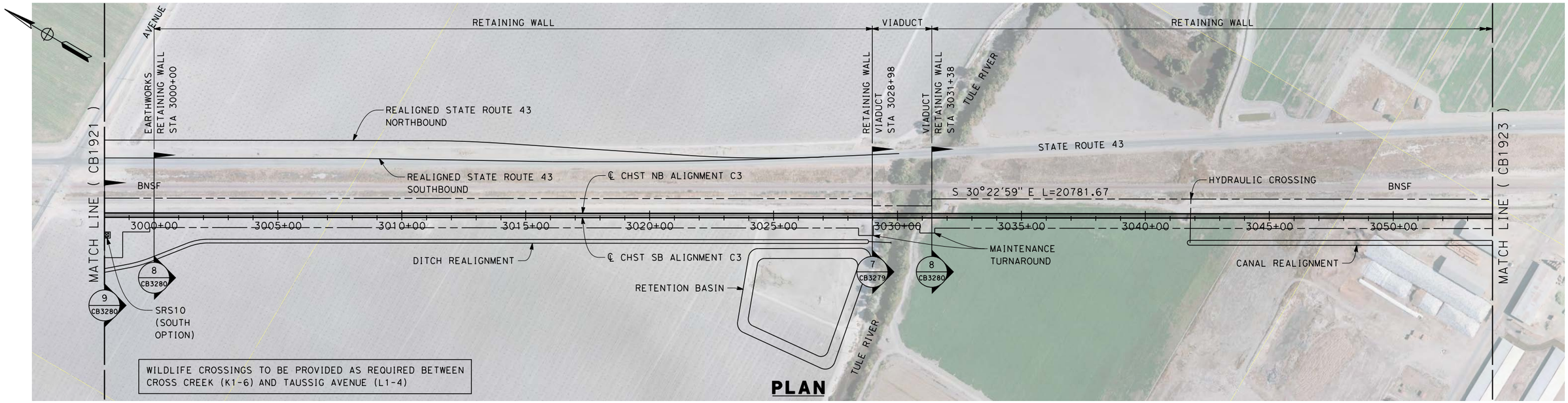

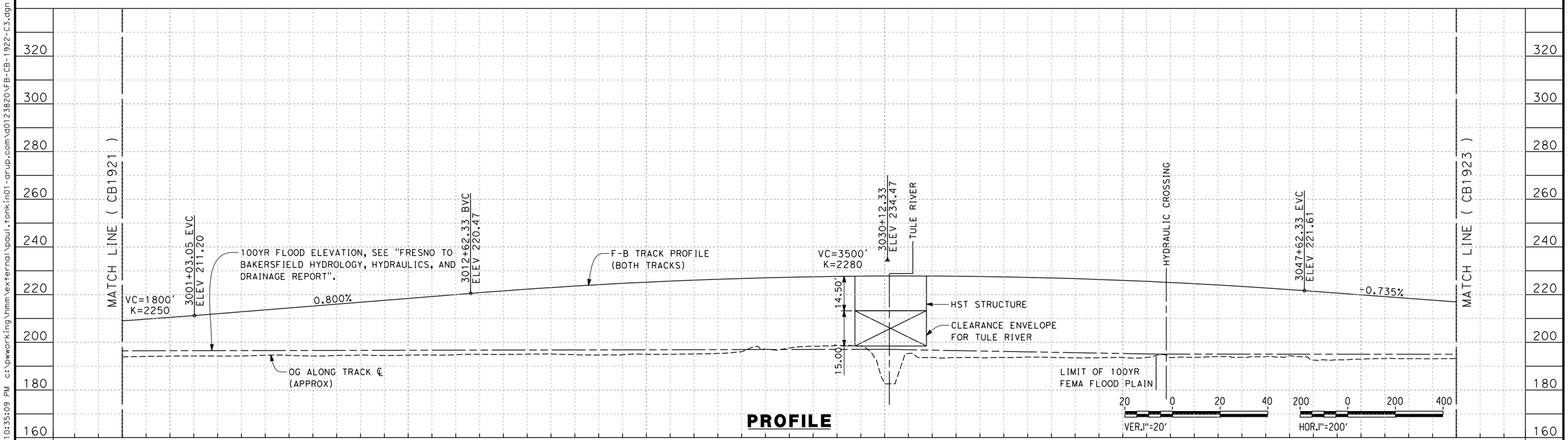

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 2998+00 TO 3054+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1922
SCALE AS SHOWN
SHEET NO. 13 OF 20

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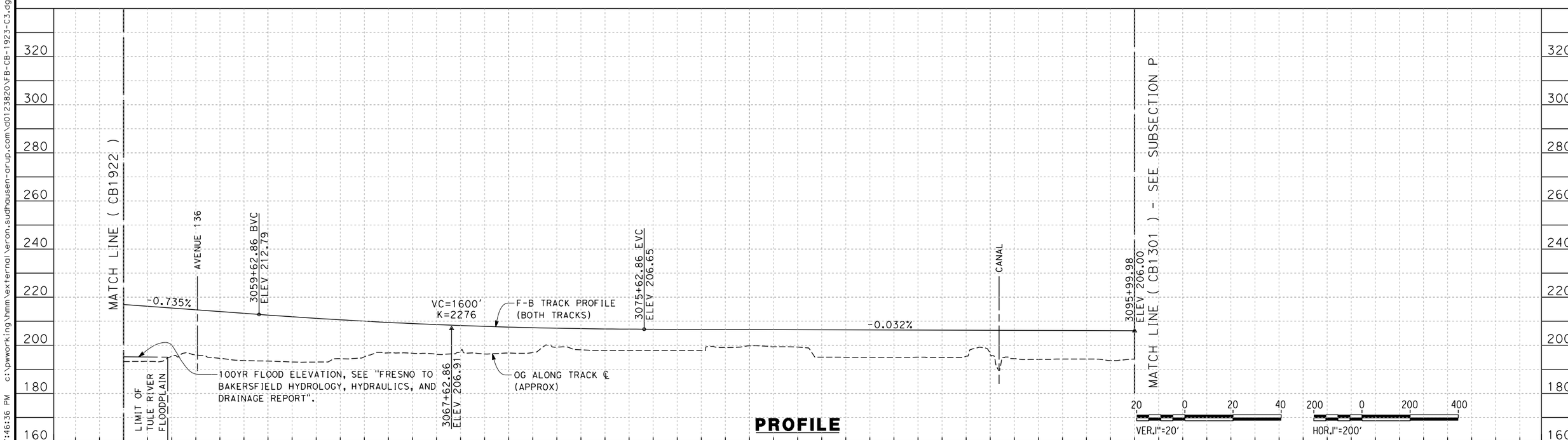

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
STA. 3054+00 TO 3096+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1923
SCALE AS SHOWN
SHEET NO. 14 OF 20

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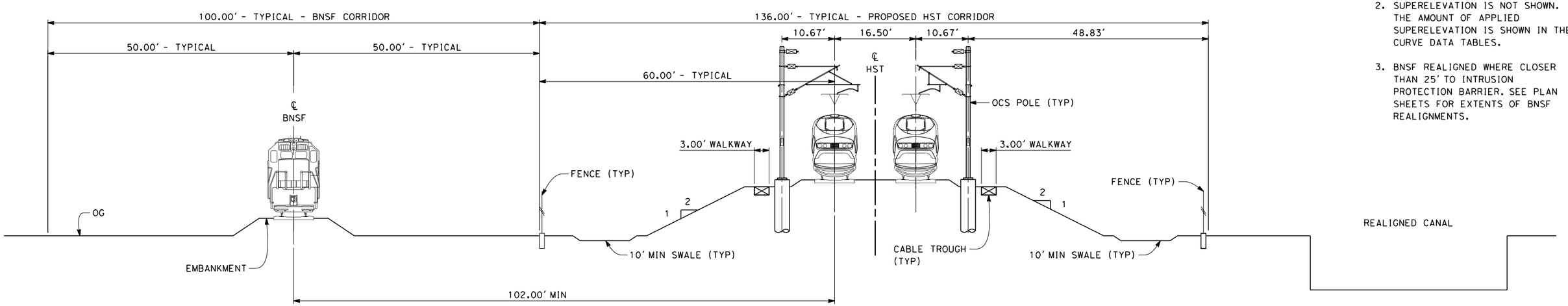
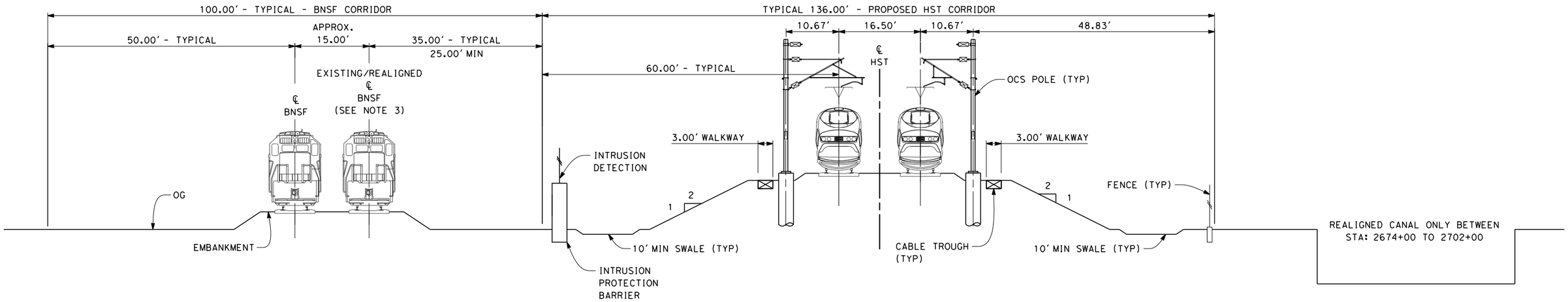
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. BNSF REALIGNED WHERE CLOSER THAN 25' TO INTRUSION PROTECTION BARRIER. SEE PLAN SHEETS FOR EXTENTS OF BNSF REALIGNMENTS.



SECTION 1

TWIN TRACK - BETWEEN BNSF AND REALIGNED CANAL
STA 2634+48 THROUGH STA 2674+00



SECTION 2

TWIN TRACK - INTRUSION PROTECTION BETWEEN TWIN TRACK BNSF AND REALIGNED CANAL
STA 2674+00 THROUGH STA 2730+50

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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

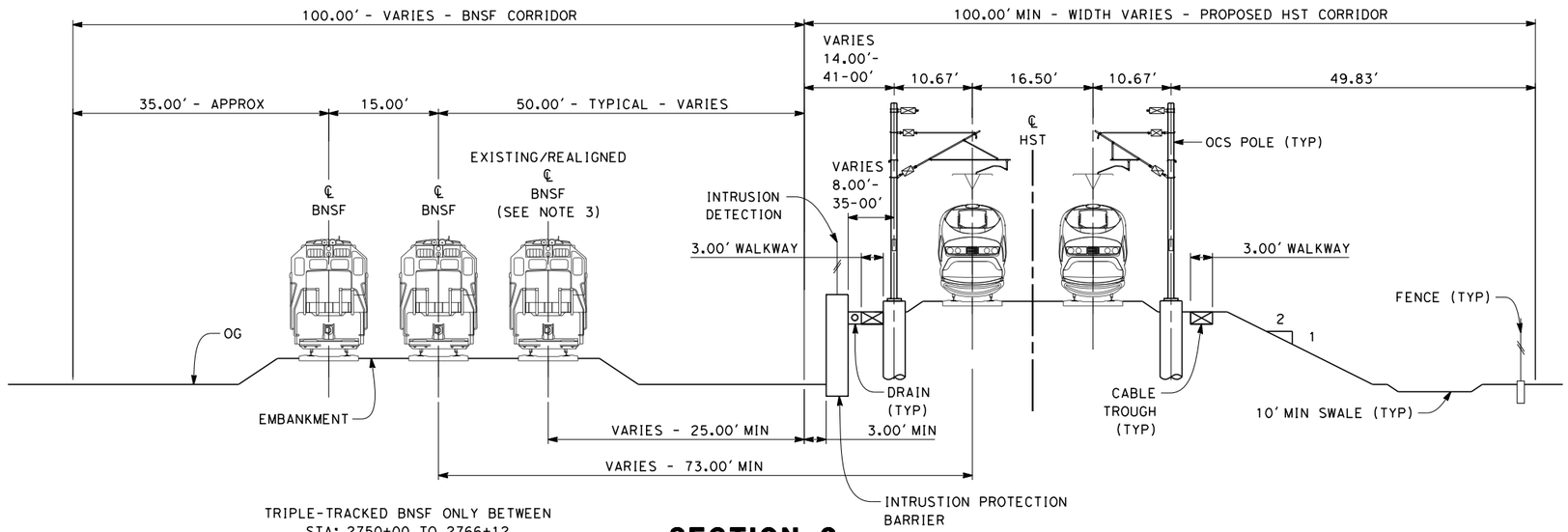
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3275
SCALE AS SHOWN
SHEET NO. 15 OF 20

joshua.thomas 12/12/2013 1:18:51 PM c:\pwworking\hmm\external\joshua.thomas-arup.com\d0123820\FB-CB-3275-C3.dgn

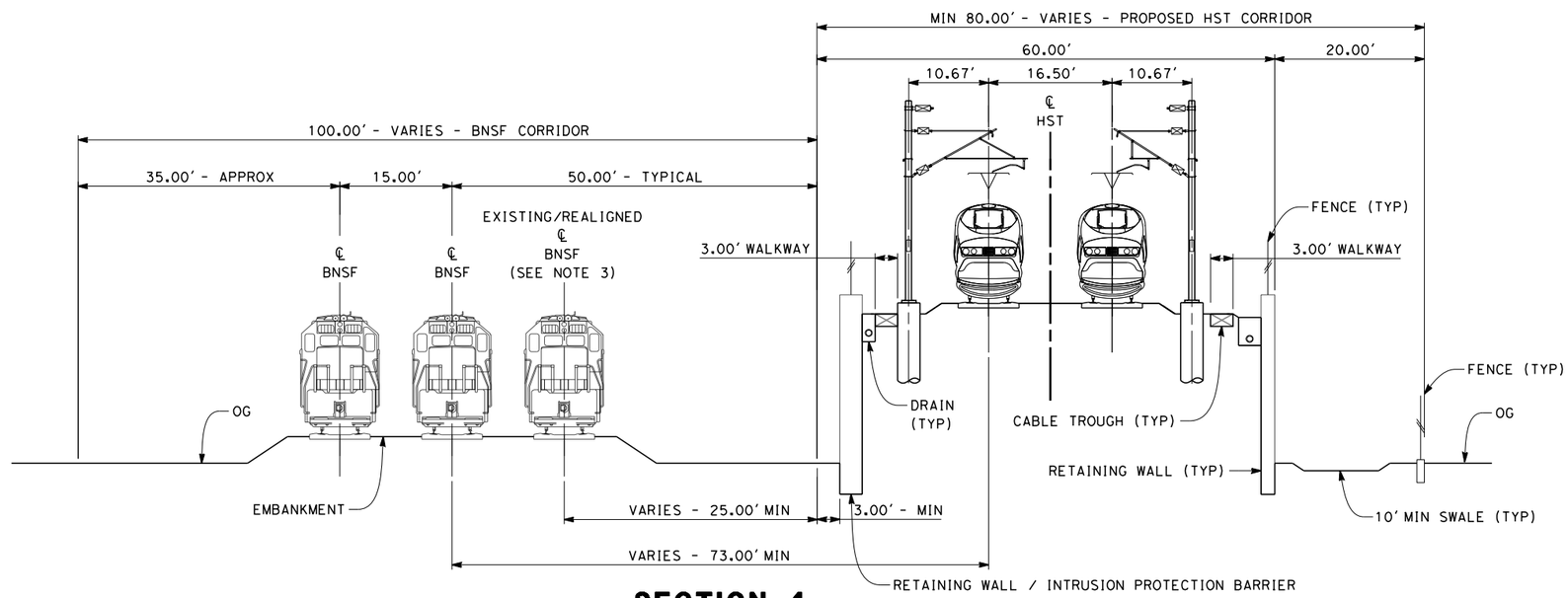
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
3. BNSF REALIGNED WHERE CLOSER THAN 25' TO INTRUSION PROTECTION BARRIER. SEE PLAN SHEETS FOR EXTENTS OF BNSF REALIGNMENTS.



SECTION 3

TWIN TRACK - INTRUSION PROTECTION ADJACENT TO TRIPLE TRACKED BNSF
STA 2730+50 THROUGH STA 2766+12



SECTION 4

TWIN TRACK - RETAINED EMBANKMENT ADJACENT TO TRIPLE TRACKED BNSF
STA 2766+12 THROUGH STA 2781+20

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3276
SCALE AS SHOWN
SHEET NO. 16 OF 20

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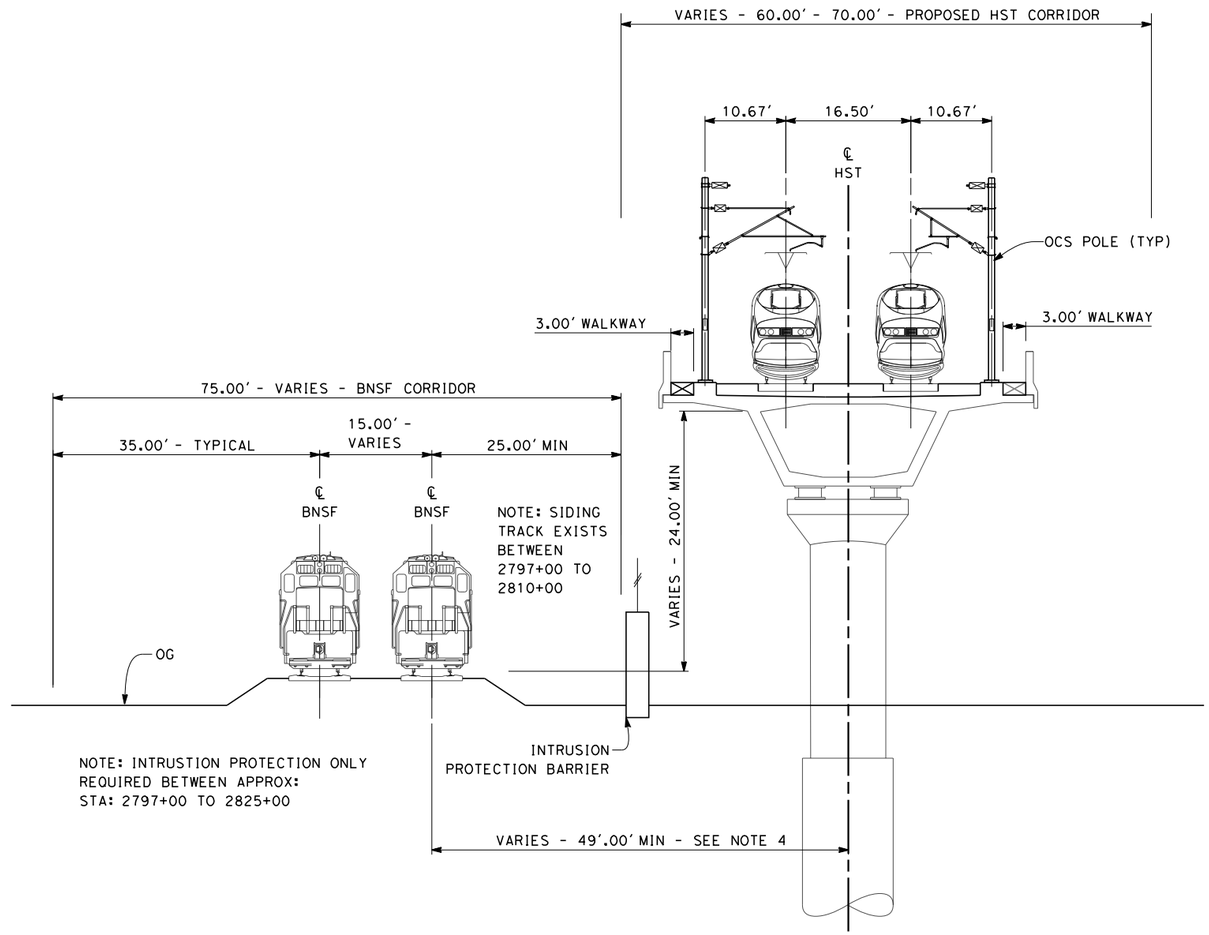
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS, SEE STRUCTURAL CROSS SECTIONS.
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
4. HST STRUCTURE OVERHANGS BNSF CORRIDOR BETWEEN STA. 2797+00 TO 2825+00.



SECTION 5

TWIN TRACKS - AERIAL VIADUCT ADJACENT TO TWIN TRACK BNSF
STA 2781+20 THROUGH STA 2815+50
STA 2823+00 THROUGH STA 2844+00

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3277
SCALE AS SHOWN
SHEET NO. 17 OF 20

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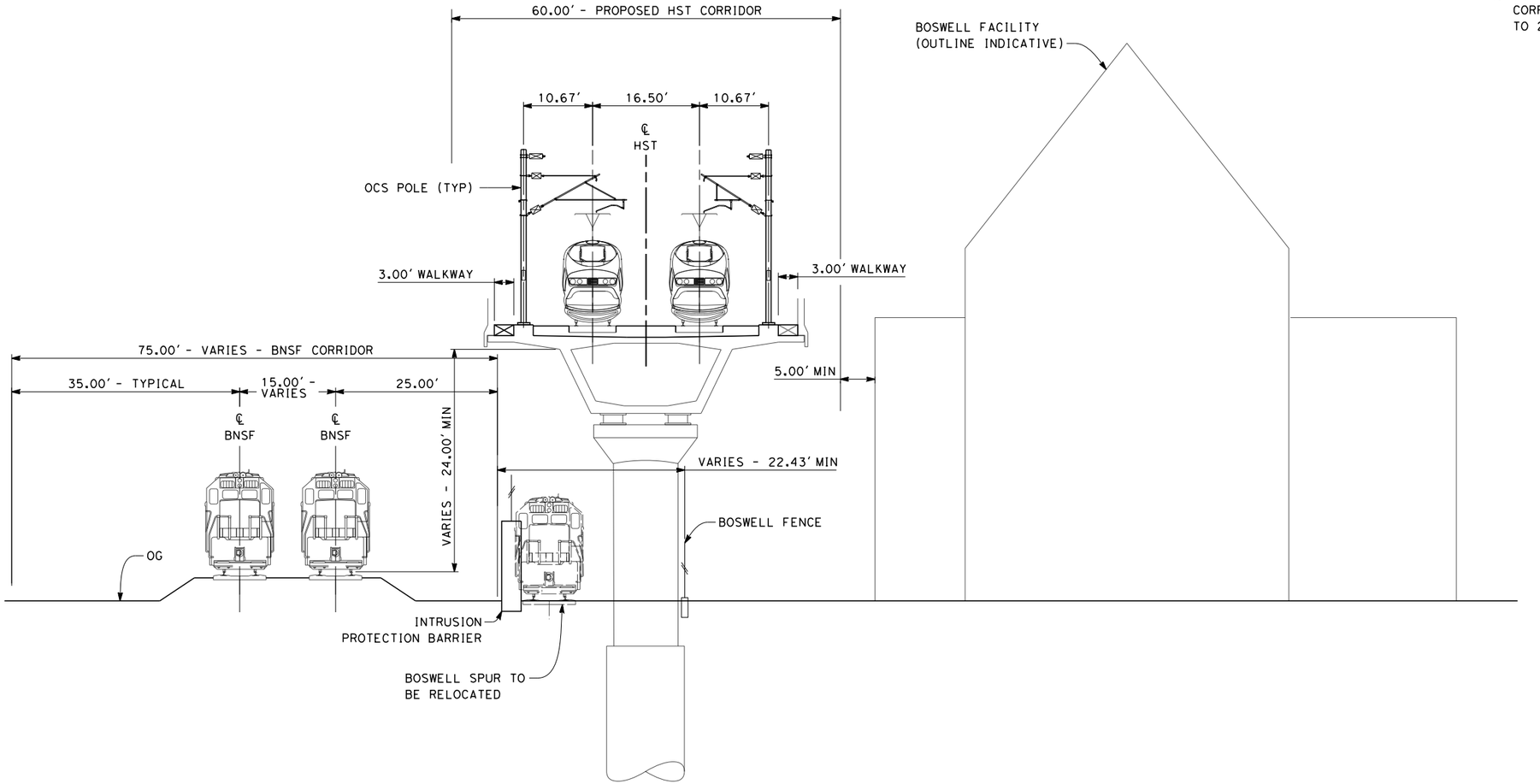
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE
2. FOR STRUCTURE DIMENSIONS, SEE STRUCTURAL CROSS SECTIONS.
3. SUPERELEVATION IS NOT SHOWN. THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE DATA TABLES.
4. HST STRUCTURE OVERHANGS BNSF CORRIDOR BETWEEN STA. 2797+00 TO 2825+00.



SECTION 6

TWIN TRACKS - AERIAL VIADUCT ADJACENT TO BOSWELL FACILITY
STA 2815+50 THROUGH STA 2823+00

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3278
SCALE AS SHOWN
SHEET NO. 18 OF 20

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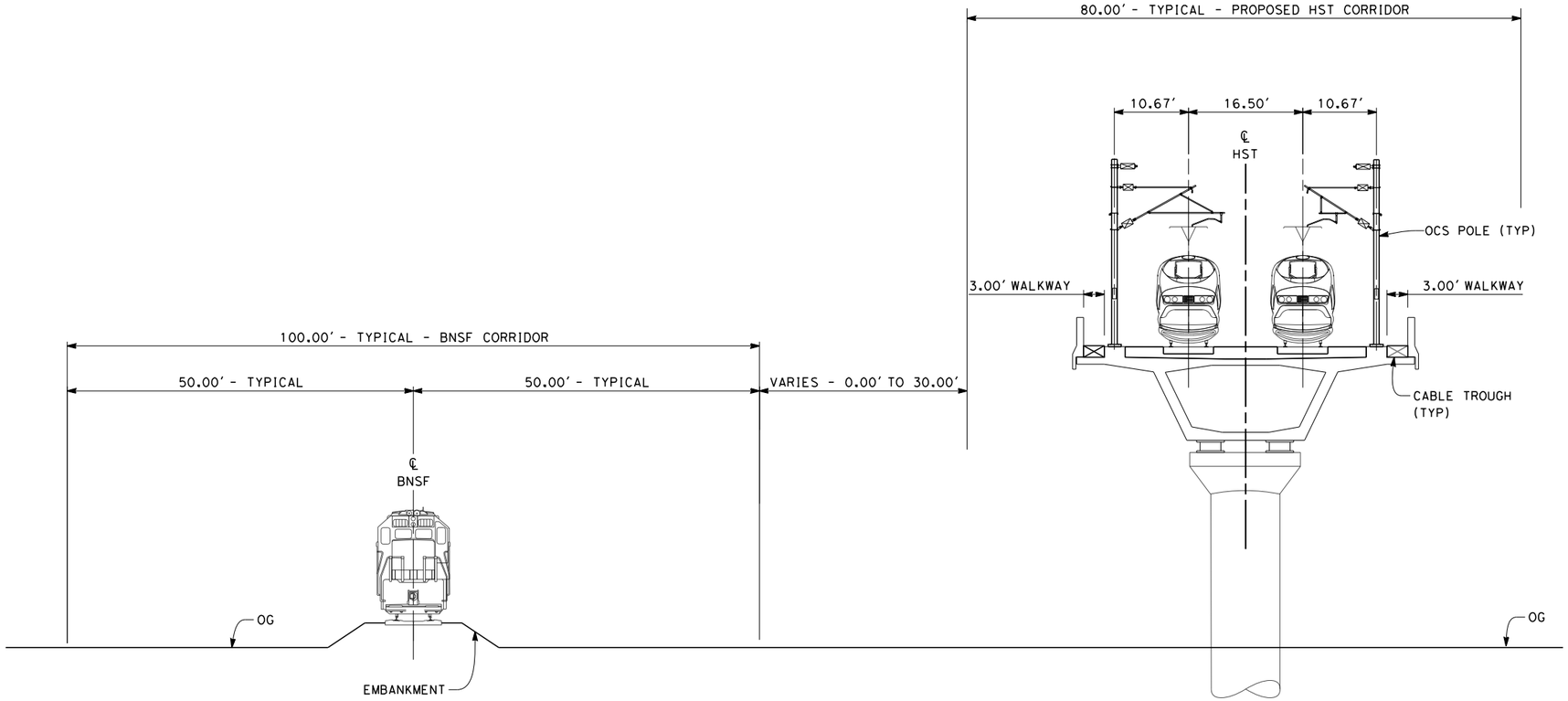
NOTES:

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



SECTION 7

TWIN TRACKS - AERIAL VIADUCT ADJACENT TO SINGLE TRACK BNSF
STA 2844+00 THROUGH STA 2867+20
STA 2888+48 THROUGH STA 2889+86
STA 3029+98 THROUGH STA 3031+38

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3279
SCALE AS SHOWN
SHEET NO. 19 OF 20

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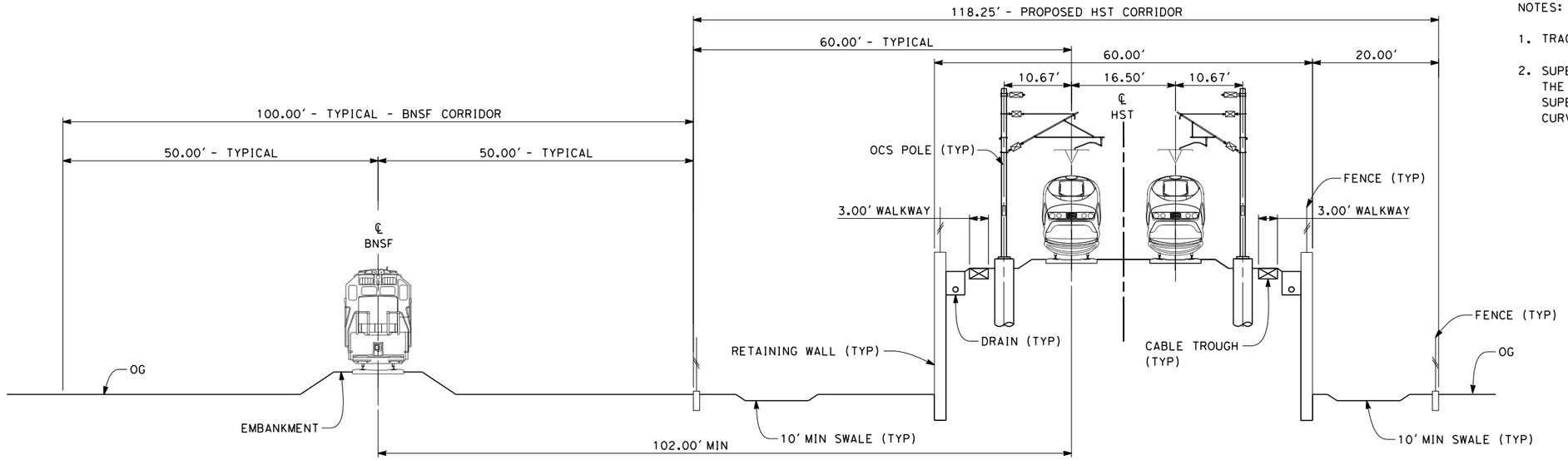
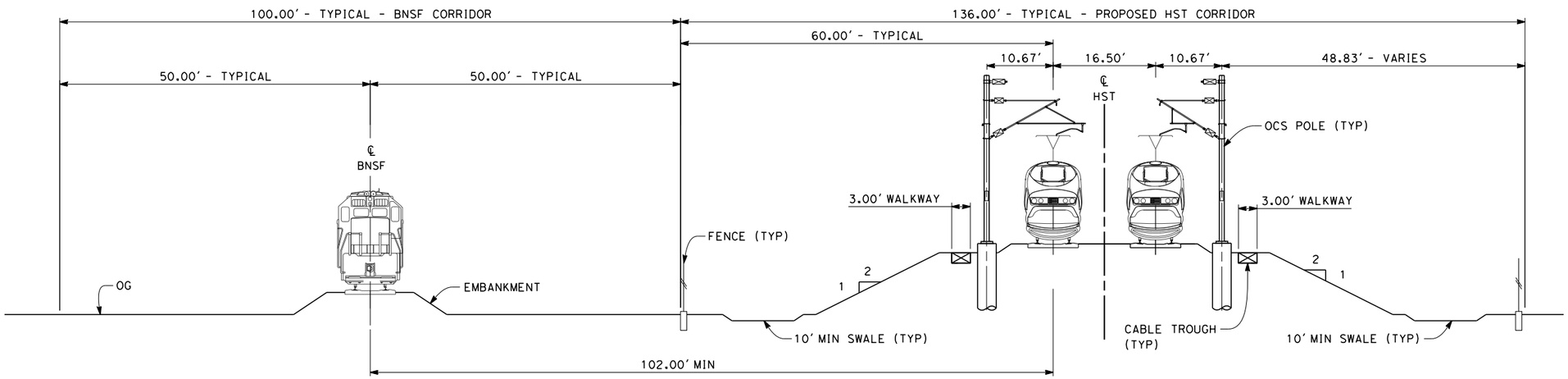
NOTES:

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



SECTION 8

TWIN TRACKS - RETAINED EMBANKMENT ADJACENT TO SINGLE TRACK BNSF
STA 2867+20 THROUGH STA 2888+48
STA 2889+86 THROUGH STA 2897+25
STA 3000+00 THROUGH STA 3028+98
STA 3031+38 THROUGH STA 3062+08



SECTION 9

TWIN TRACKS - ADJACENT TO SINGLE TRACK BNSF
STA 2897+25 THROUGH STA 3000+00
STA 3062+08 THROUGH STA 3096+00

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
CORCORAN SUBSECTION
ALIGNMENT C3
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3280
SCALE AS SHOWN
SHEET NO. 20 OF 20

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3096+00 TO 3459+25
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1300
SCALE AS SHOWN
SHEET NO. 1 OF 9

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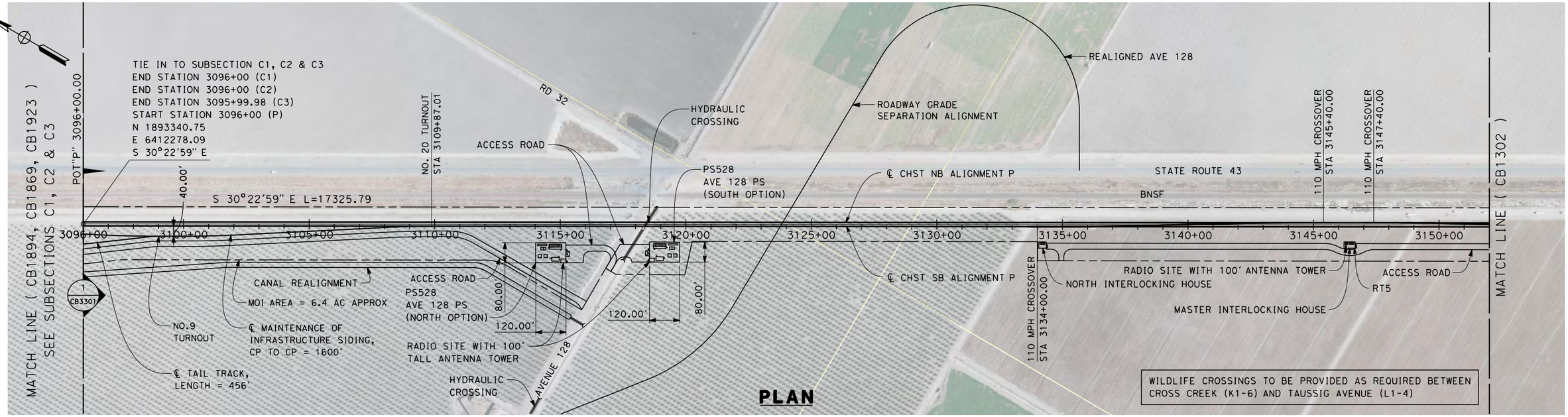

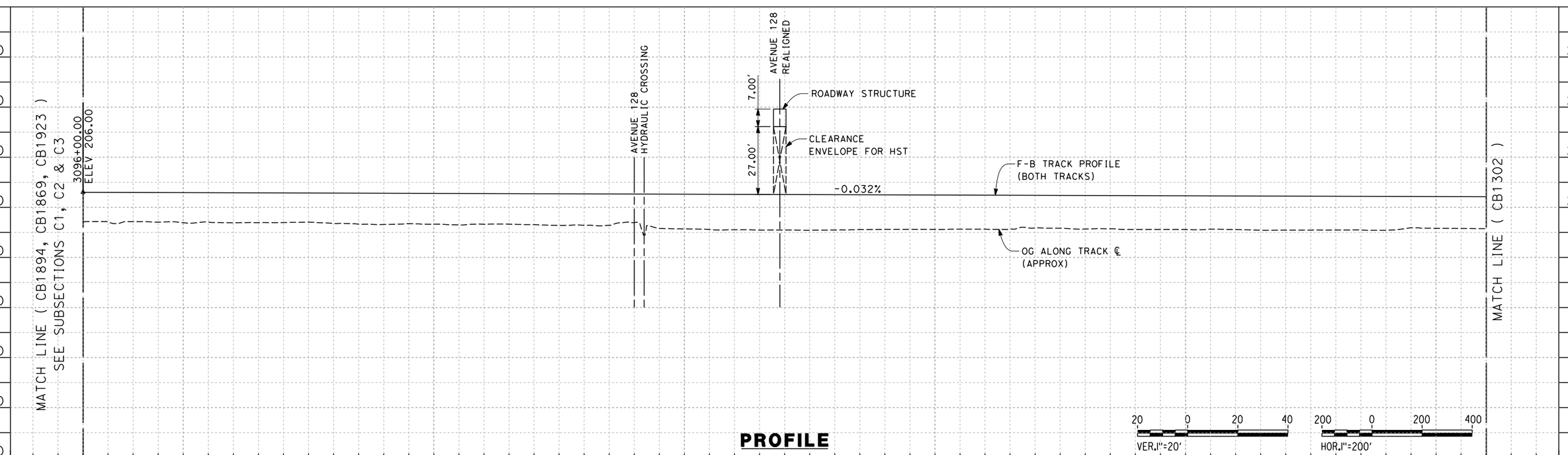

STATION	3096+00	3100+00	3110+00	3120+00	3130+00	3140+00	3150+00	3152+00	TOTAL
CY Exc									
CY Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3096+00 TO 3152+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1301
SCALE AS SHOWN
SHEET NO. 2 OF 9

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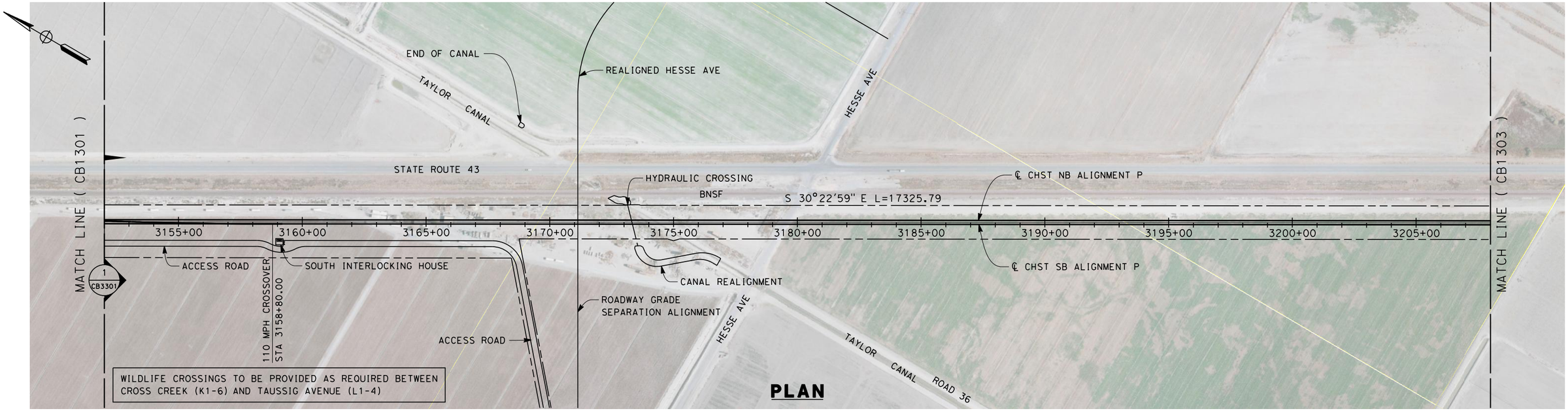
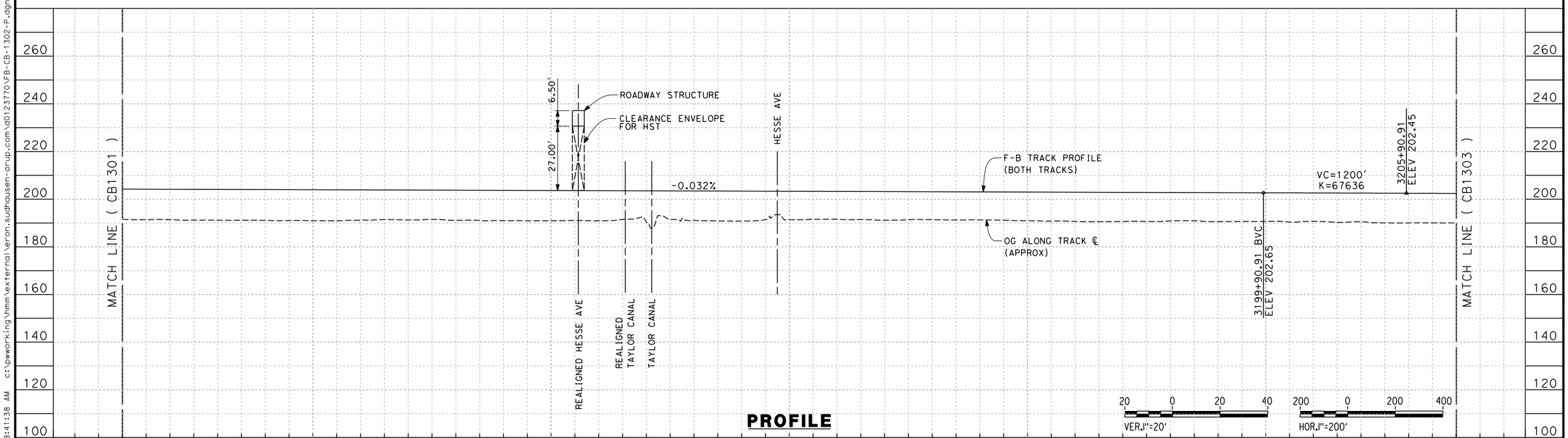
paul.tonkin



PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3152+00 TO 3208+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1302
SCALE AS SHOWN
SHEET NO. 3 OF 9

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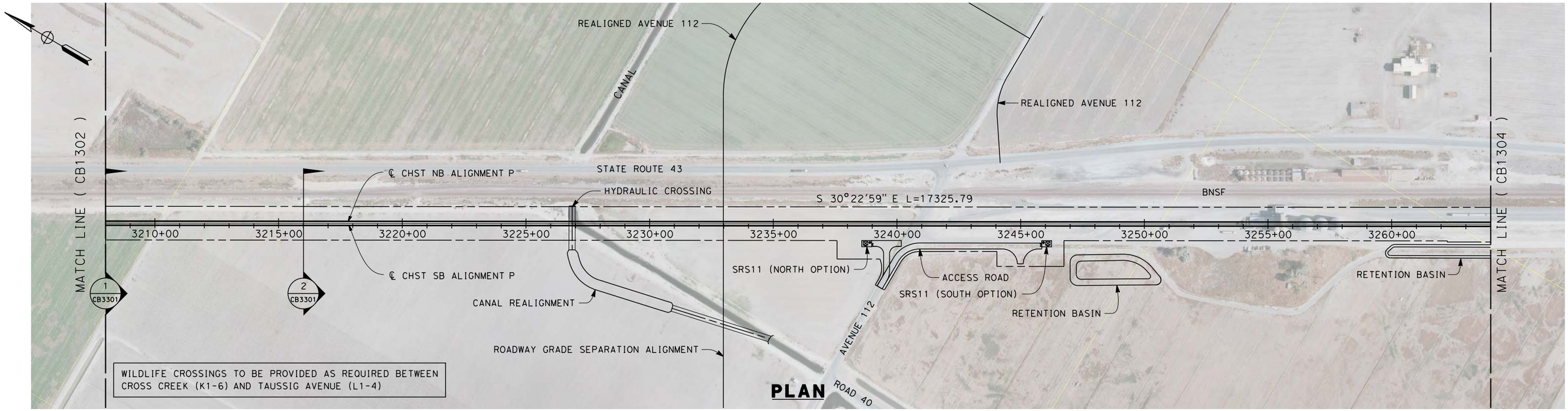
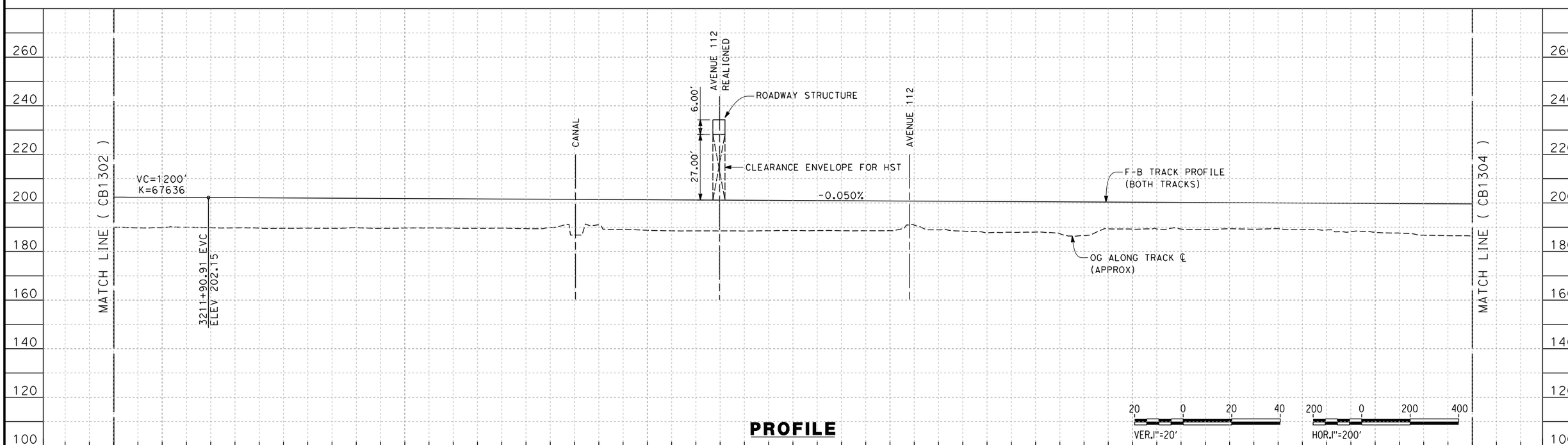


PLAN



PROFILE

STATION	3208+00	3210+00	3220+00	3230+00	3240+00	3250+00	3260+00	3264+00	TOTAL
CY Exc									
CY Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

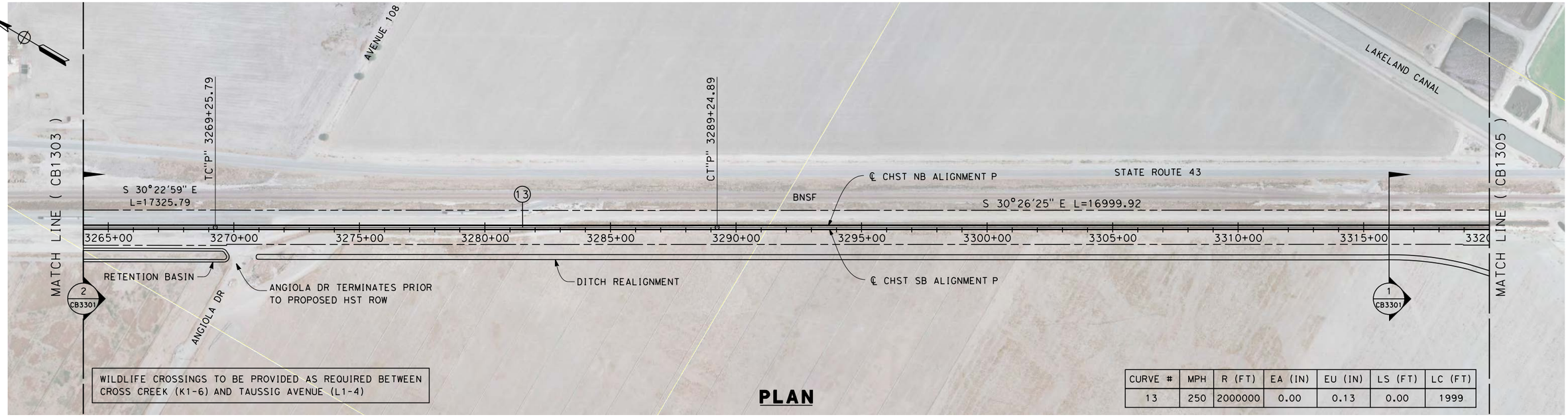
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3208+00 TO 3264+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1303
SCALE AS SHOWN
SHEET NO. 4 OF 9

$FILE$ $TIME$ $DATE$ $USER$



PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
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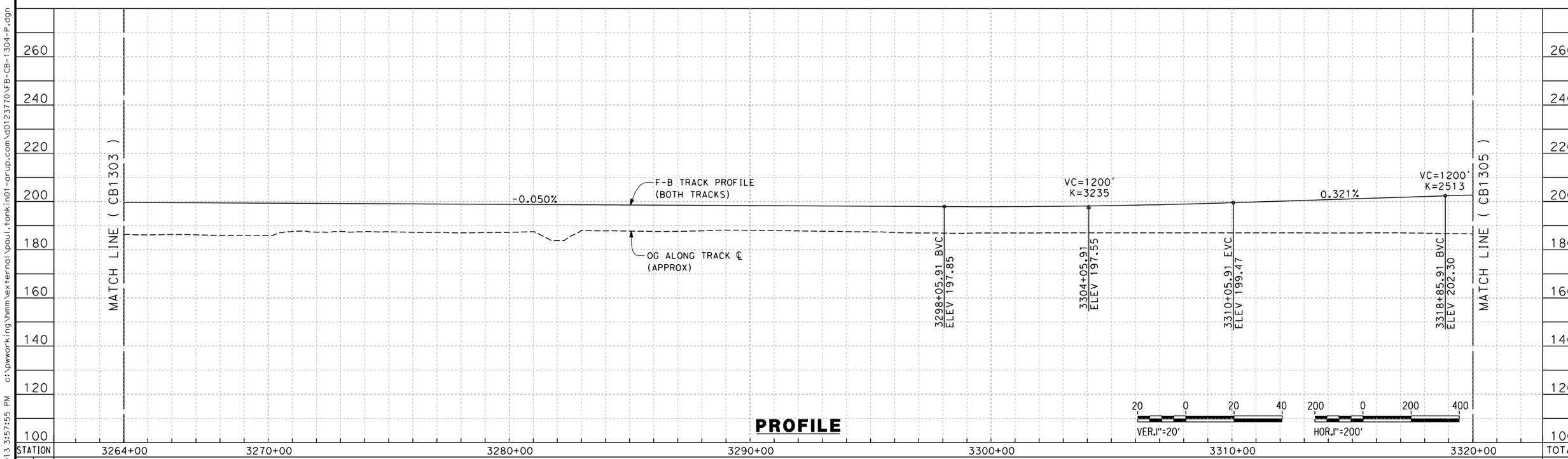

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3264+00 TO 3320+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1304
SCALE AS SHOWN
SHEET NO. 5 OF 9

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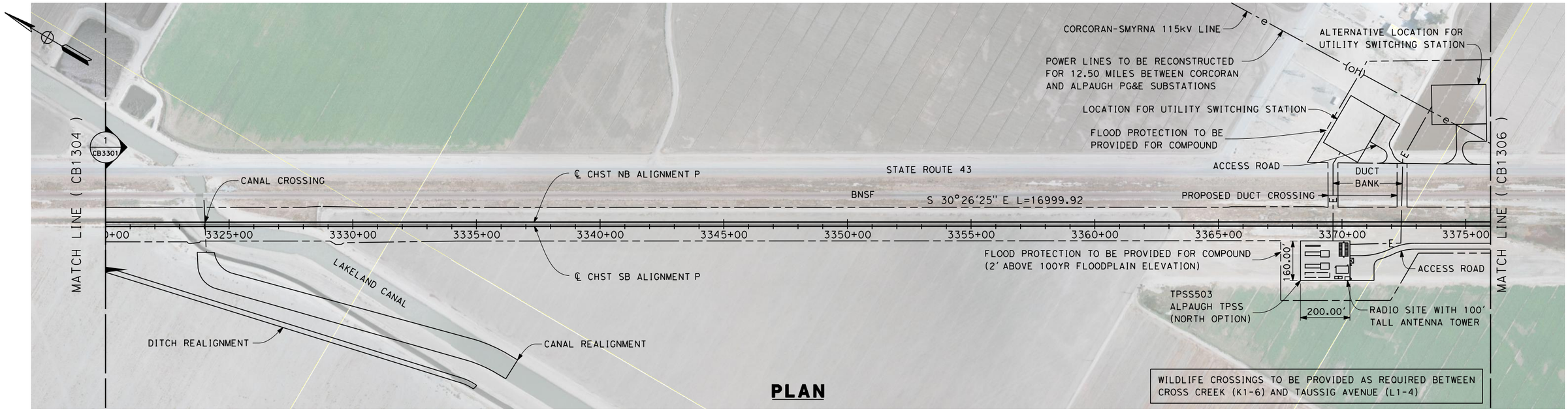
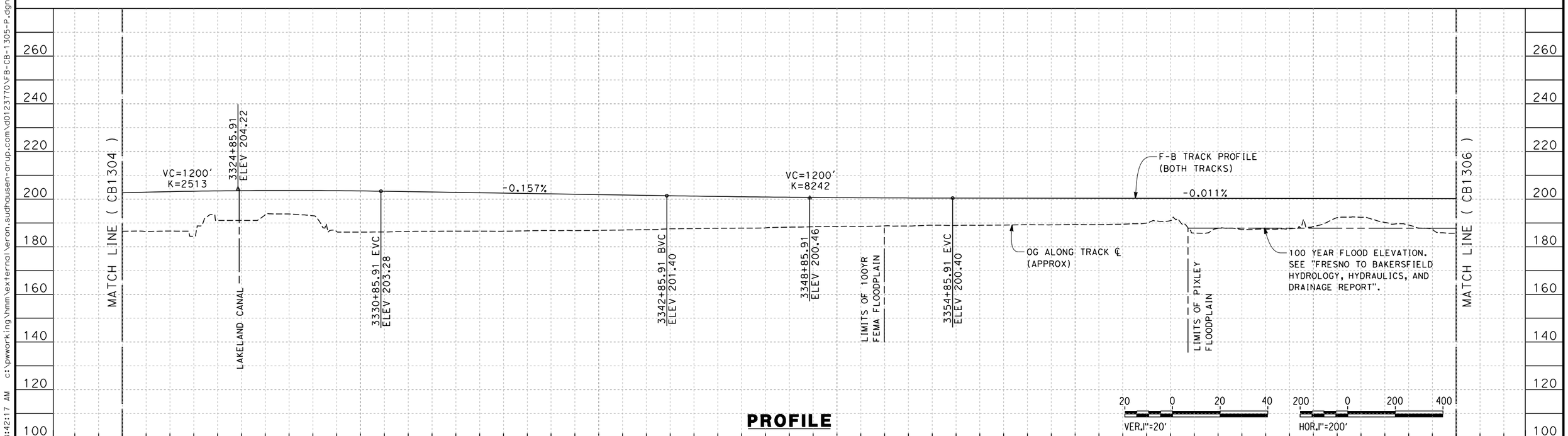


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3320+00 TO 3376+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1305
SCALE AS SHOWN
SHEET NO. 6 OF 9

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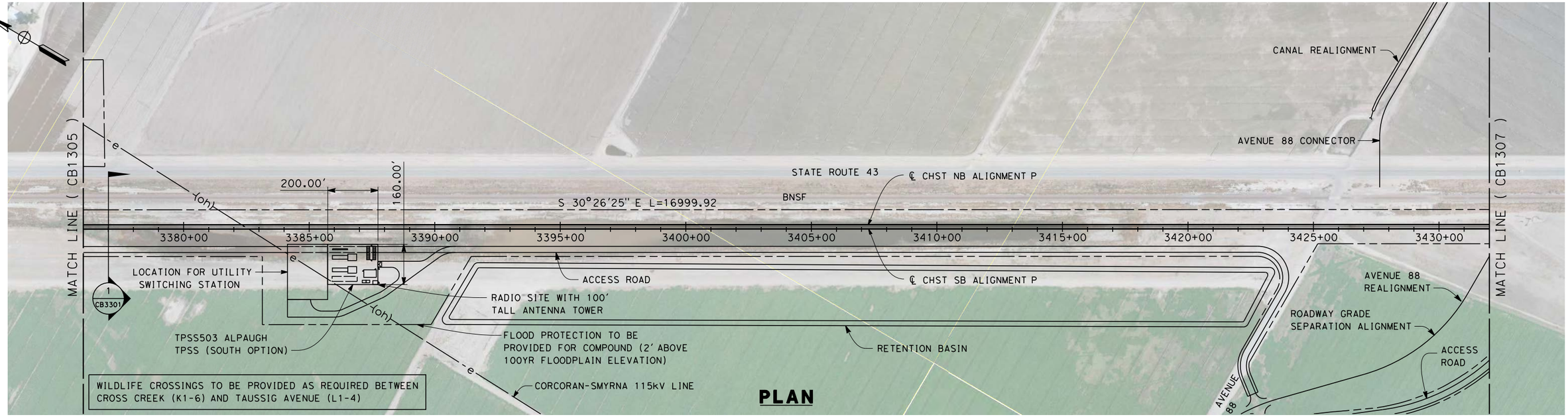
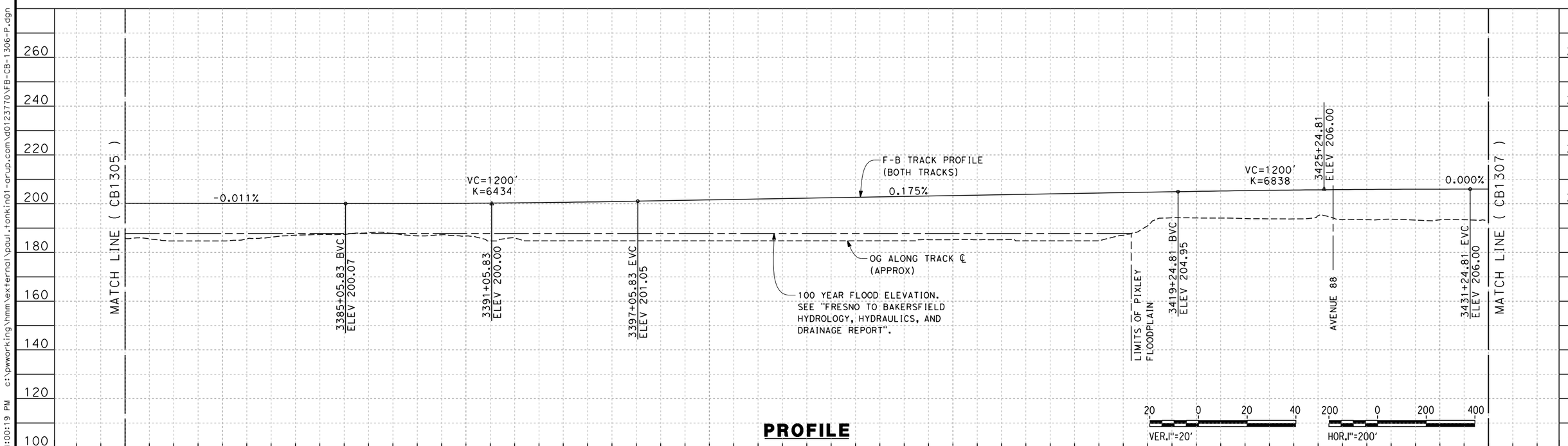


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3376+00 TO 3432+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1306
SCALE AS SHOWN
SHEET NO. 7 OF 9

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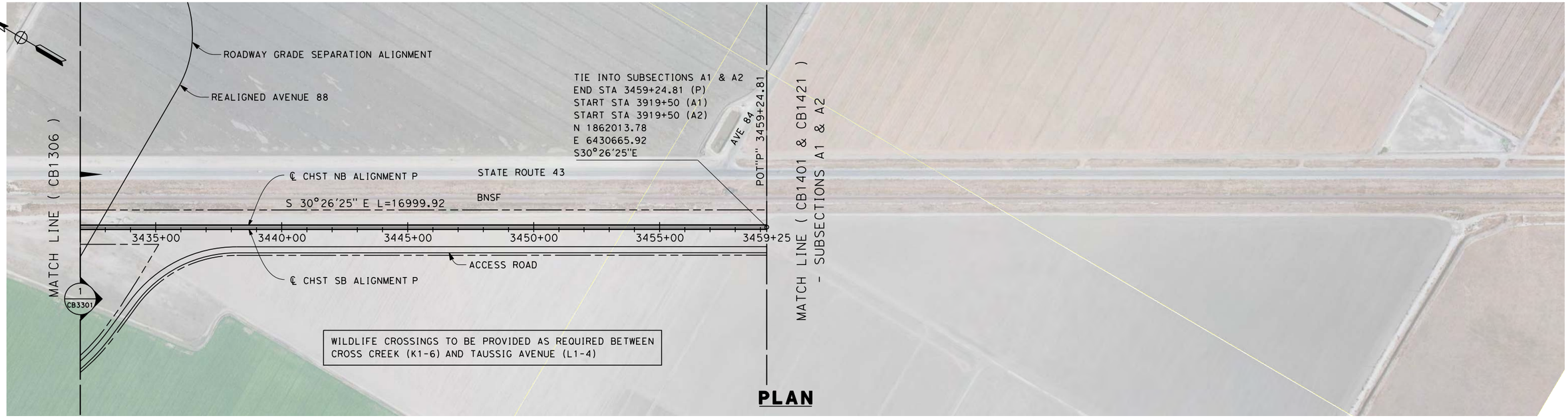
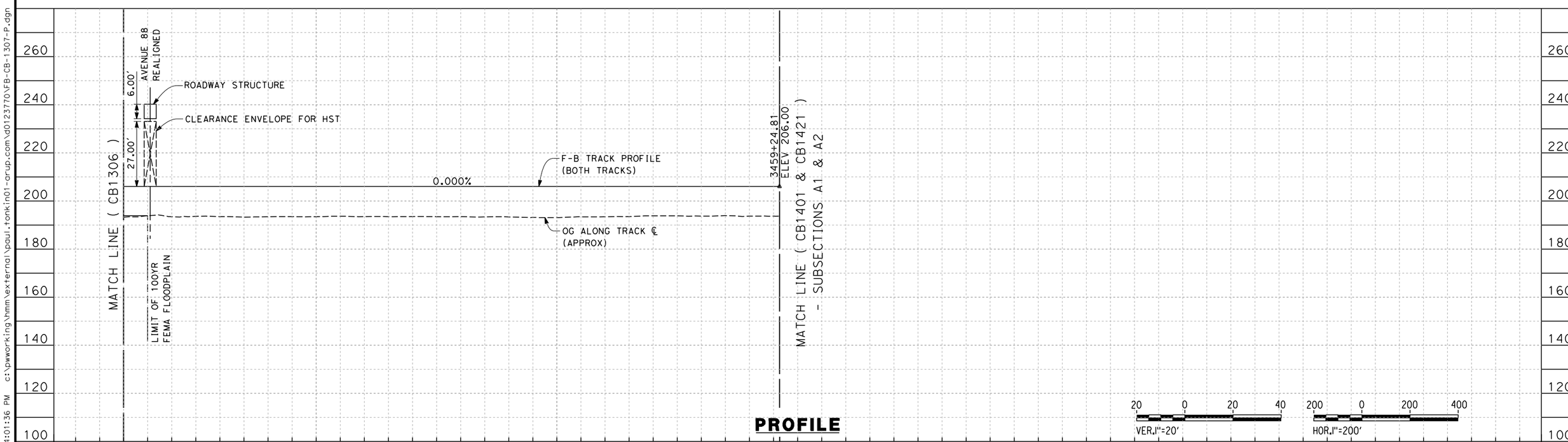


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
STA. 3432+00 TO 3459+25
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1307
SCALE AS SHOWN
SHEET NO. 8 OF 9

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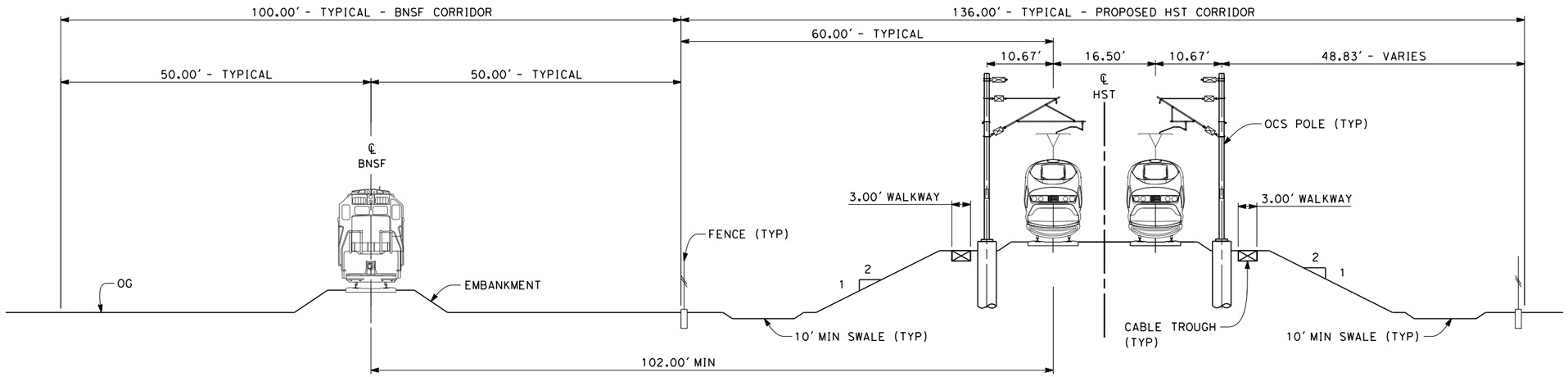
paul.tonkin

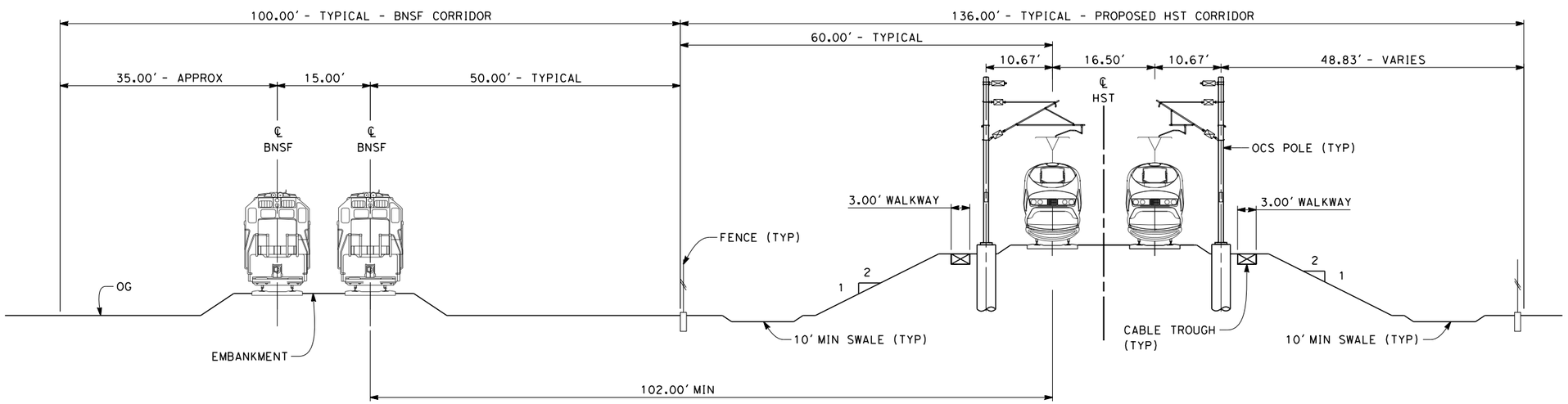
NOTES:

1. TRACKFORM SHOWN IS INDICATIVE.
2. FOR STRUCTURE DIMENSIONS SEE STRUCTURAL CROSS SECTIONS.



SECTION 1

TWIN TRACK - ADJACENT TO SINGLE TRACK BNSF
STA 3096+00 THROUGH STA 3216+00
STA 3316+00 THROUGH STA 3459+25



SECTION 2

TWIN TRACK - ADJACENT TO TWIN TRACK BNSF
STA 3216+00 THROUGH STA 3316+00

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
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
PIXLEY SUBSECTION
ALIGNMENT P
TYPICAL SECTION

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3301
SCALE AS SHOWN
SHEET NO. 9 OF 9

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LEGEND

EXISTING FREIGHT RAILROAD

PROPOSED CHST

3000 0 3000 6000

1"=3000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 3919+50 TO 4925+51
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1400
SCALE AS SHOWN
SHEET NO. 1 OF 21

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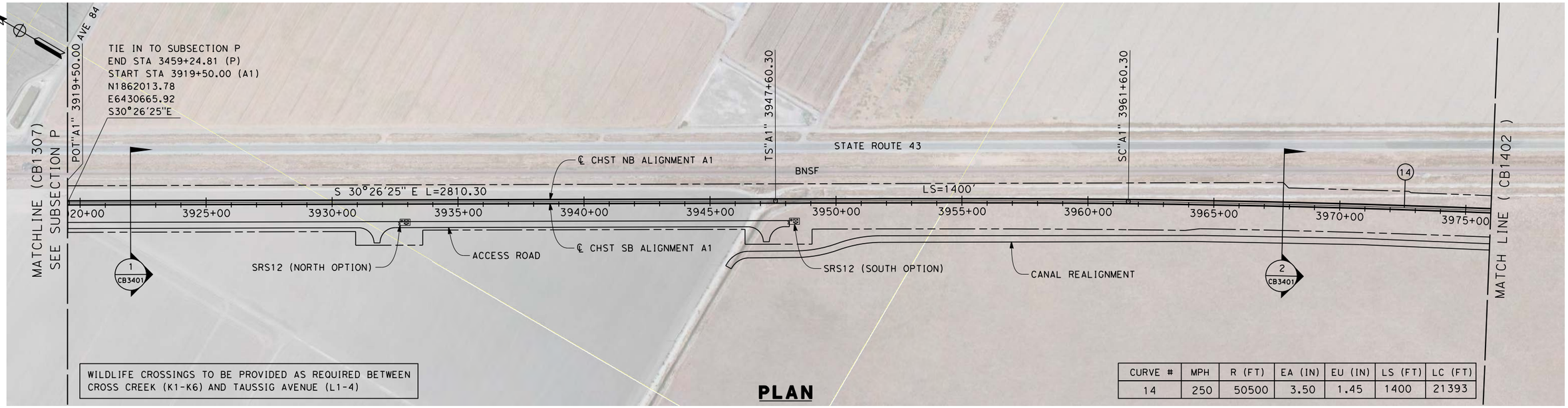
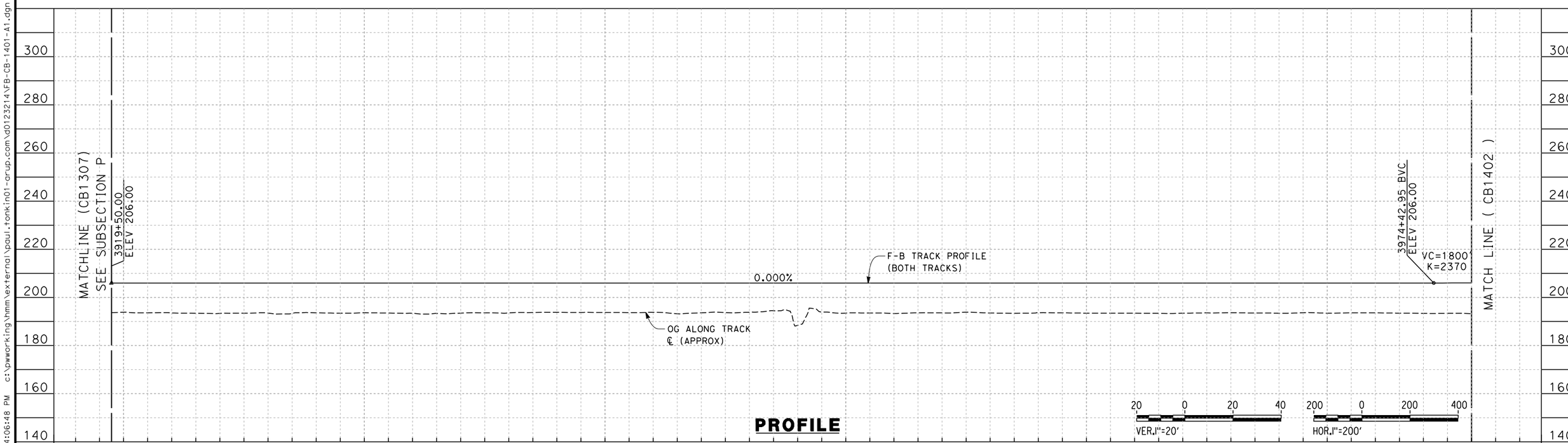


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
14	250	50500	3.50	1.45	1400	21393



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 3919+50 TO 3976+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1401
SCALE AS SHOWN
SHEET NO. 2 OF 21

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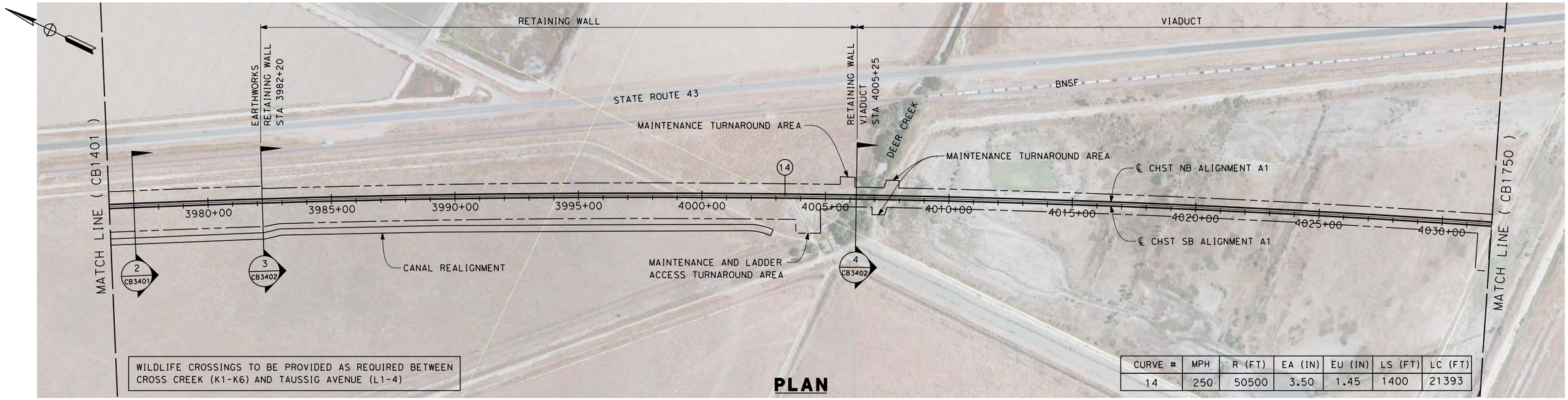
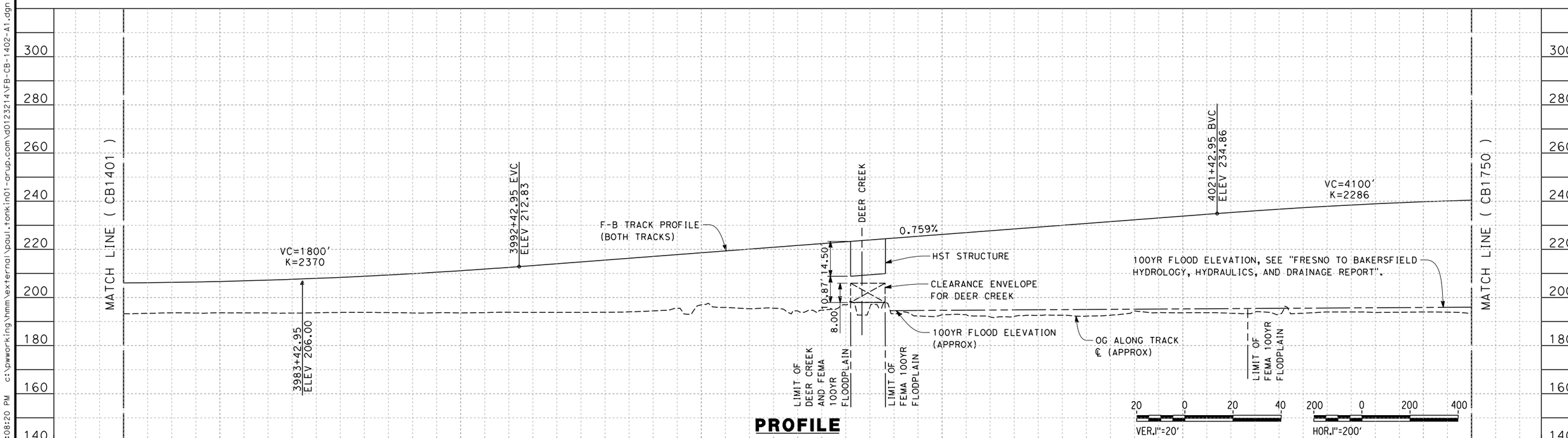


PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
14	250	50500	3.50	1.45	1400	21393



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 3976+00 TO 4032+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1402
SCALE AS SHOWN
SHEET NO. 3 OF 21

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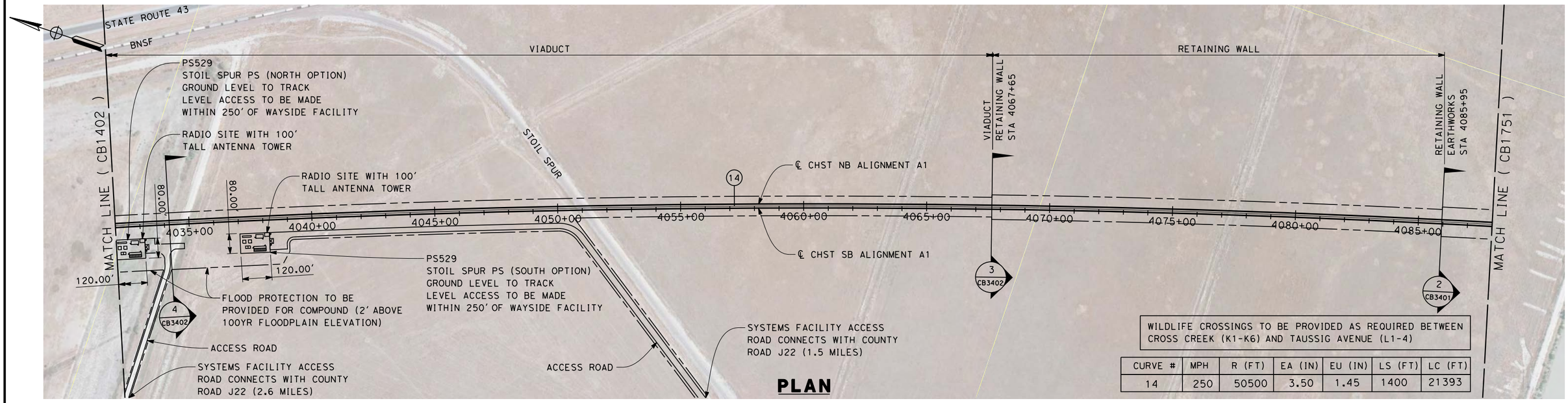
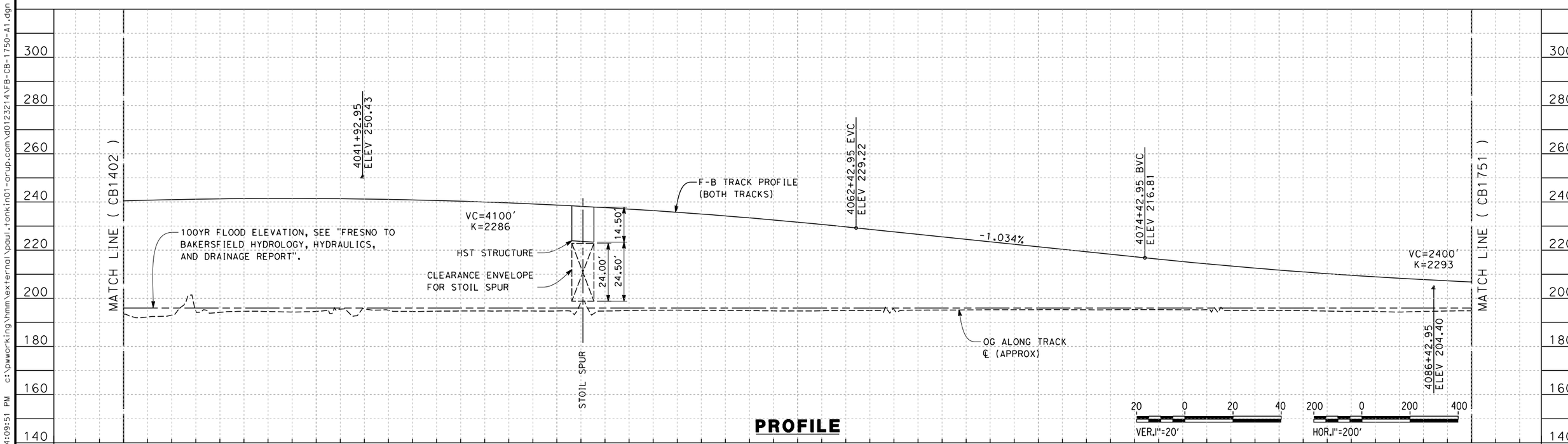


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-4)

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
14	250	50500	3.50	1.45	1400	21393



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4032+00 TO 4088+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1750
SCALE AS SHOWN
SHEET NO. 4 OF 21

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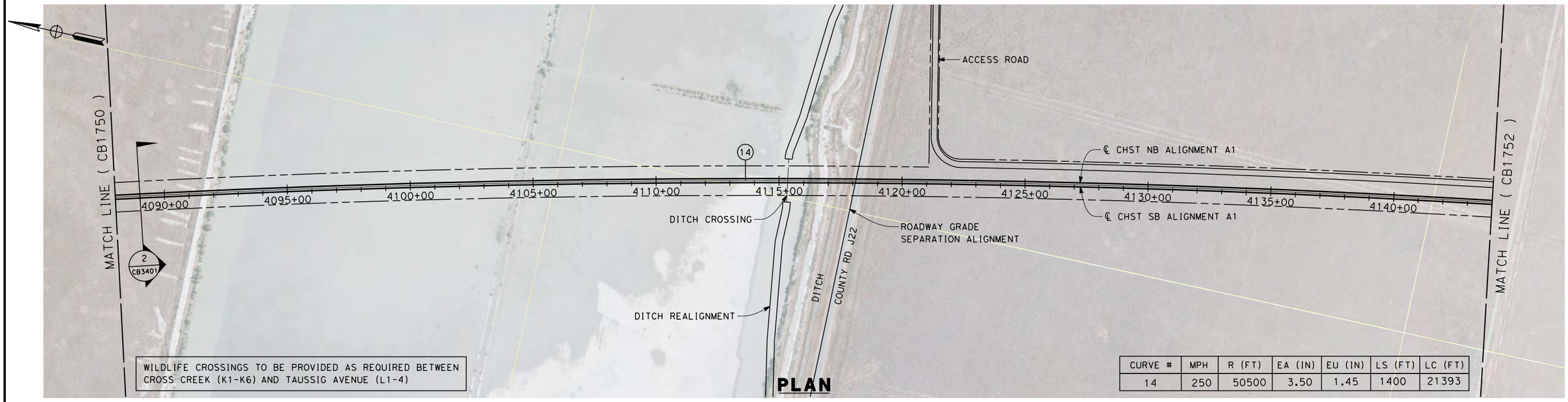
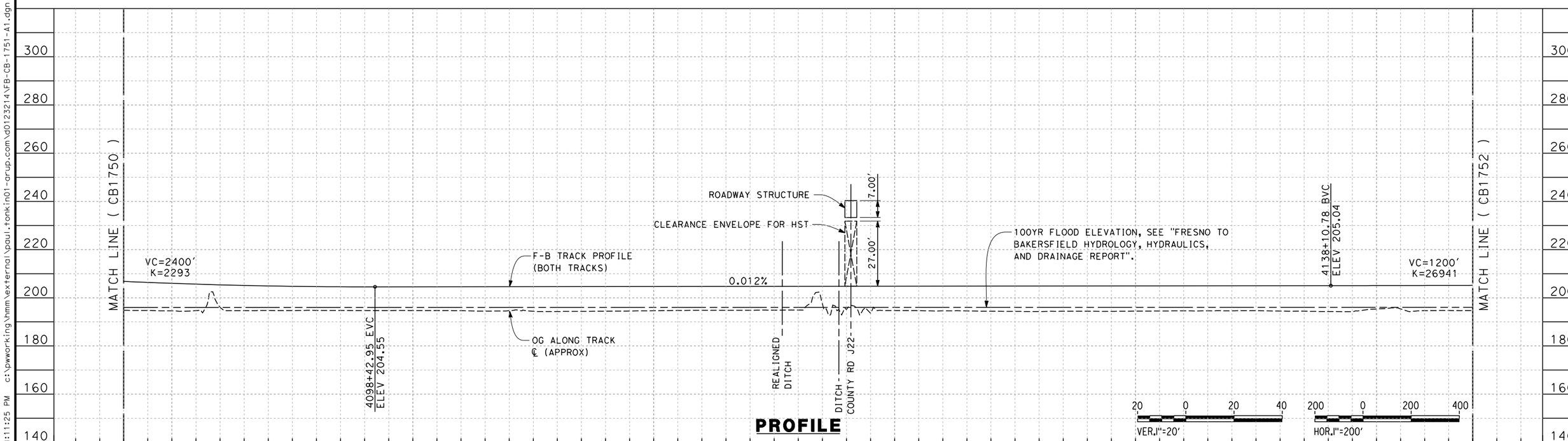


PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
14	250	50500	3.50	1.45	1400	21393



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4088+00 TO 4144+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1751
SCALE AS SHOWN
SHEET NO. 5 OF 21

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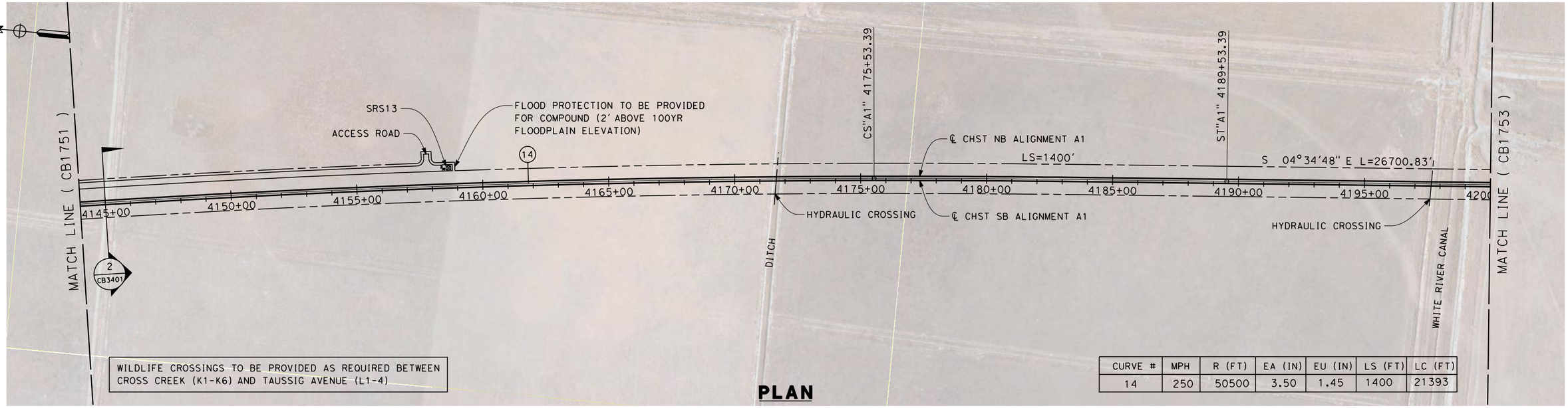
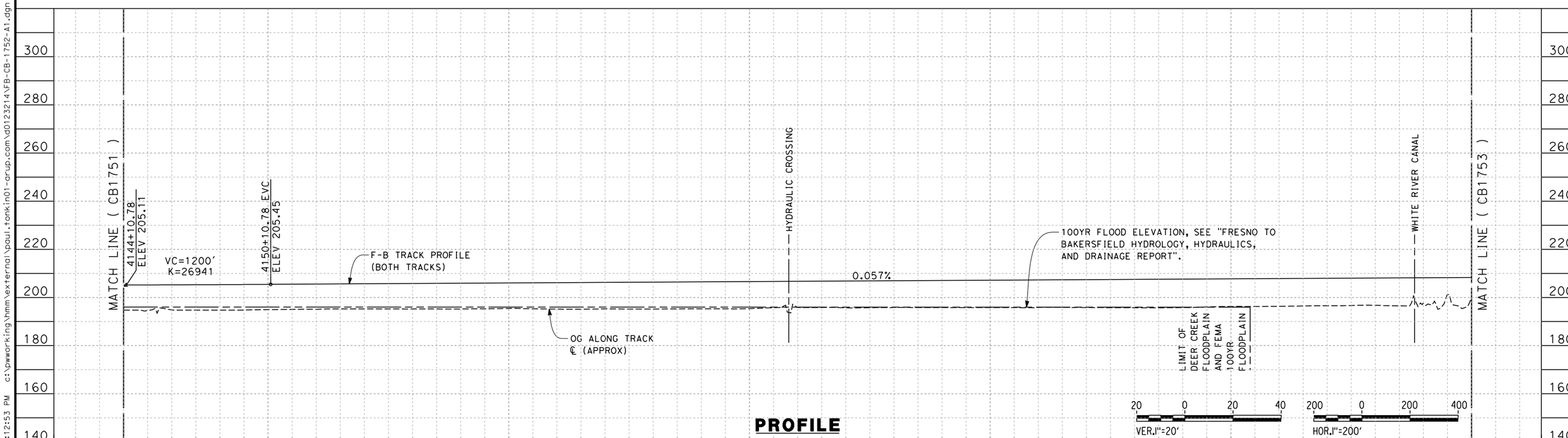


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
14	250	50500	3.50	1.45	1400	21393



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4144+00 TO 4200+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1752
SCALE AS SHOWN
SHEET NO. 6 OF 21

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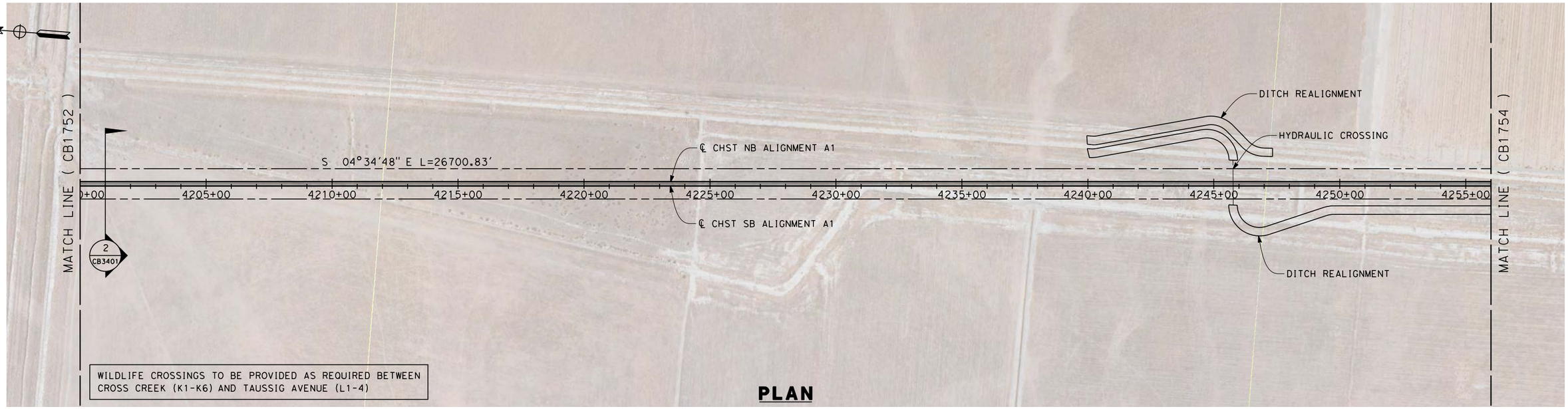
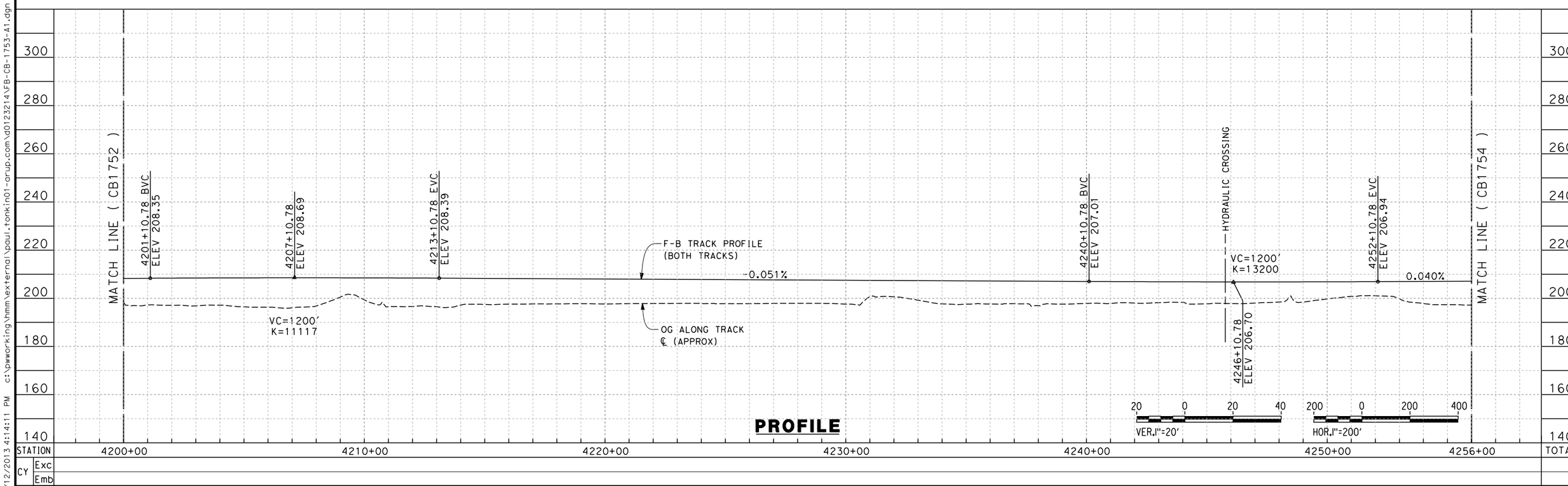


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4200+00 TO 4256+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1753
SCALE AS SHOWN
SHEET NO. 7 OF 21

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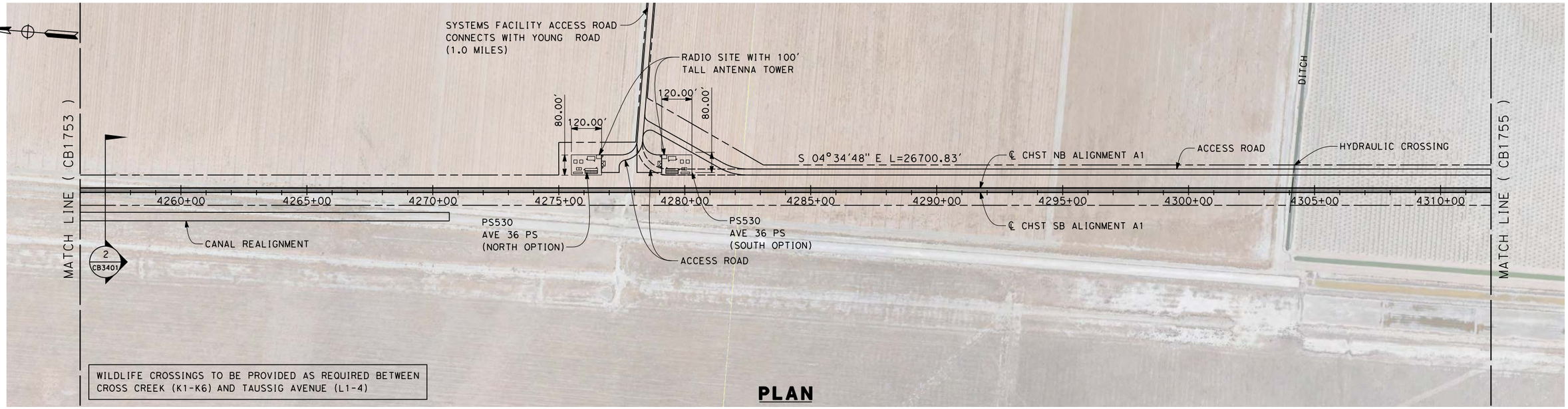
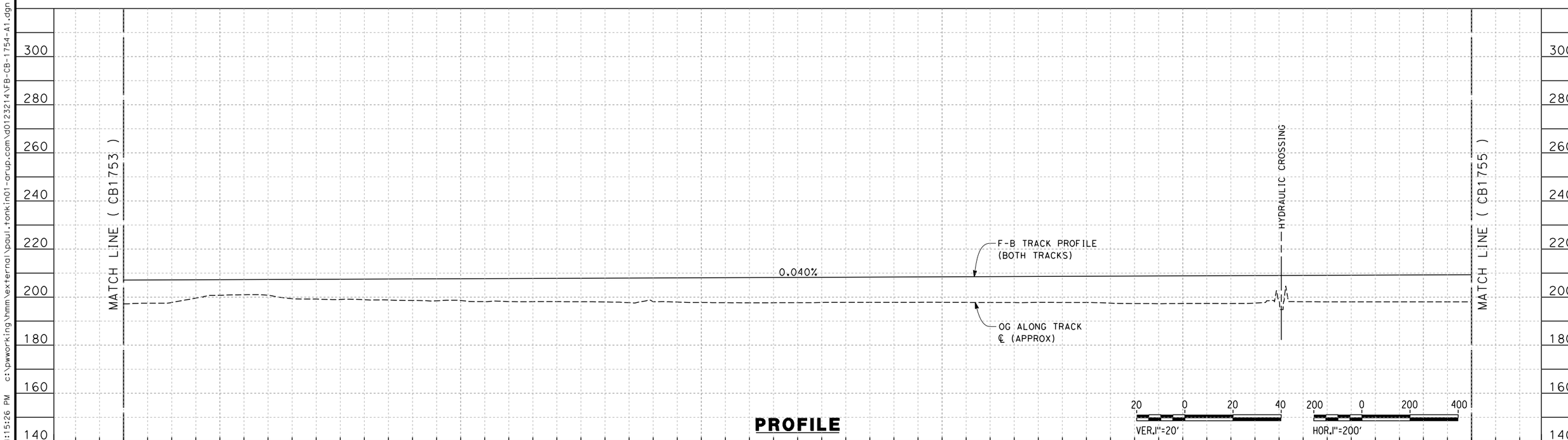


PLAN



PROFILE

STATION	4256+00	4260+00	4270+00	4280+00	4290+00	4300+00	4310+00	4312+00	TOTAL
CY Exc									
CY Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4256+00 TO 4312+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1754
SCALE AS SHOWN
SHEET NO. 8 OF 21

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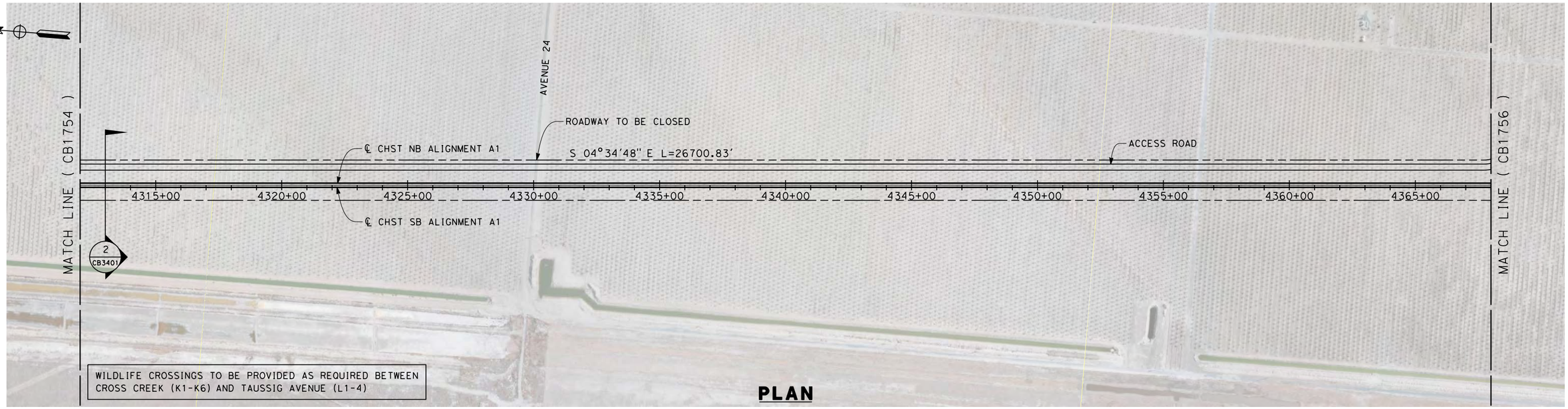
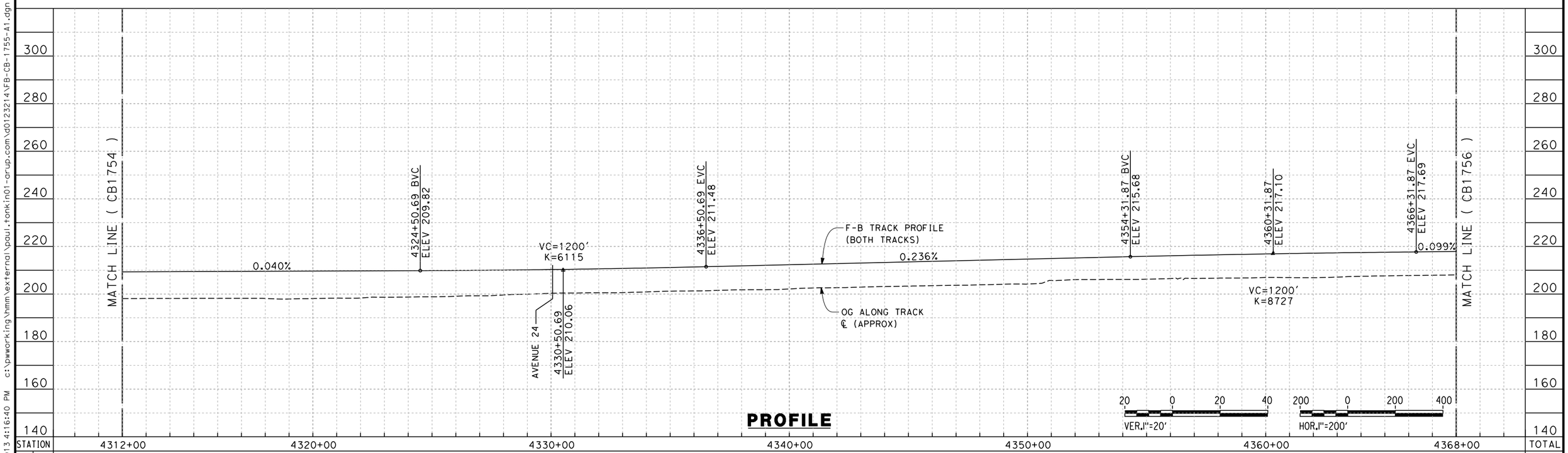


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4312+00 TO 4368+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1755
SCALE AS SHOWN
SHEET NO. 9 OF 21

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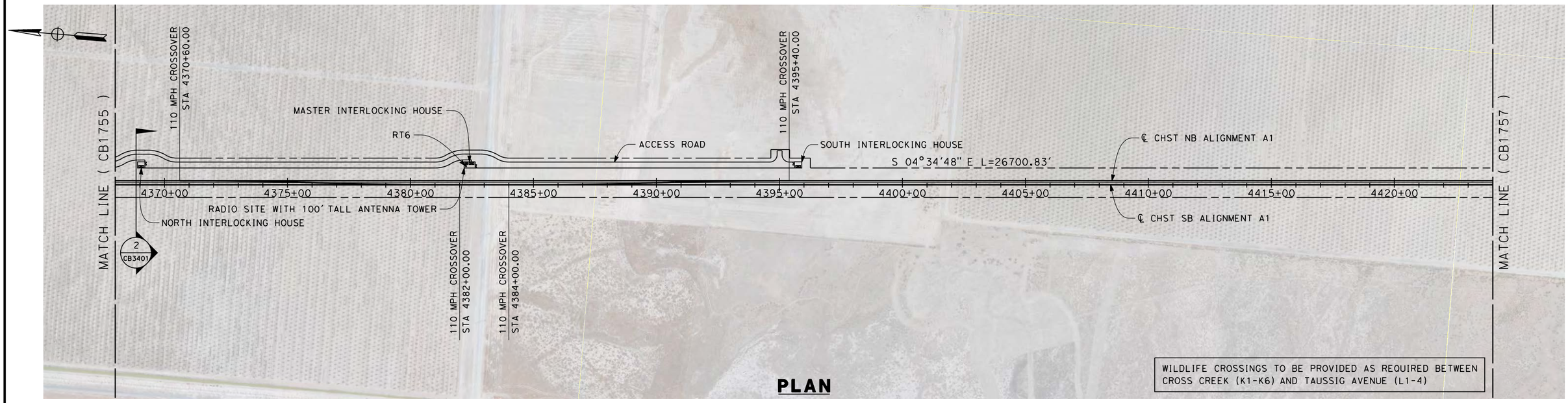
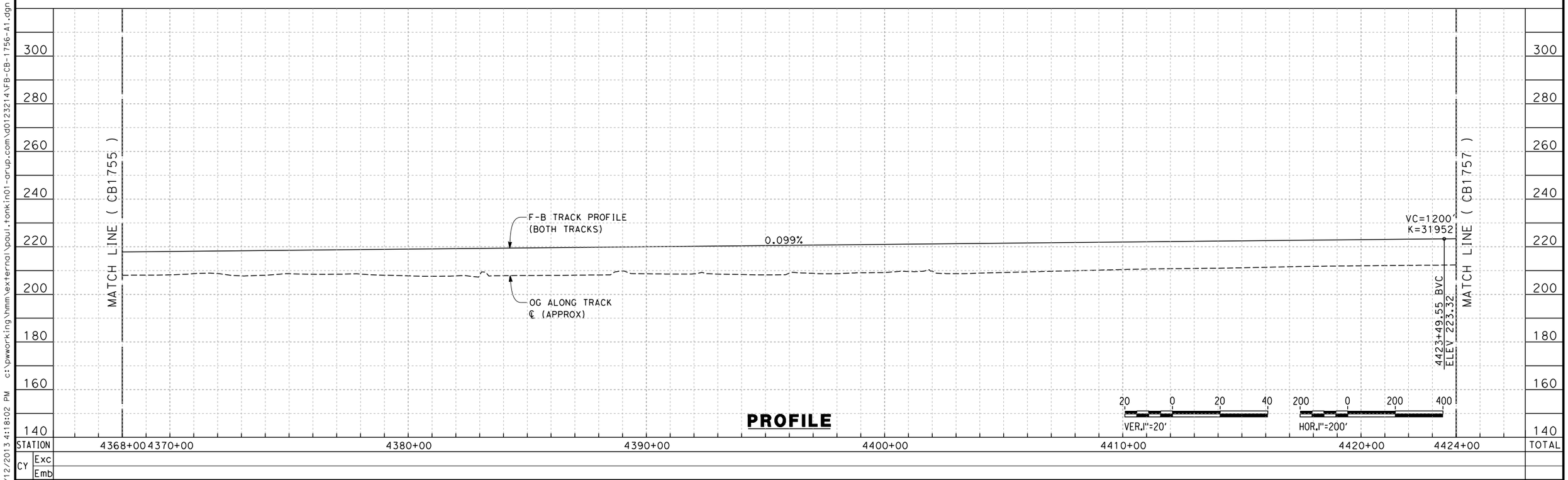


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4368+00 TO 4424+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1756
SCALE AS SHOWN
SHEET NO. 10 OF 21

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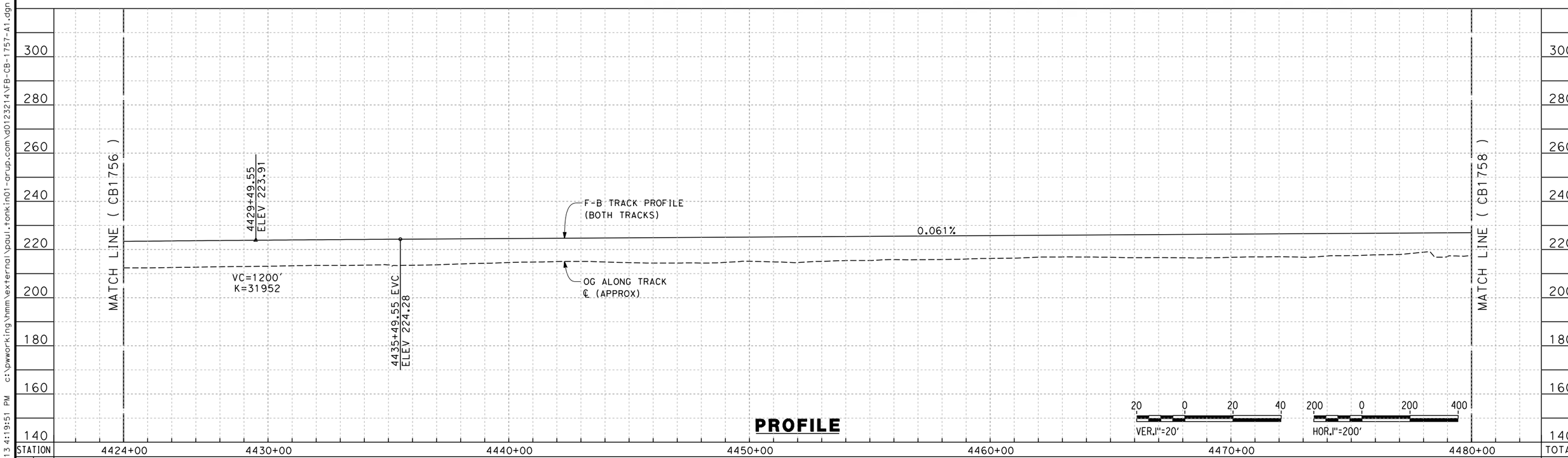
WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-L4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4424+00 TO 4480+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1757
SCALE AS SHOWN
SHEET NO. 11 OF 21

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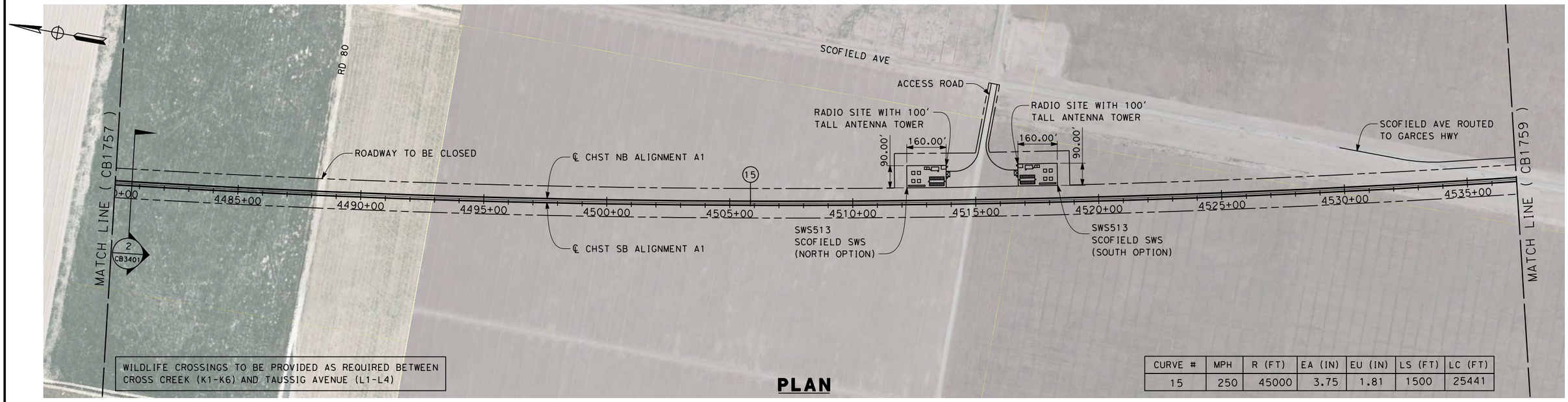
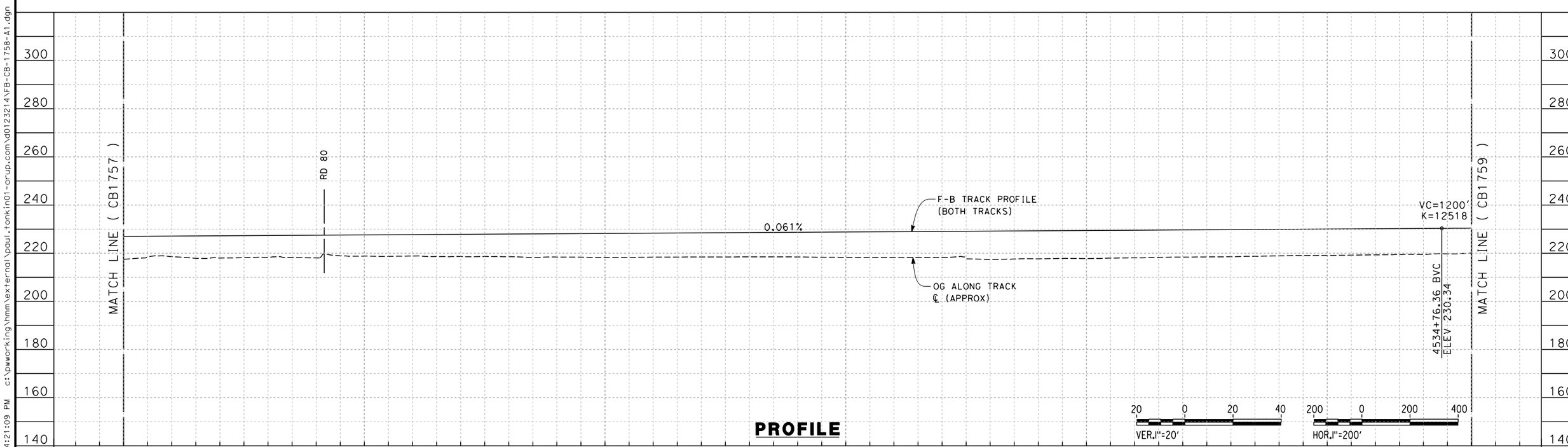


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-L4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4480+00 TO 4536+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1758
SCALE AS SHOWN
SHEET NO. 12 OF 21

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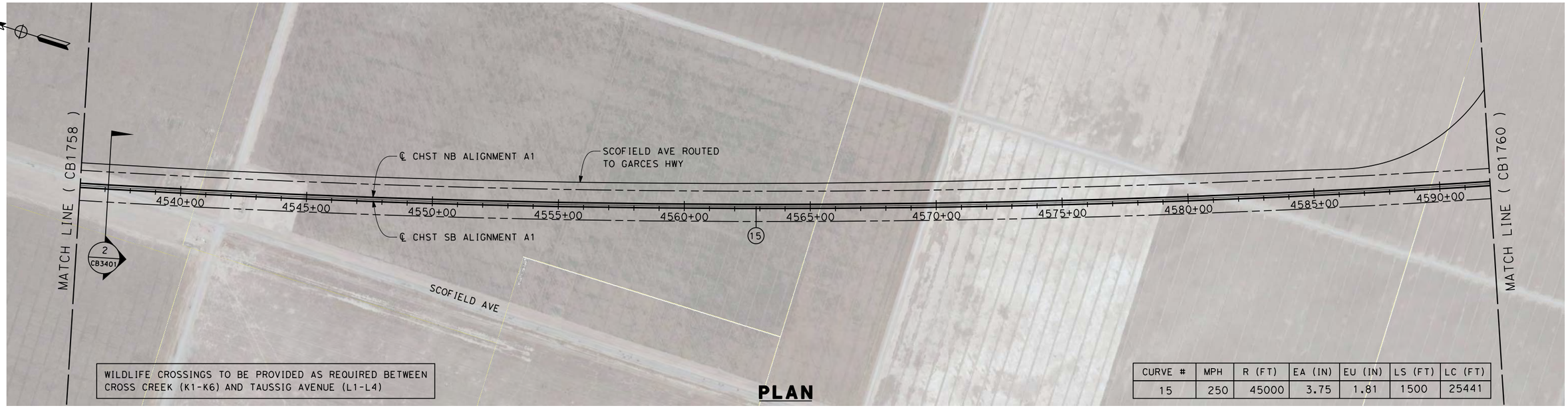
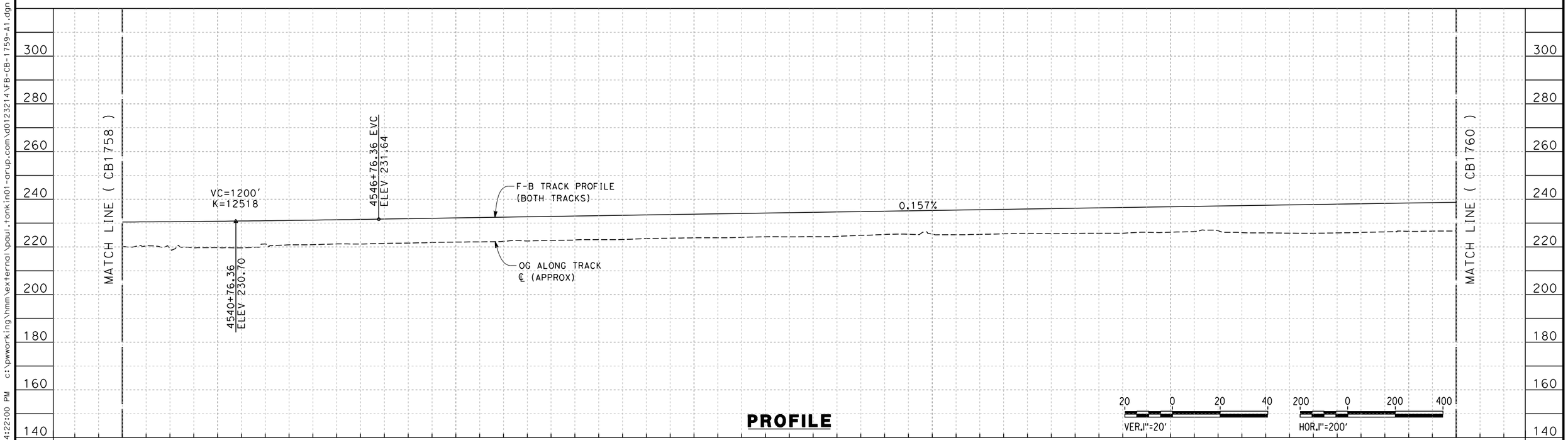


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-L4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4536+00 TO 4592+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1759
SCALE AS SHOWN
SHEET NO. 13 OF 21

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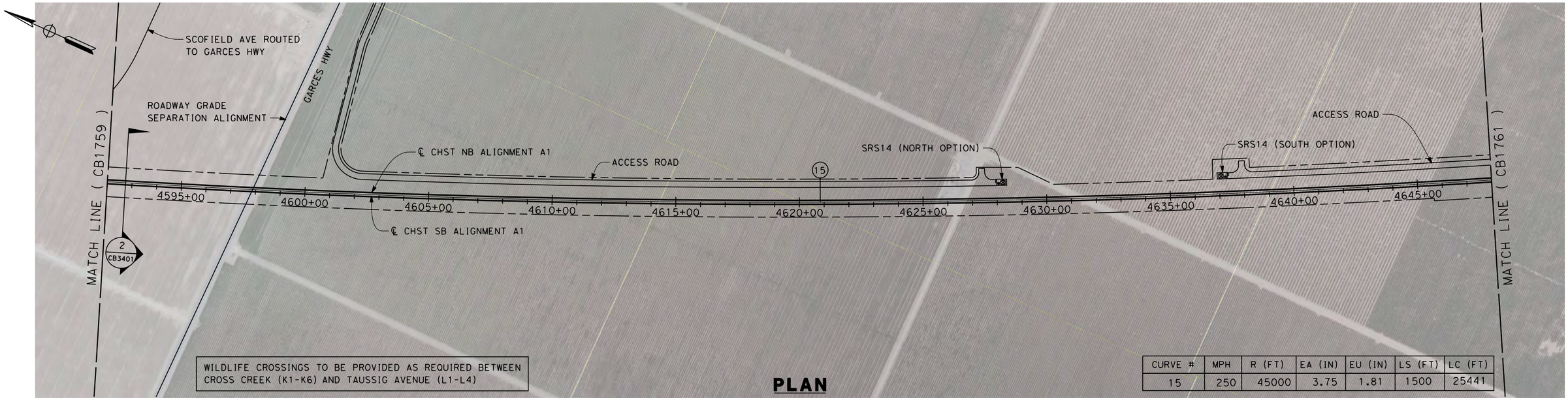
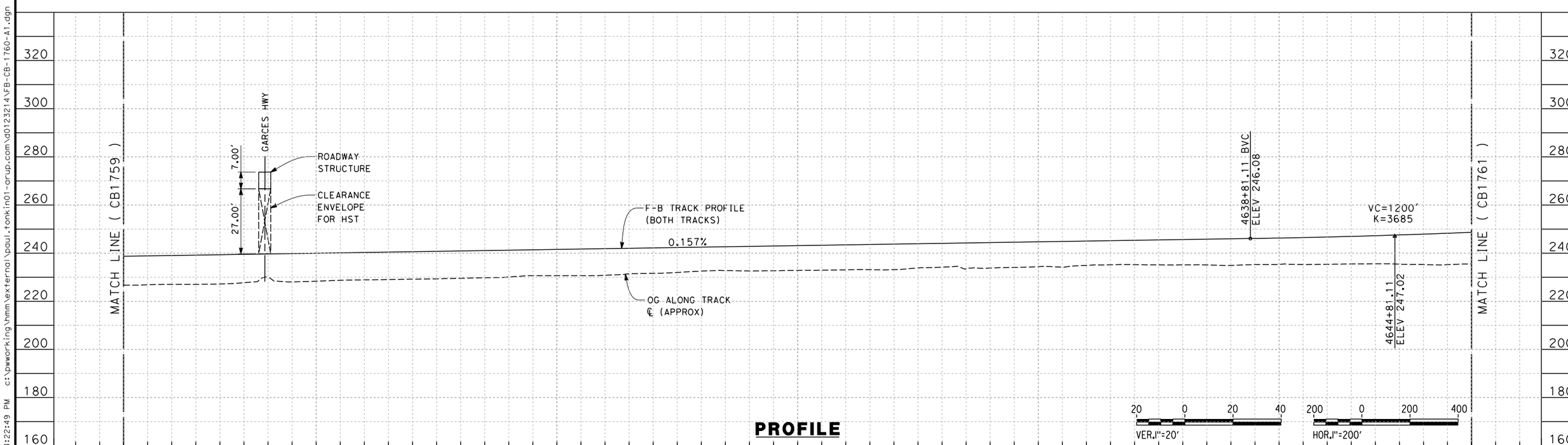


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-L4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441



PROFILE

STATION	4592+00	4600+00	4610+00	4620+00	4630+00	4640+00	4648+00	TOTAL
CY Exc								
CY Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4592+00 TO 4648+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1760
SCALE AS SHOWN
SHEET NO. 14 OF 21

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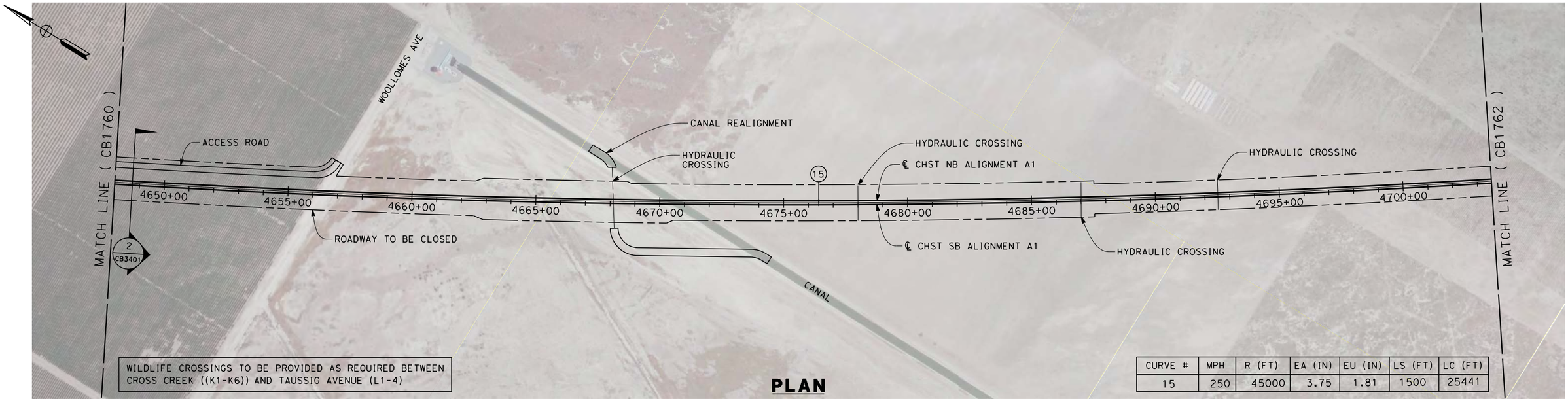
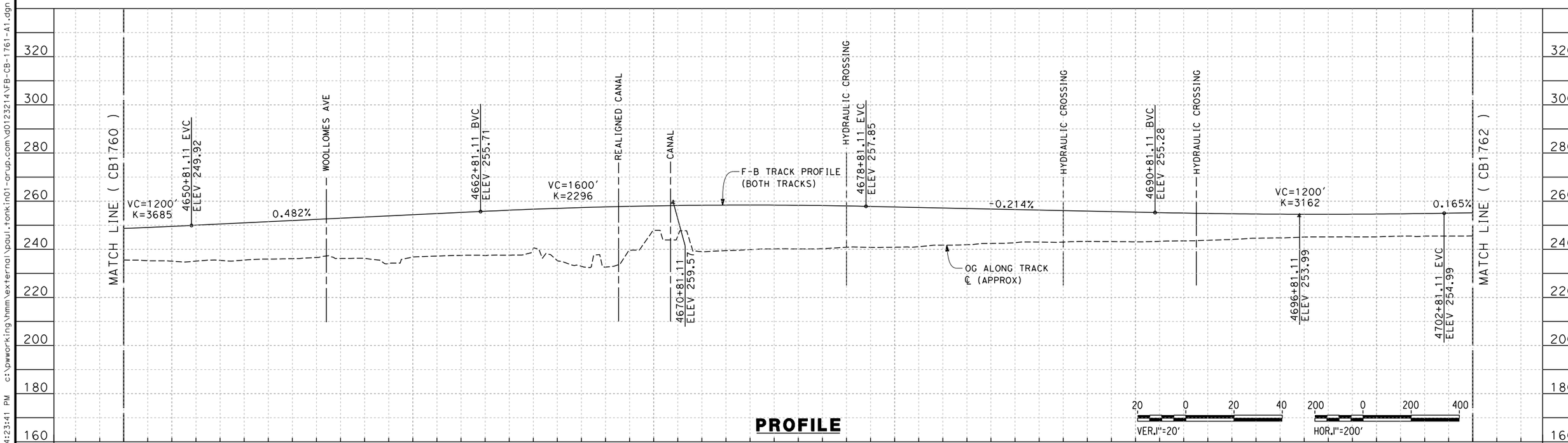


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK ((K1-K6)) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4648+00 TO 4704+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1761
SCALE AS SHOWN
SHEET NO. 15 OF 21

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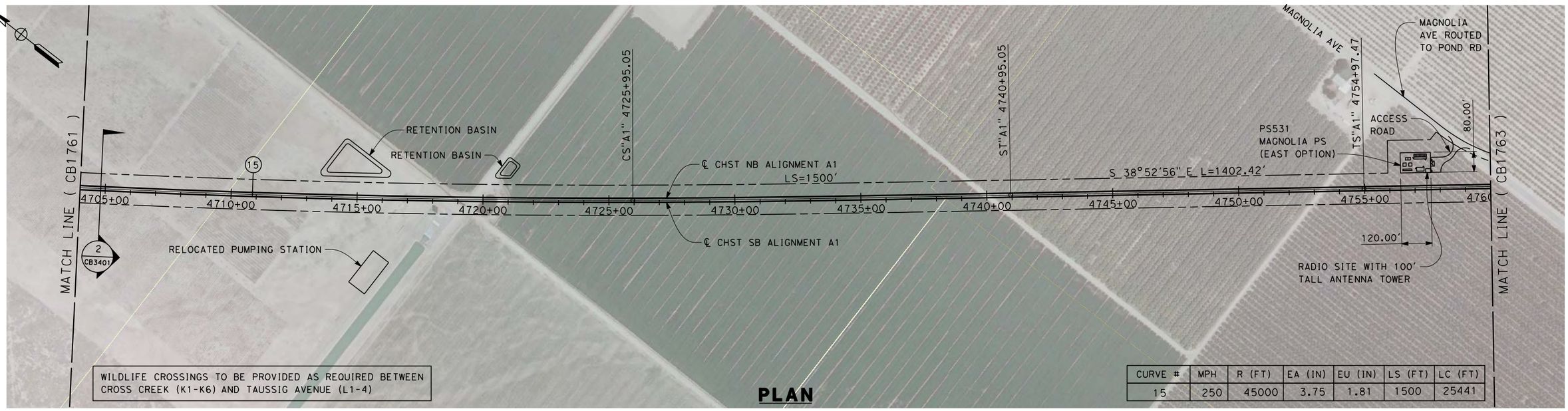
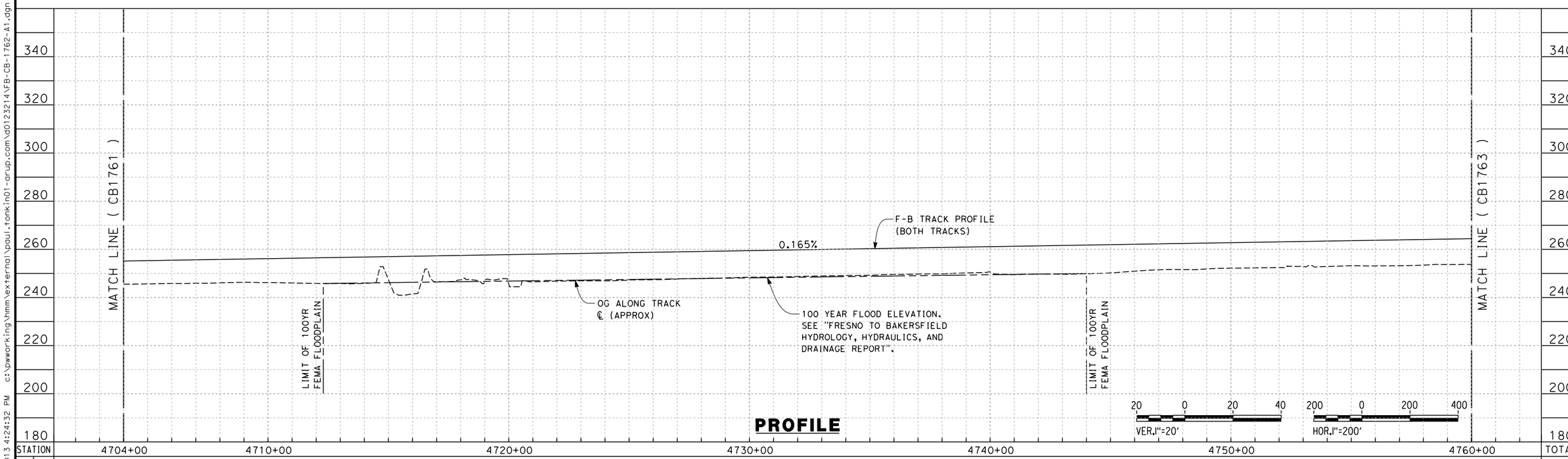


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-4)

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
15	250	45000	3.75	1.81	1500	25441

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4704+00 TO 4760+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1762
SCALE AS SHOWN
SHEET NO. 16 OF 21

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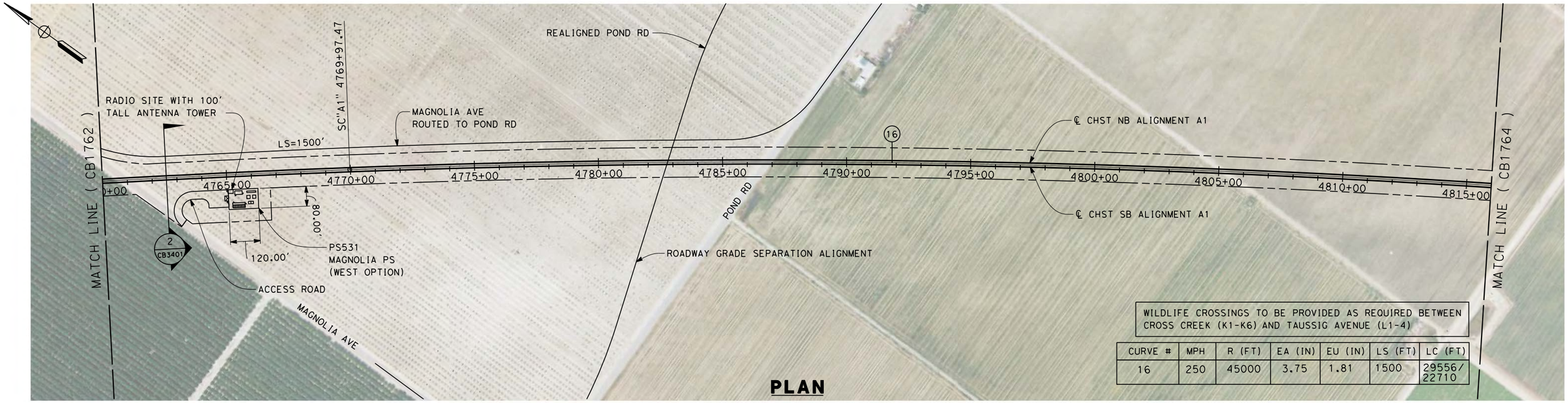
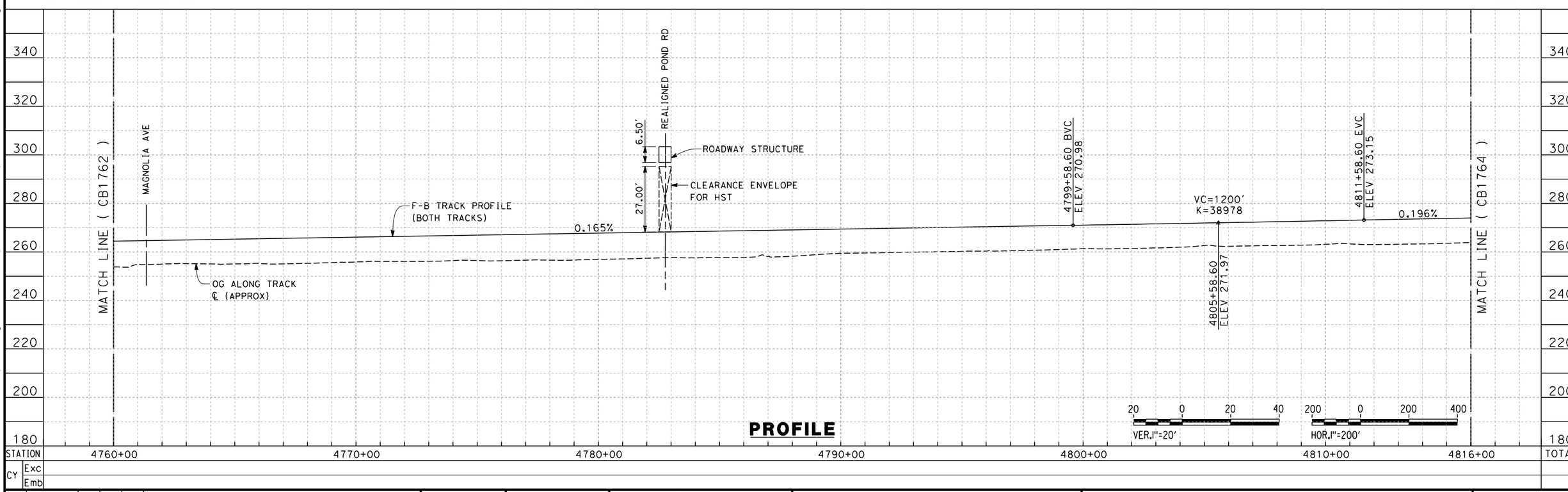


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-4)

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556/ 22710

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4760+00 TO 4816+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1763
SCALE AS SHOWN
SHEET NO. 17 OF 21

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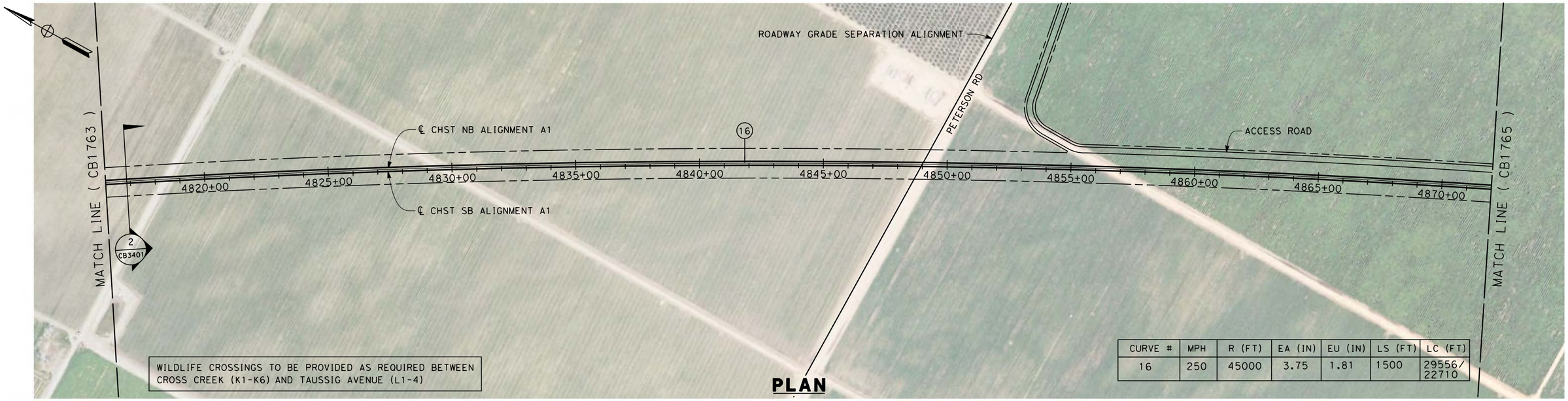
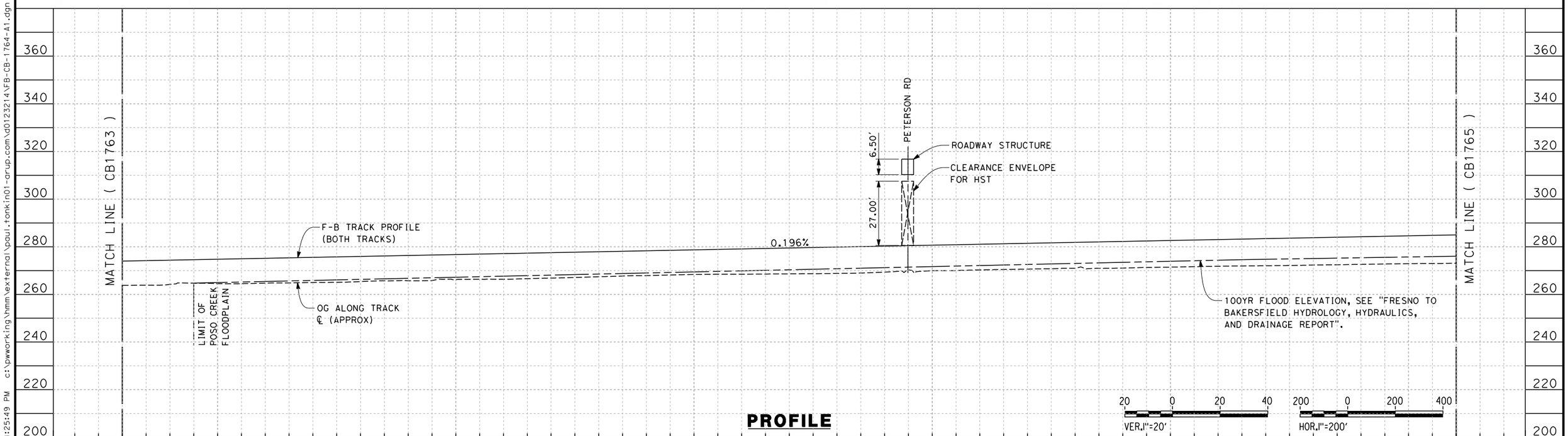


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556/ 22710

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4816+00 TO 4872+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1764
SCALE AS SHOWN
SHEET NO. 18 OF 21

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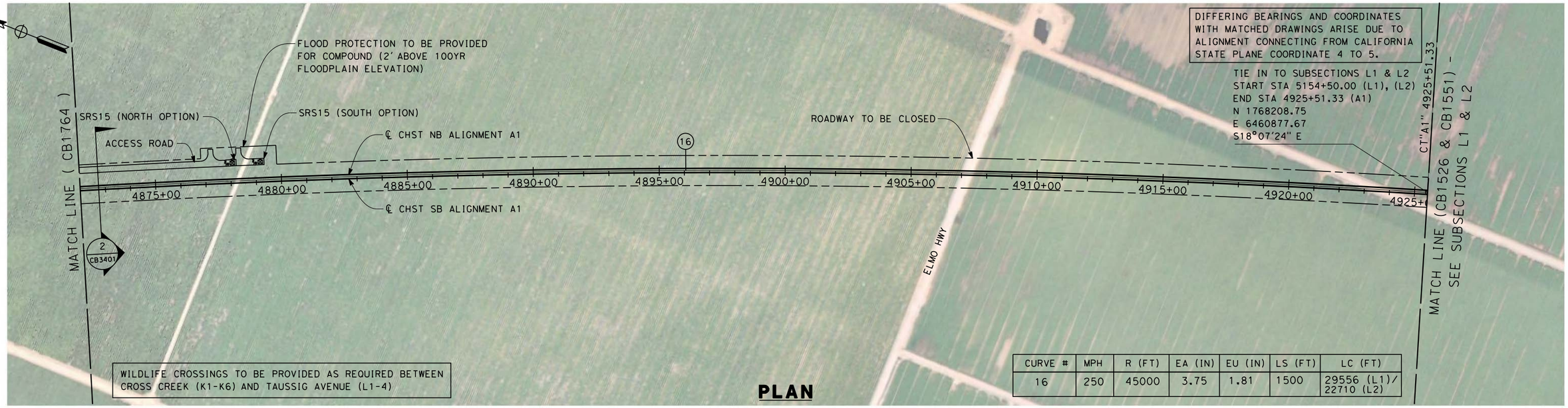


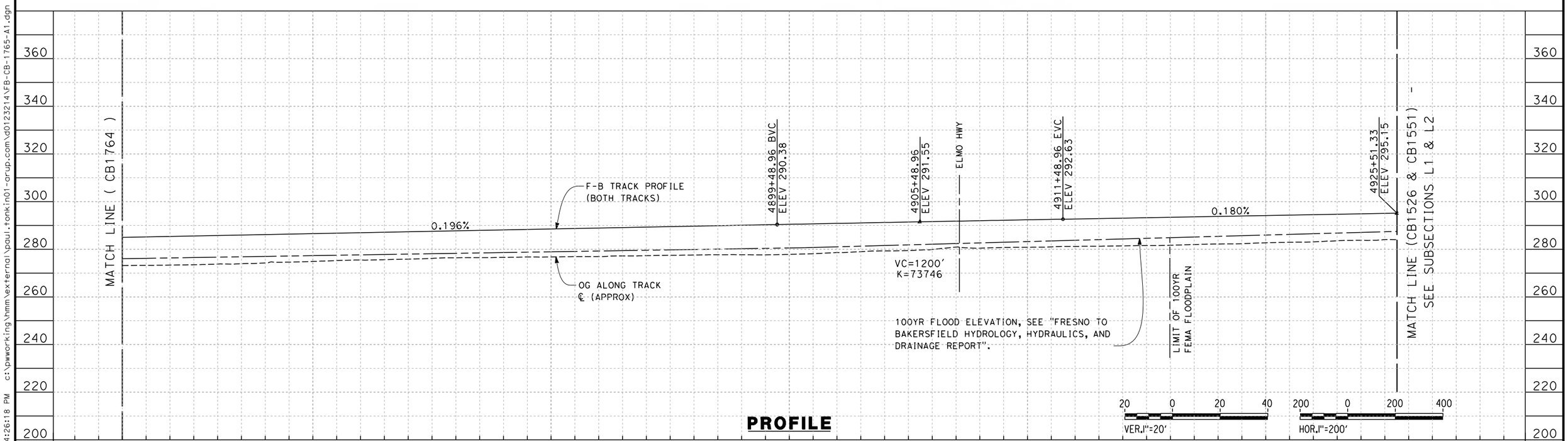
DIFFERING BEARINGS AND COORDINATES WITH MATCHED DRAWINGS ARISE DUE TO ALIGNMENT CONNECTING FROM CALIFORNIA STATE PLANE COORDINATE 4 TO 5.

TIE IN TO SUBSECTIONS L1 & L2
START STA 5154+50.00 (L1), (L2)
END STA 4925+51.33 (A1)
N 1768208.75
E 6460877.67
S18°07'24" E

WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-K6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556 (L1)/ 22710 (L2)



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
STA. 4872+00 TO 4925+51
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1765
SCALE AS SHOWN
SHEET NO. 19 OF 21

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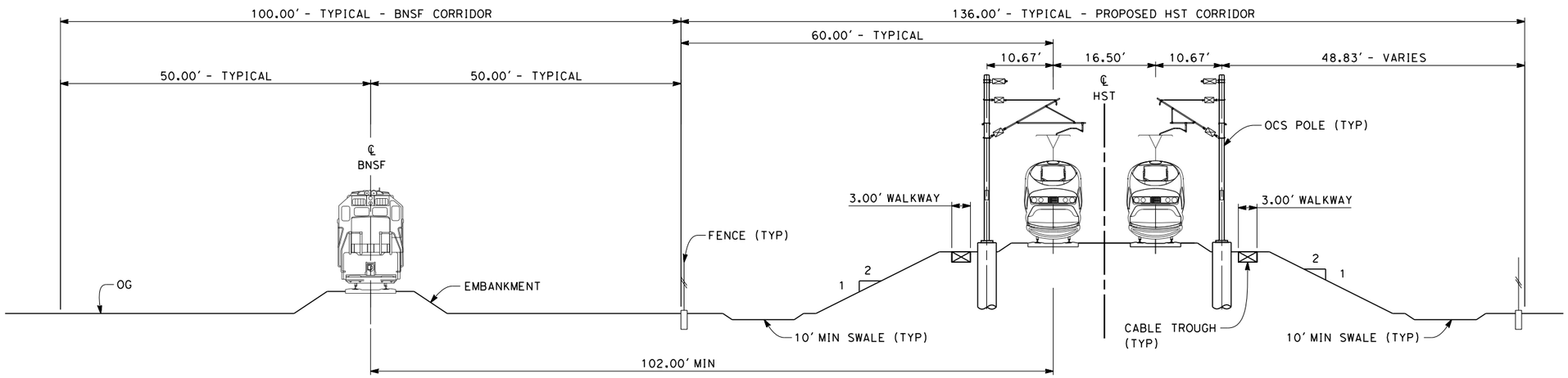
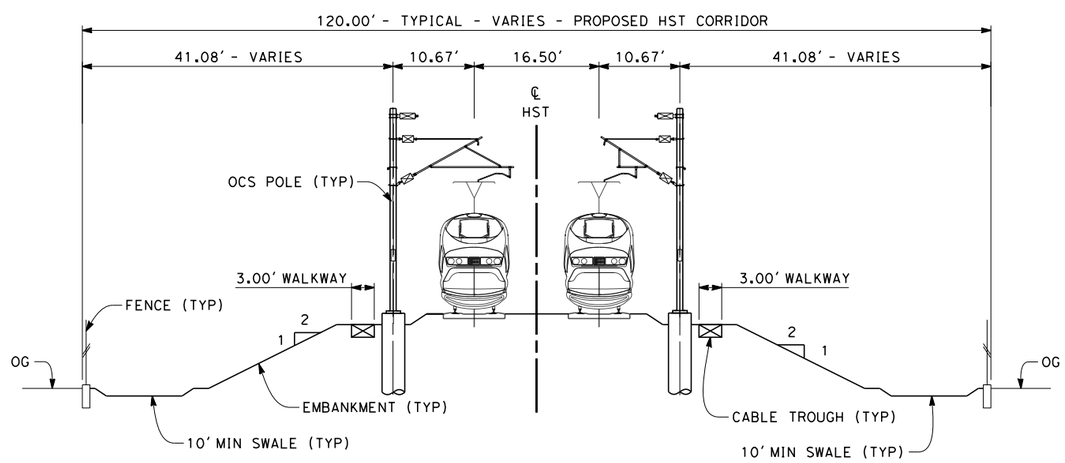
NOTES:

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



SECTION 1

TWIN TRACK - ADJACENT TO SINGLE TRACK BNSF
STA 3919+50 THROUGH STA 3967+75



SECTION 2

TWIN TRACK - AT-GRADE WITH OPEN DRAINAGE
STA 3967+75 THROUGH STA 3982+20
STA 4085+95 THROUGH STA 4925+51.33

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3401
SCALE AS SHOWN
SHEET NO. 20 OF 21

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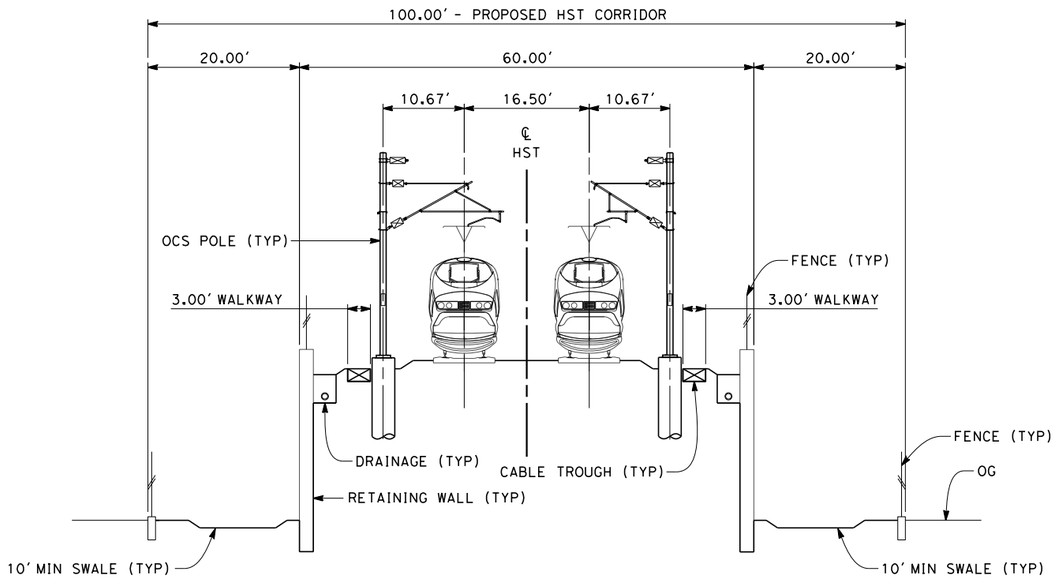
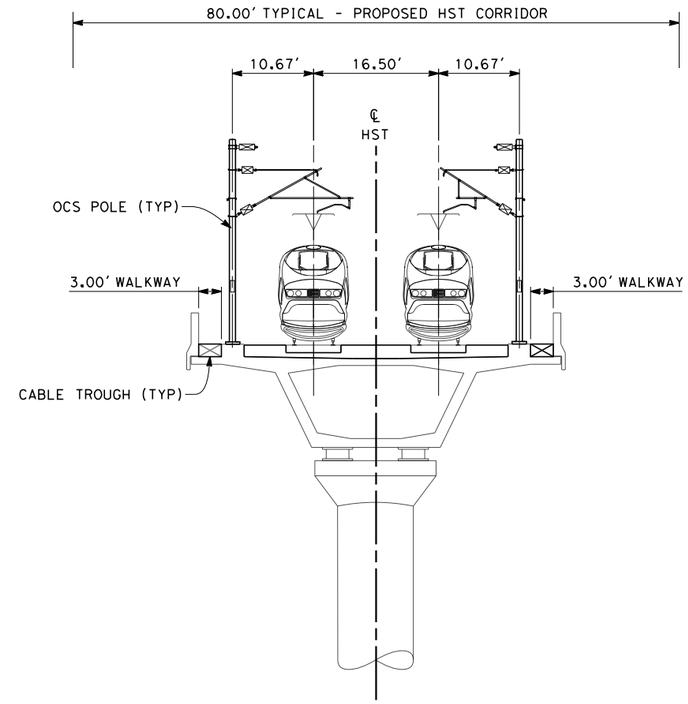
NOTES:

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



SECTION 3

TWIN TRACK - RETAINED EMBANKMENT
STA 3982+20 THROUGH STA 4005+25
STA 4067+65 THROUGH STA 4085+95



SECTION 4

TWIN TRACK - AERIAL VIADUCT
STA 4005+25 THROUGH STA 4067+65

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. WALKER
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
ALLENSWORTH BYPASS SUBSECTION
ALIGNMENT A1
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3402
SCALE AS SHOWN
SHEET NO. 21 OF 21

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LEGEND

EXISTING FREIGHT RAILROAD

PROPOSED CHST

3000 0 3000 6000

1"=3000'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 3919+50 TO 4924+27
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1420
SCALE AS SHOWN
SHEET NO. 1 OF 22

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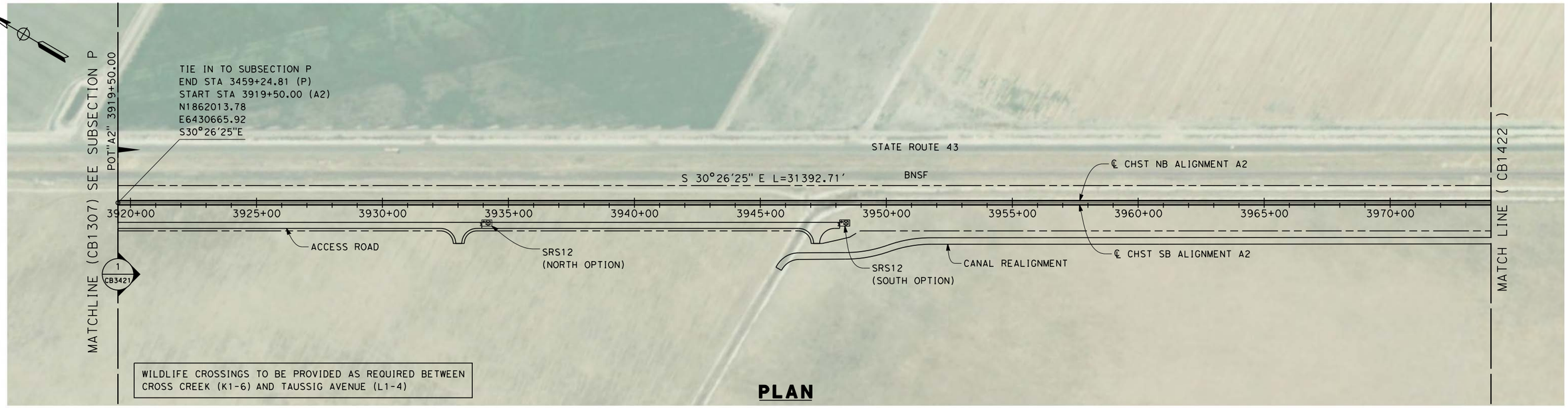
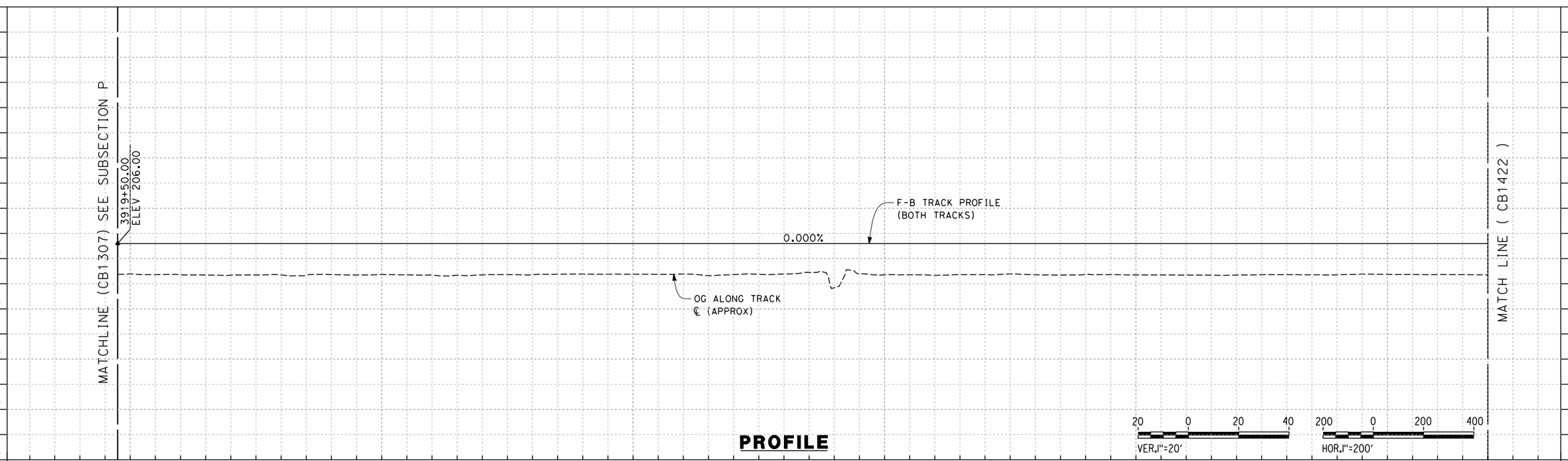


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 3919+50 TO 3974+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1421
SCALE AS SHOWN
SHEET NO. 2 OF 22

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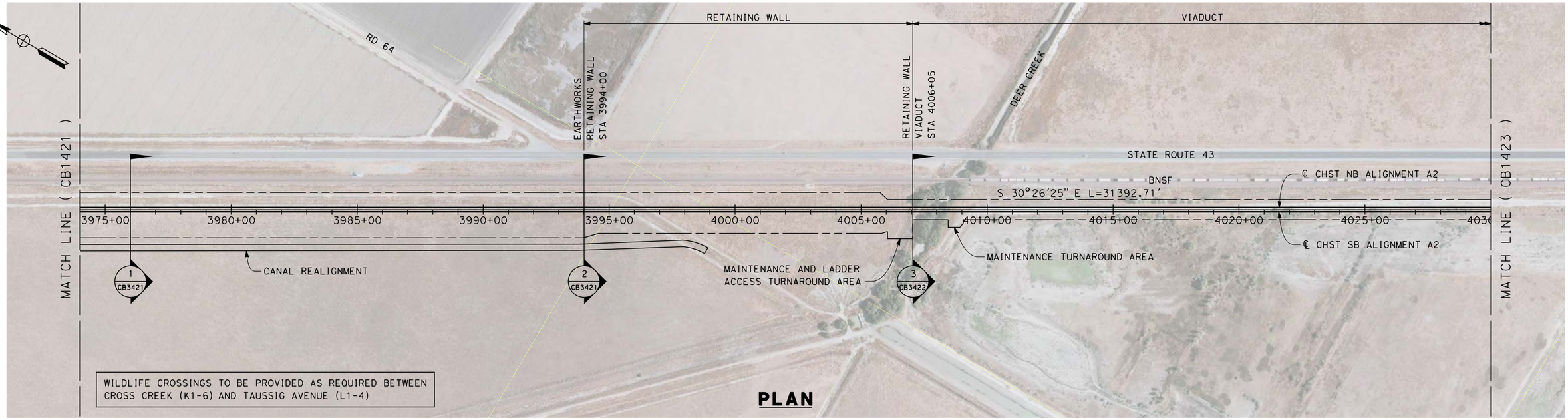
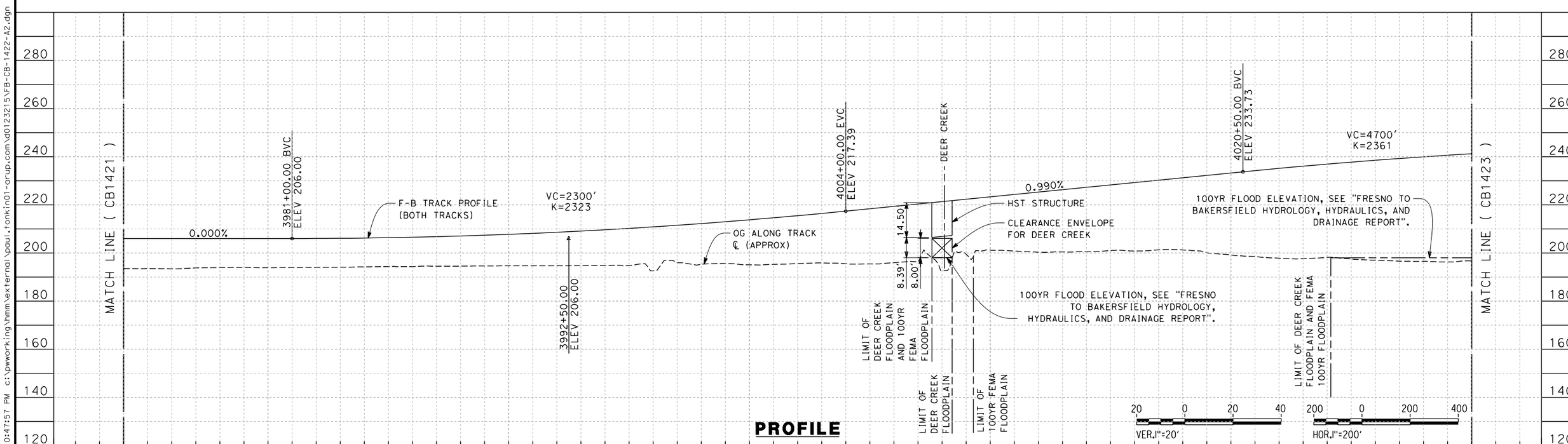


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 3974+00 TO 4030+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1422
SCALE AS SHOWN
SHEET NO. 3 OF 22

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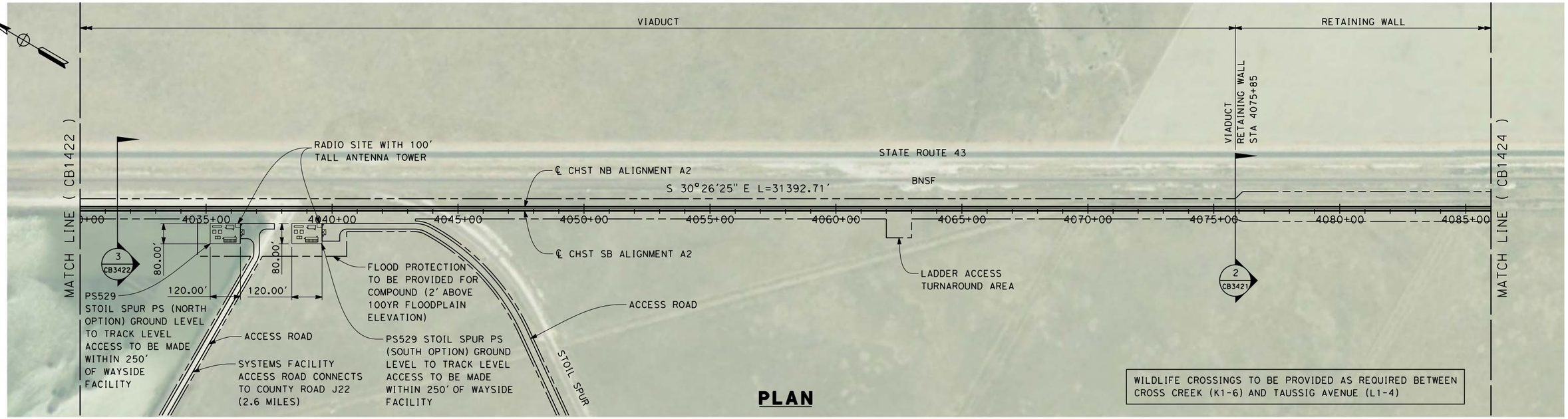
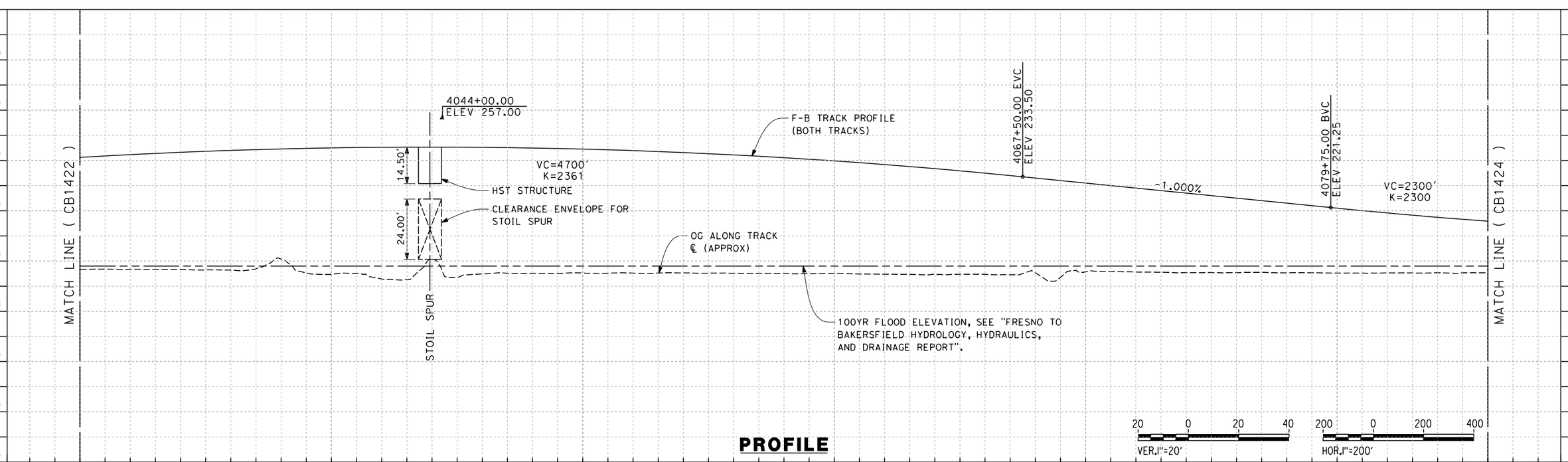
paul.tonkin



PLAN



PROFILE

STATION	4030+00	4040+00	4050+00	4060+00	4070+00	4080+00	4086+00	TOTAL
CY Exc								
CY Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4030+00 TO 4086+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1423
SCALE AS SHOWN
SHEET NO. 4 OF 22

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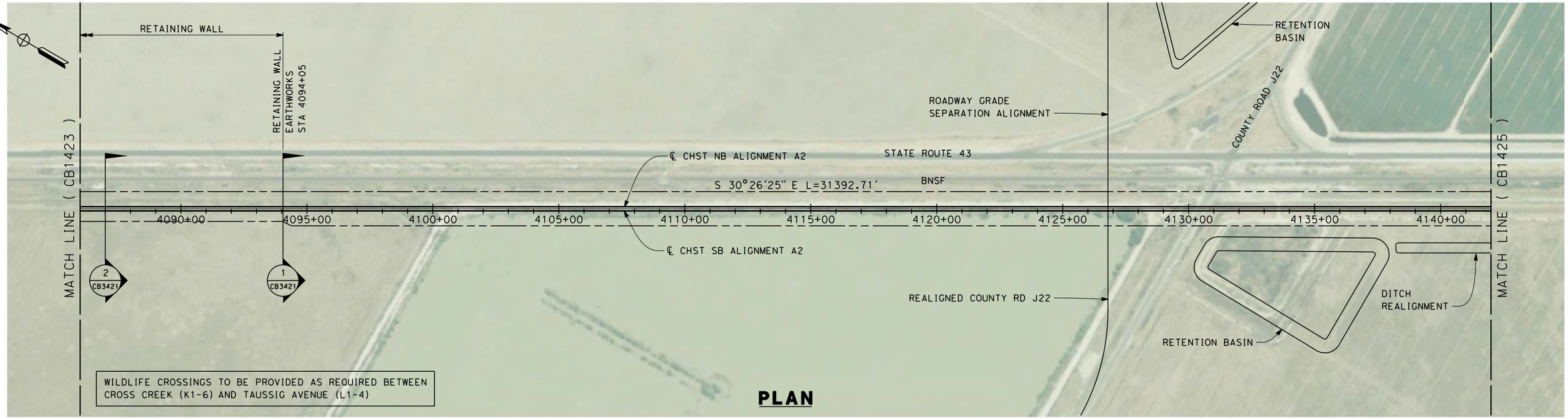
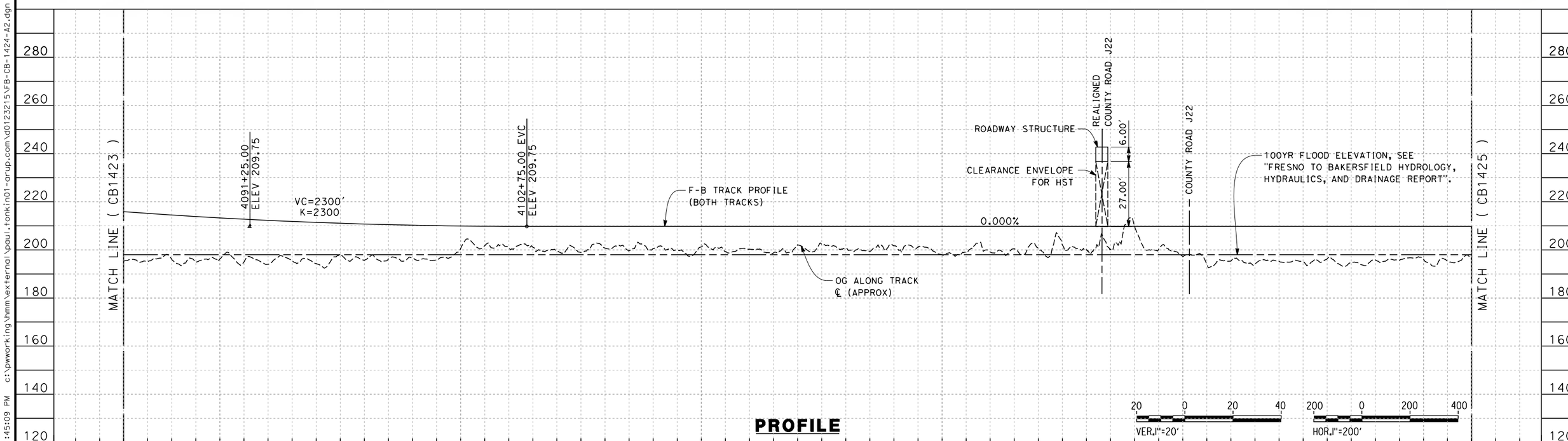


PLAN



PROFILE

STATION	4086+00	4090+00	4100+00	4110+00	4120+00	4130+00	4140+00	4142+00	TOTAL
CY Exc									
CY Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4086+00 TO 4142+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1424
SCALE AS SHOWN
SHEET NO. 5 OF 22

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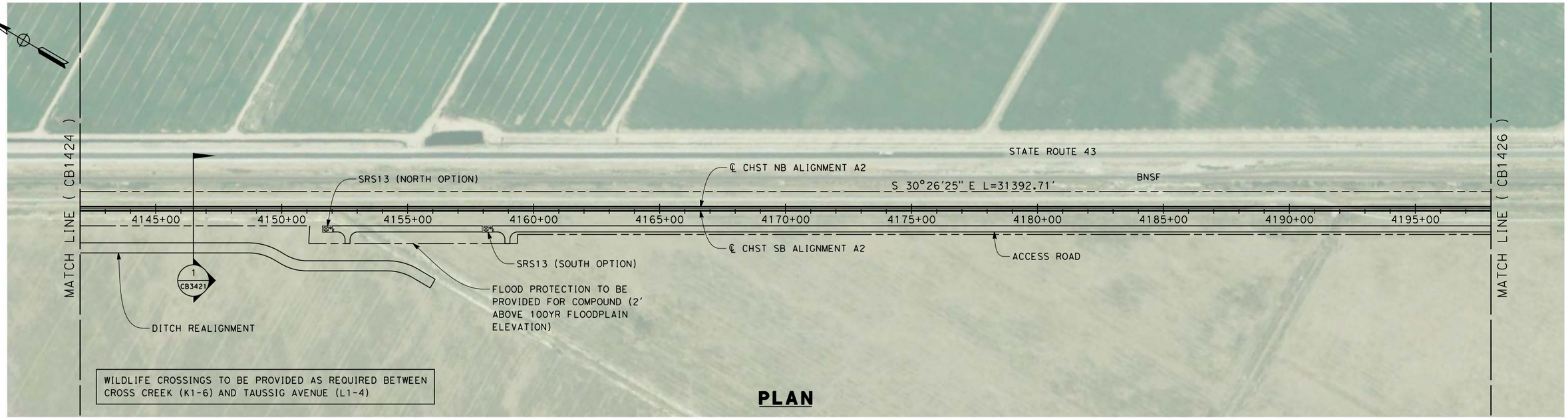
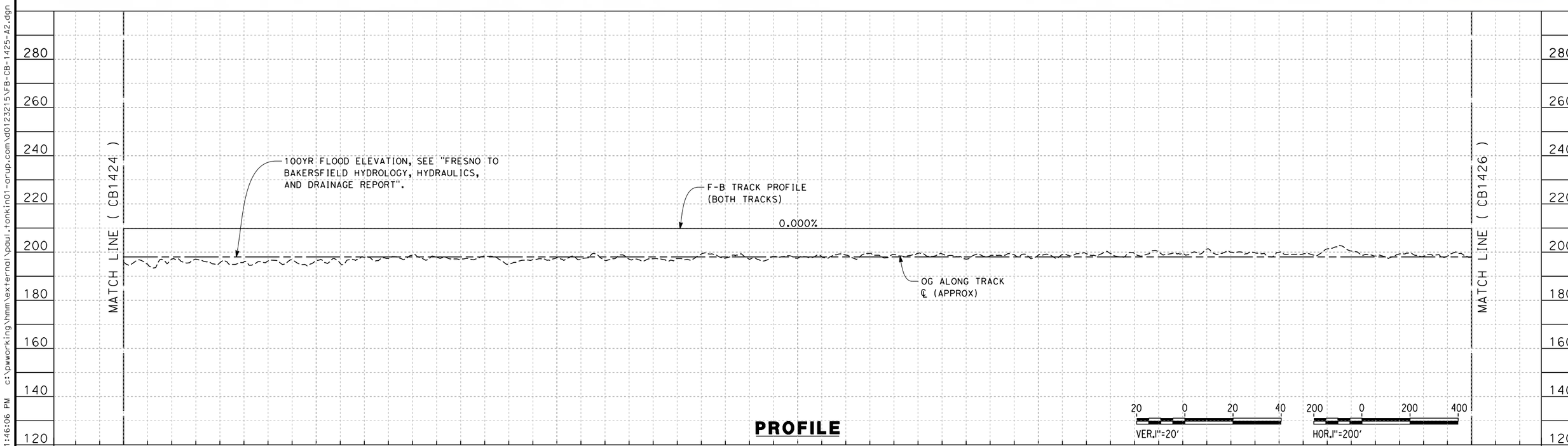


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4142+00 TO 4198+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1425
SCALE AS SHOWN
SHEET NO. 6 OF 22

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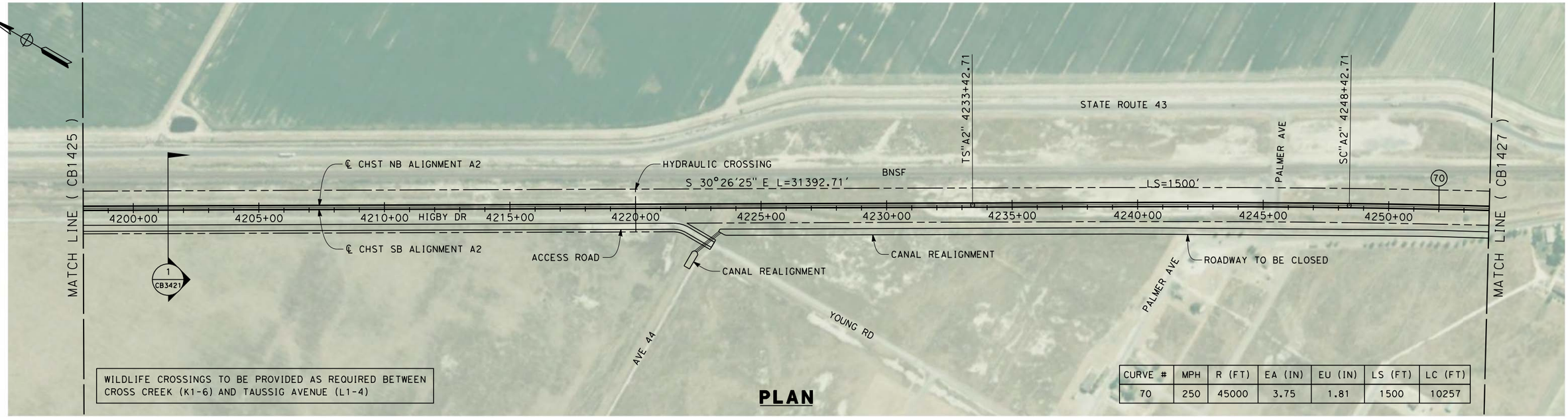
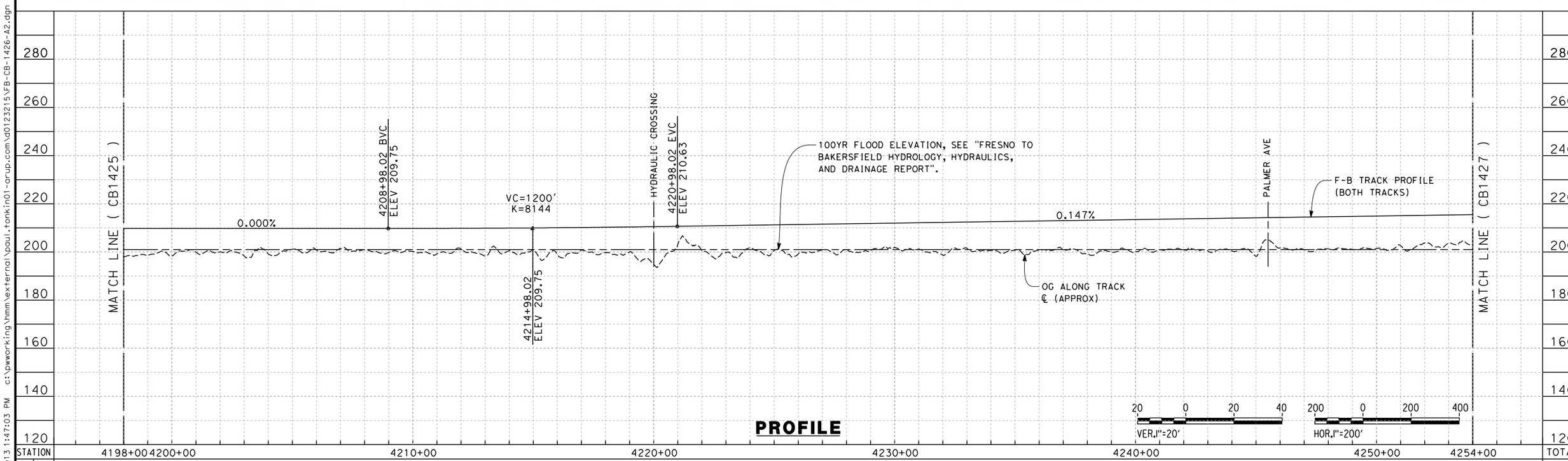


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
70	250	45000	3.75	1.81	1500	10257



PROFILE

STATION	4198+00	4200+00	4210+00	4220+00	4230+00	4240+00	4250+00	4254+00	TOTAL
CY Exc									
CY Emb									

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4198+00 TO 4254+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1426
SCALE AS SHOWN
SHEET NO. 7 OF 22

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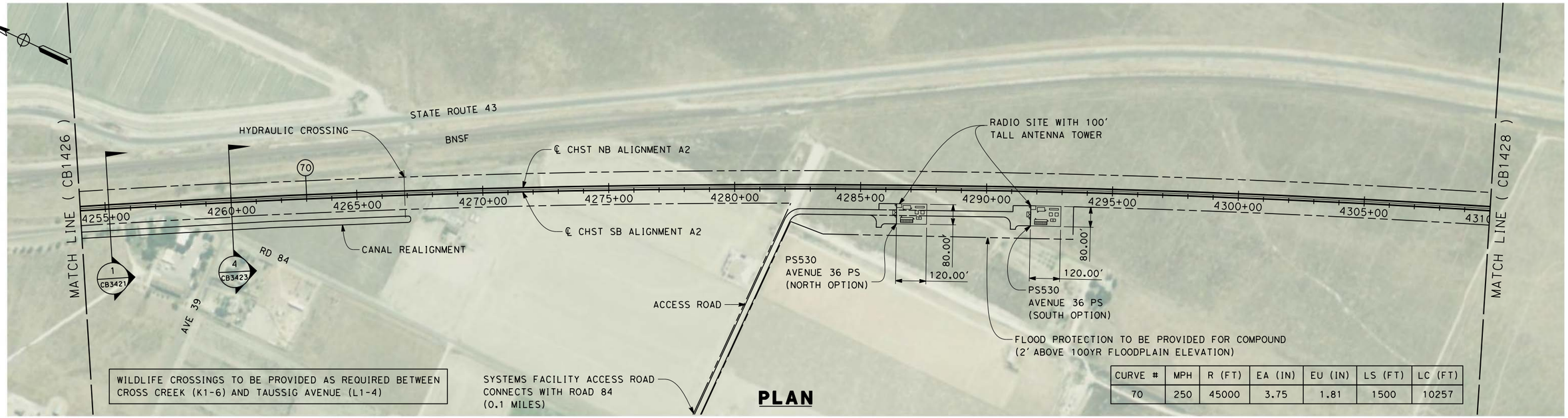
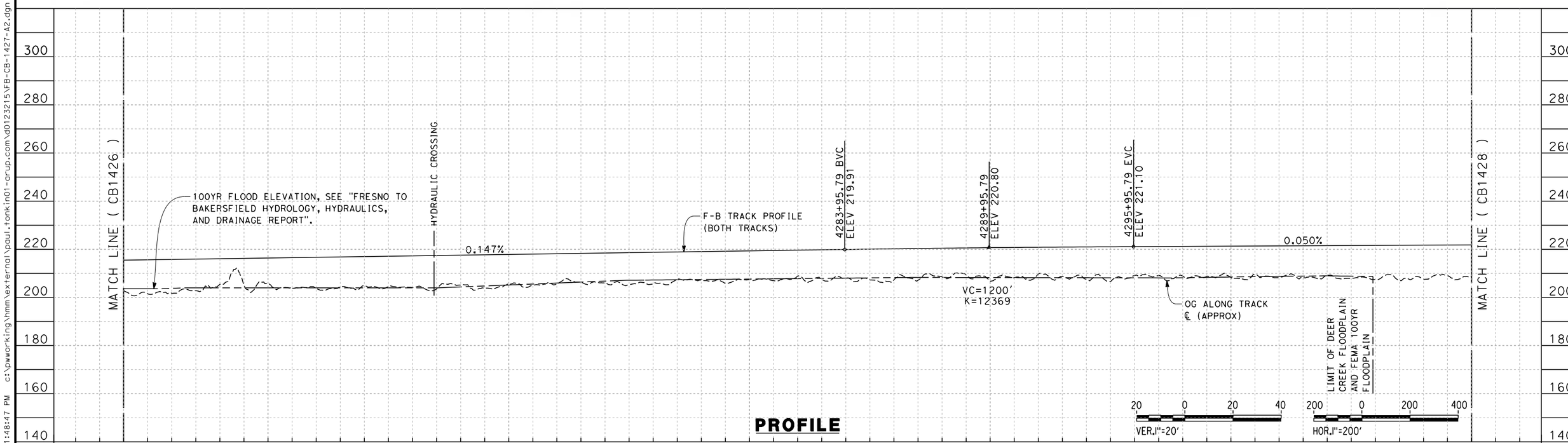


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
70	250	45000	3.75	1.81	1500	10257

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4254+00 TO 4310+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1427
SCALE AS SHOWN
SHEET NO. 8 OF 22

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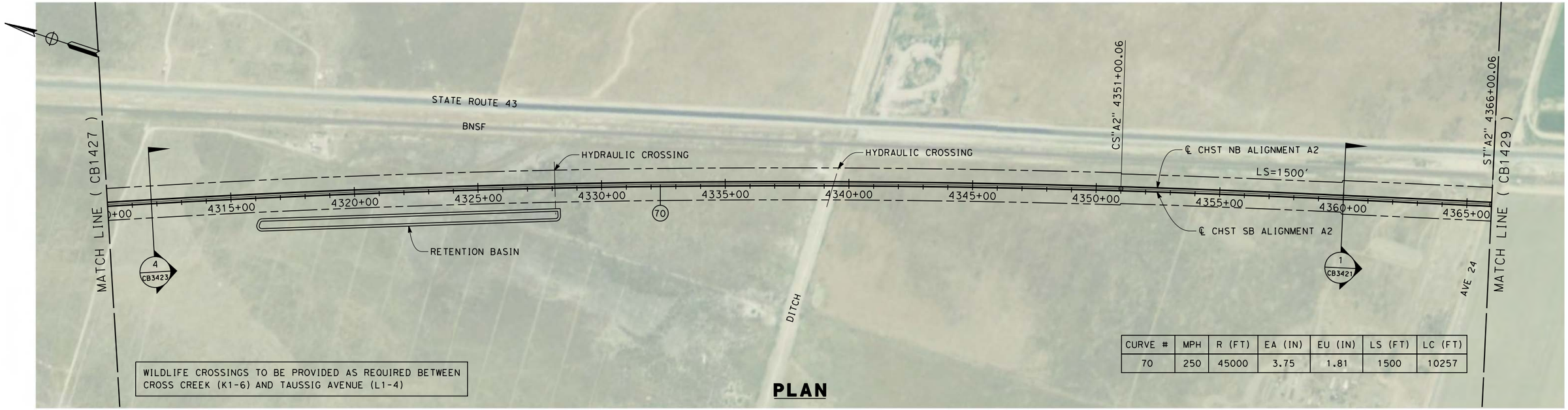
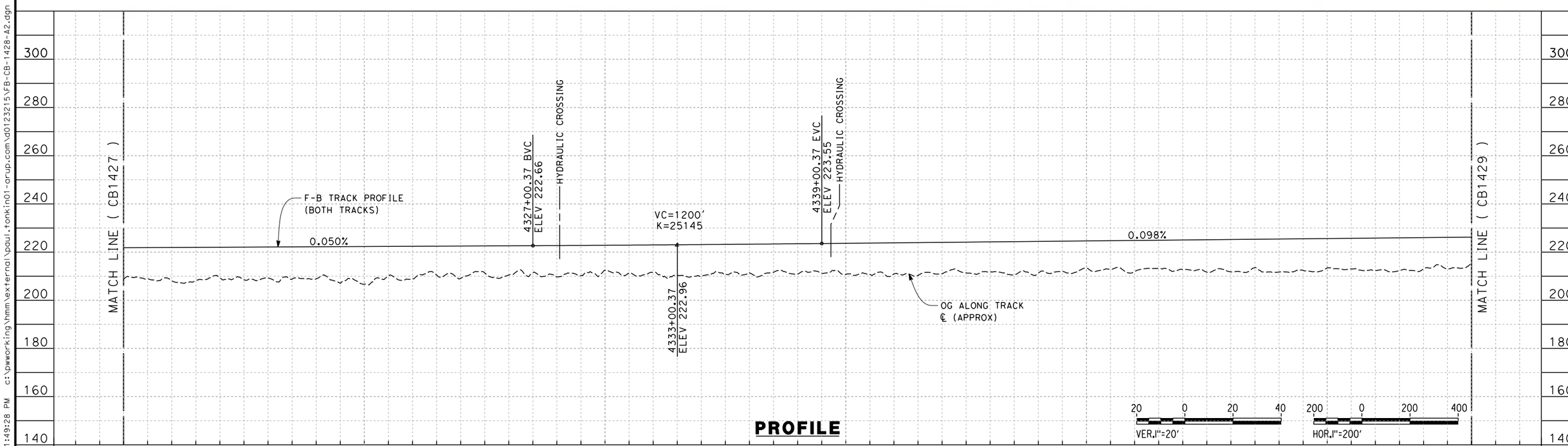


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
70	250	45000	3.75	1.81	1500	10257

WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN



PROFILE

STATION	4310+00	4320+00	4330+00	4340+00	4350+00	4360+00	4366+00	TOTAL
CY Exc								
CY Emb								

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4310+00 TO 4366+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1428
SCALE AS SHOWN
SHEET NO. 9 OF 22

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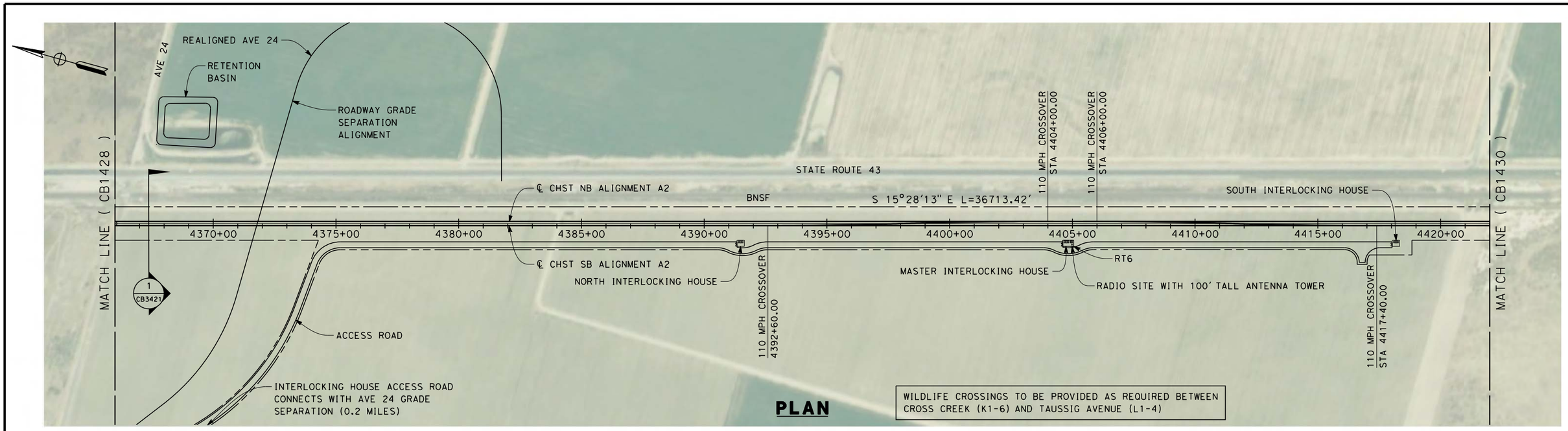

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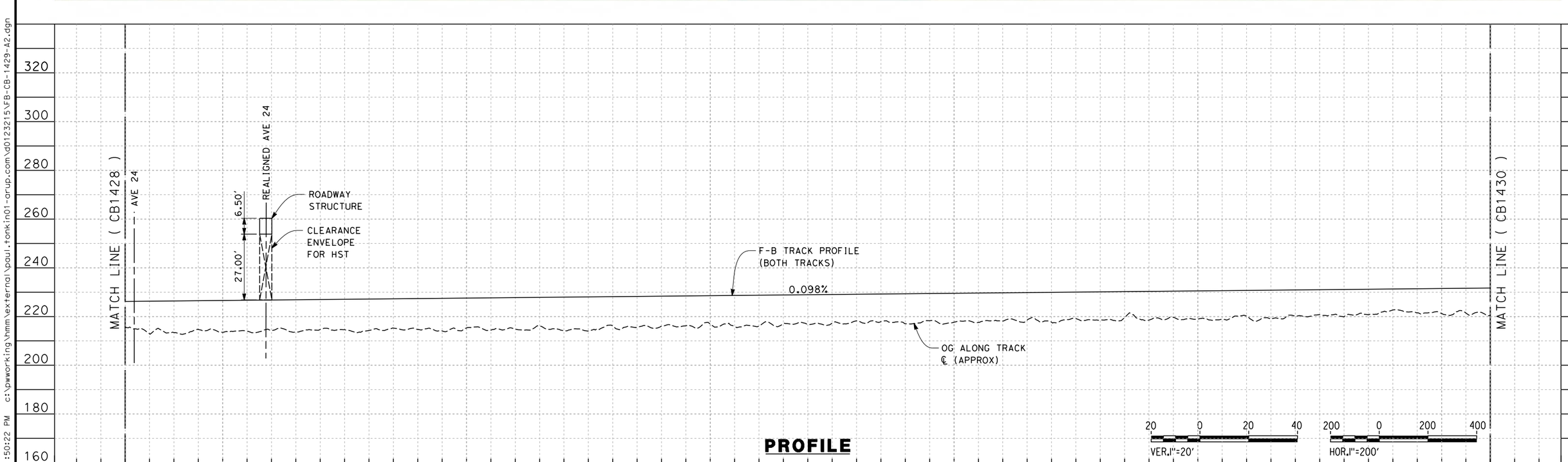

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4366+00 TO 4422+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1429
SCALE AS SHOWN
SHEET NO. 10 OF 22

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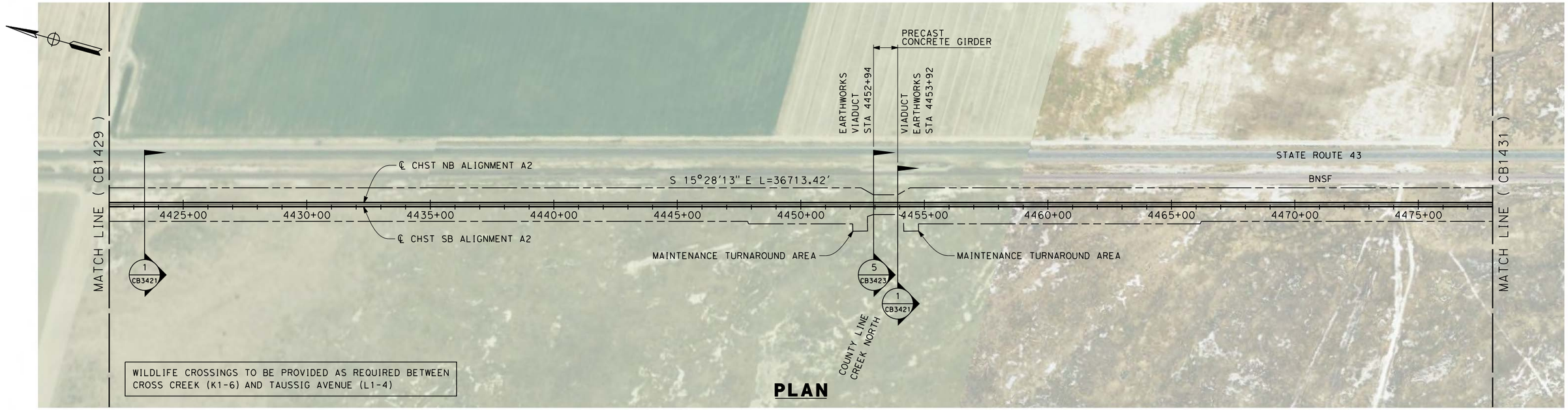

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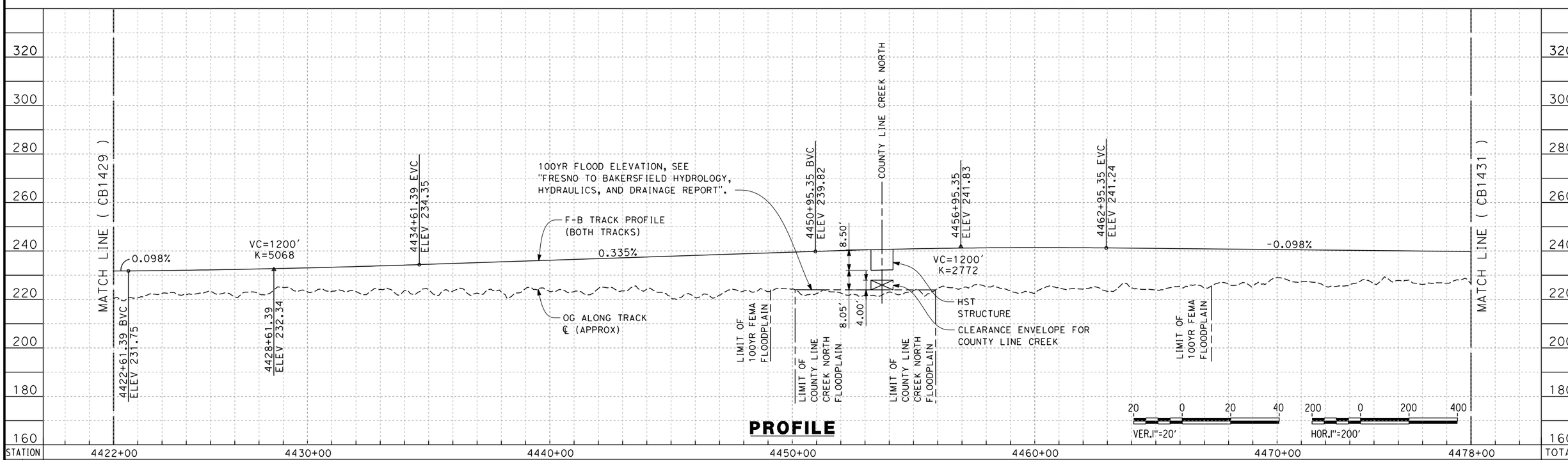

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4422+00 TO 4478+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1430
SCALE AS SHOWN
SHEET NO. 11 OF 22

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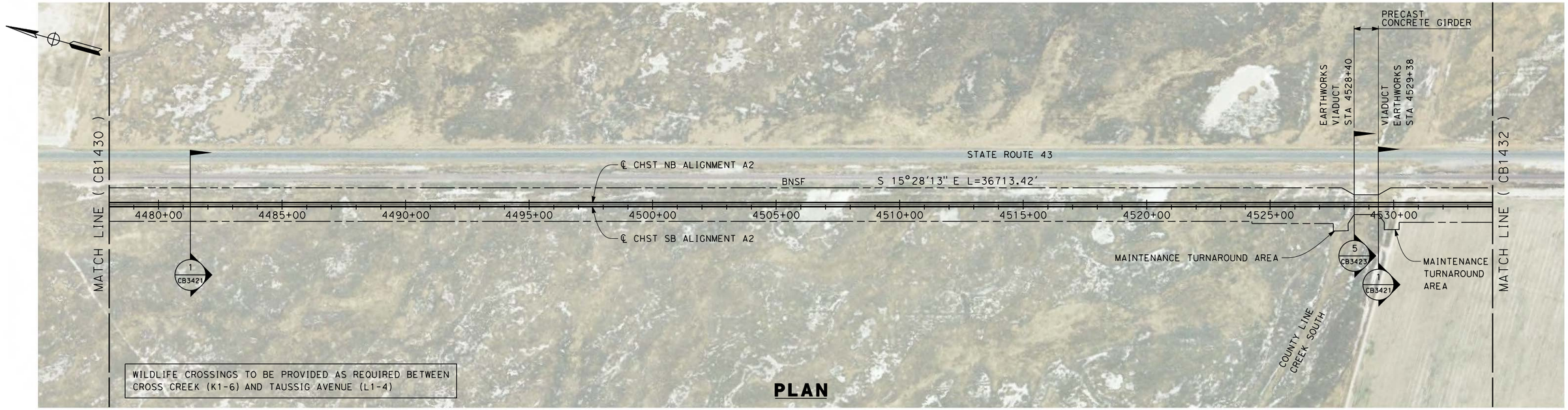

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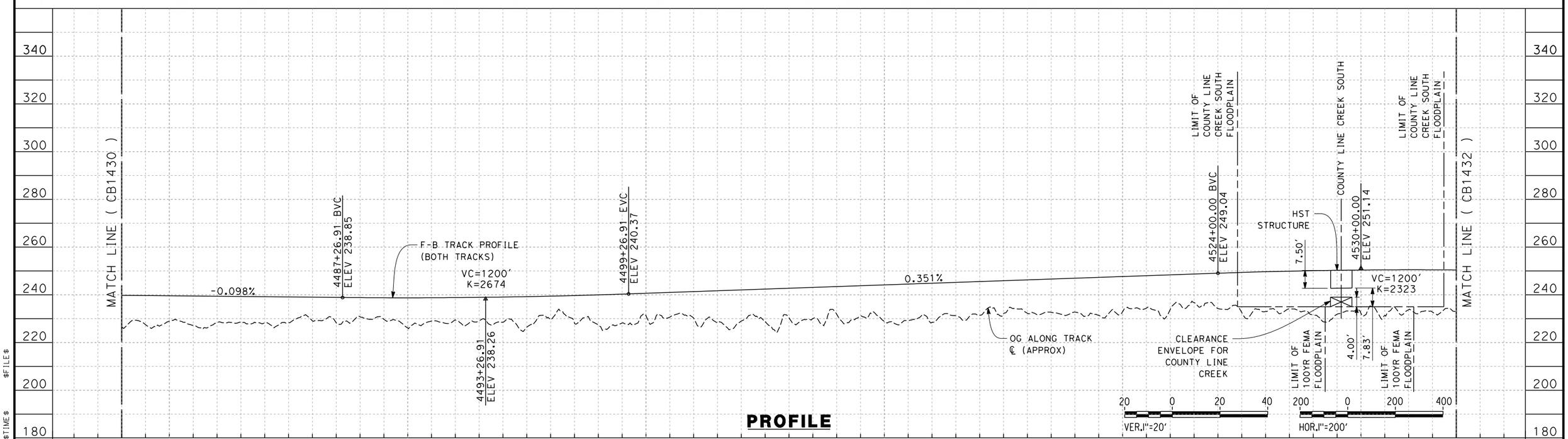

PROFILE

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
CHECKED BY G. MEJIA
IN CHARGE R. COFFIN
DATE 12/31/13

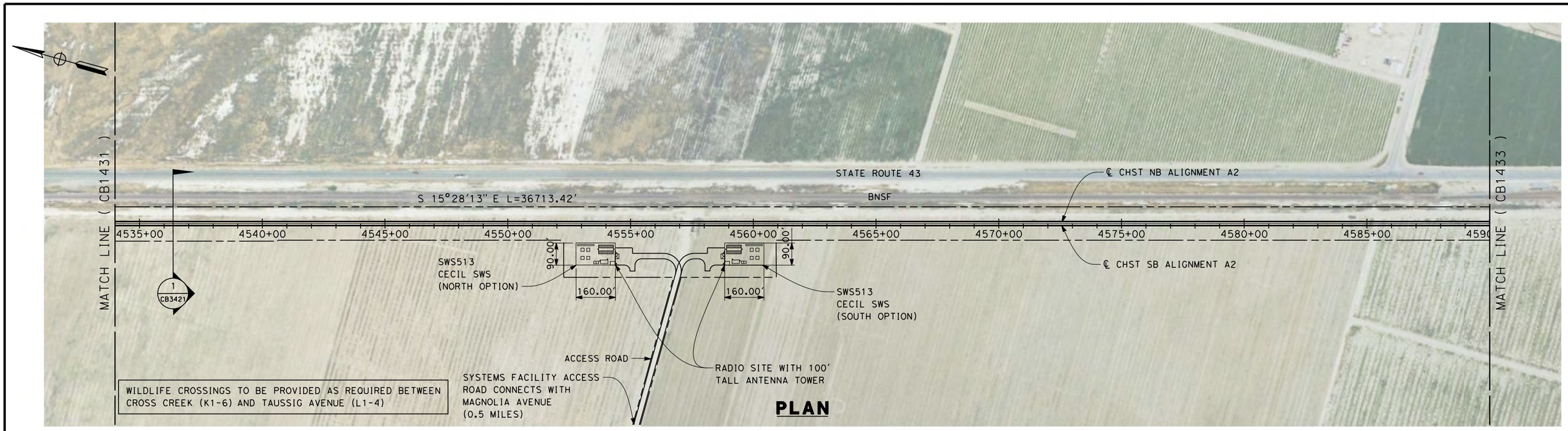
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

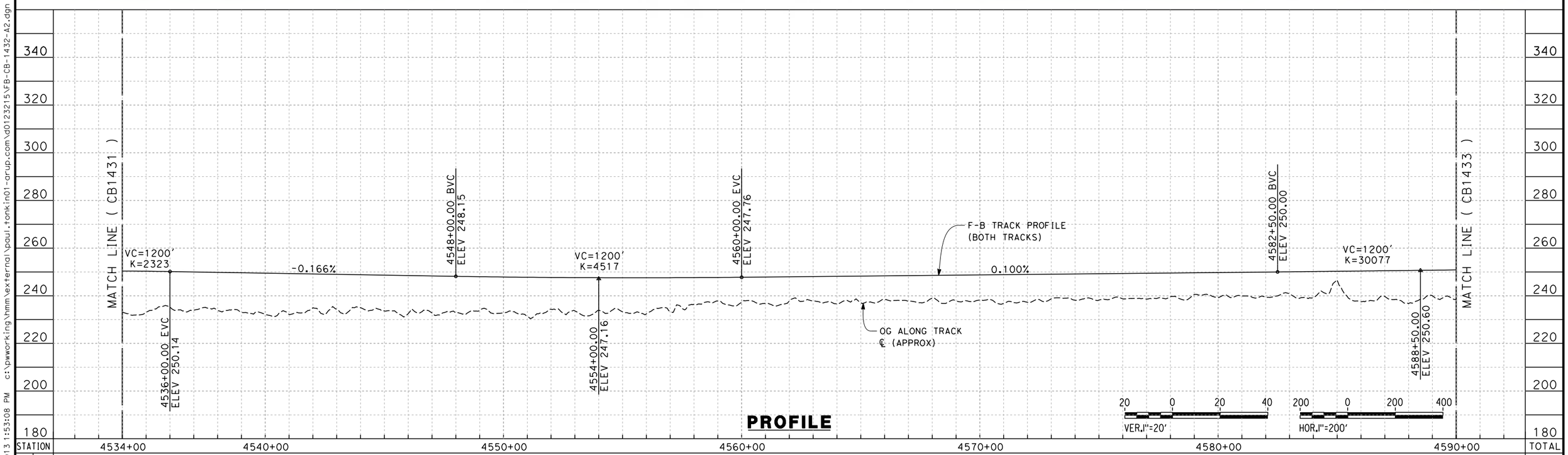
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4478+00 TO 4534+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1431
SCALE AS SHOWN
SHEET NO. 12 OF 22





REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4534+00 TO 4590+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1432
SCALE AS SHOWN
SHEET NO. 13 OF 22

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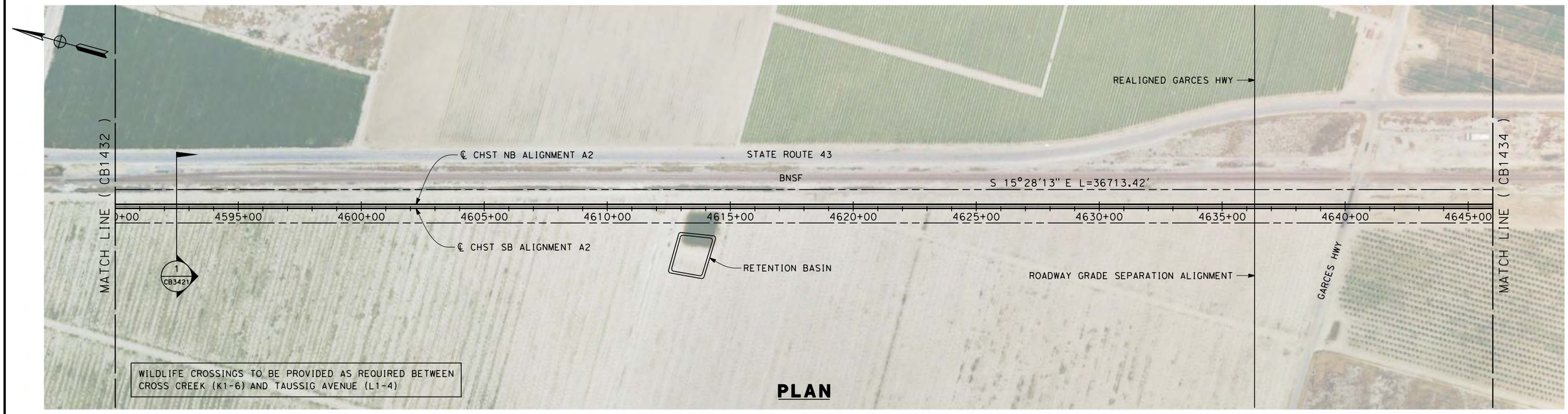

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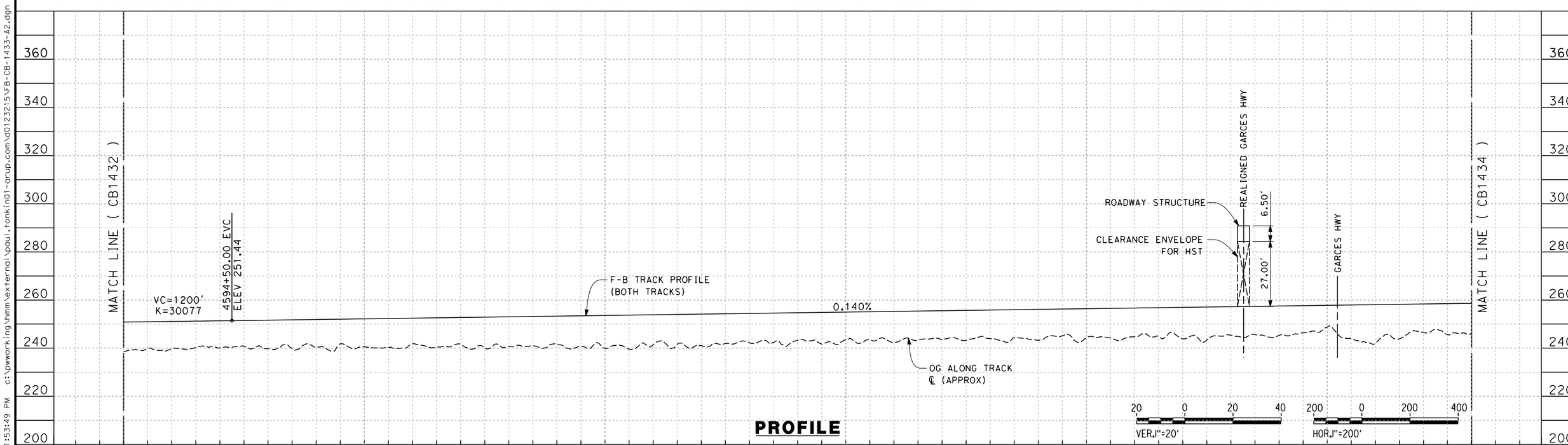

PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4590+00 TO 4646+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1433
SCALE AS SHOWN
SHEET NO. 14 OF 22

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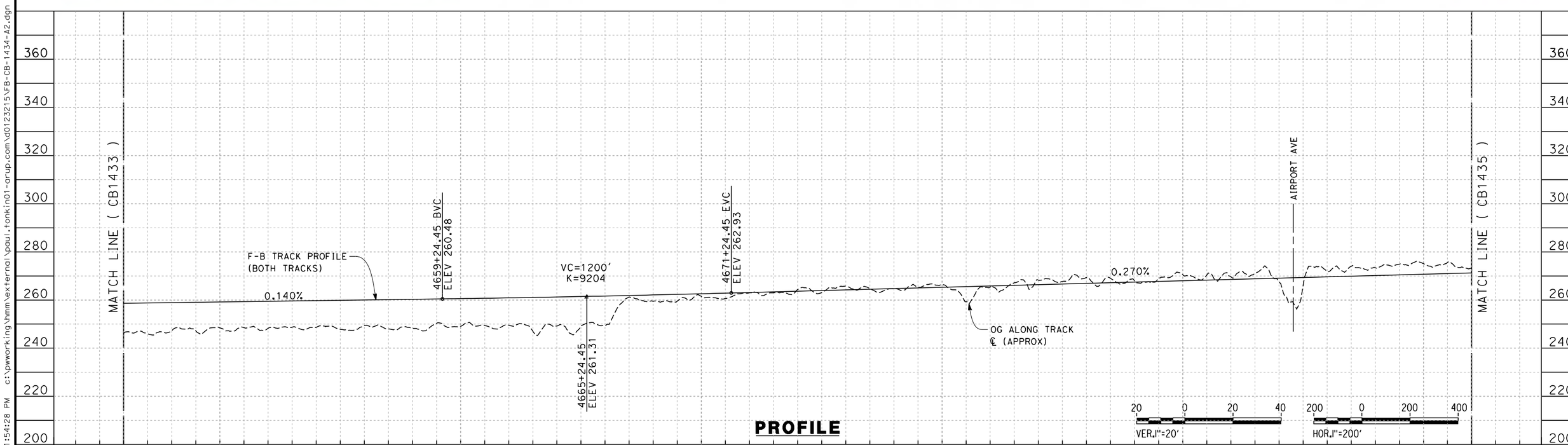
PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4646+00 TO 4702+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1434
SCALE AS SHOWN
SHEET NO. 15 OF 22

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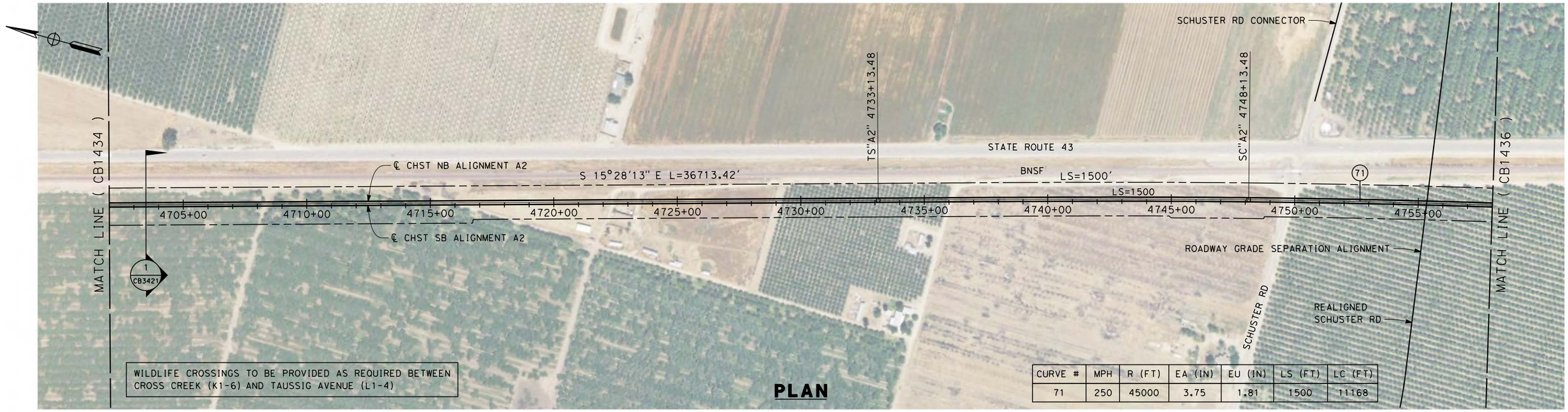
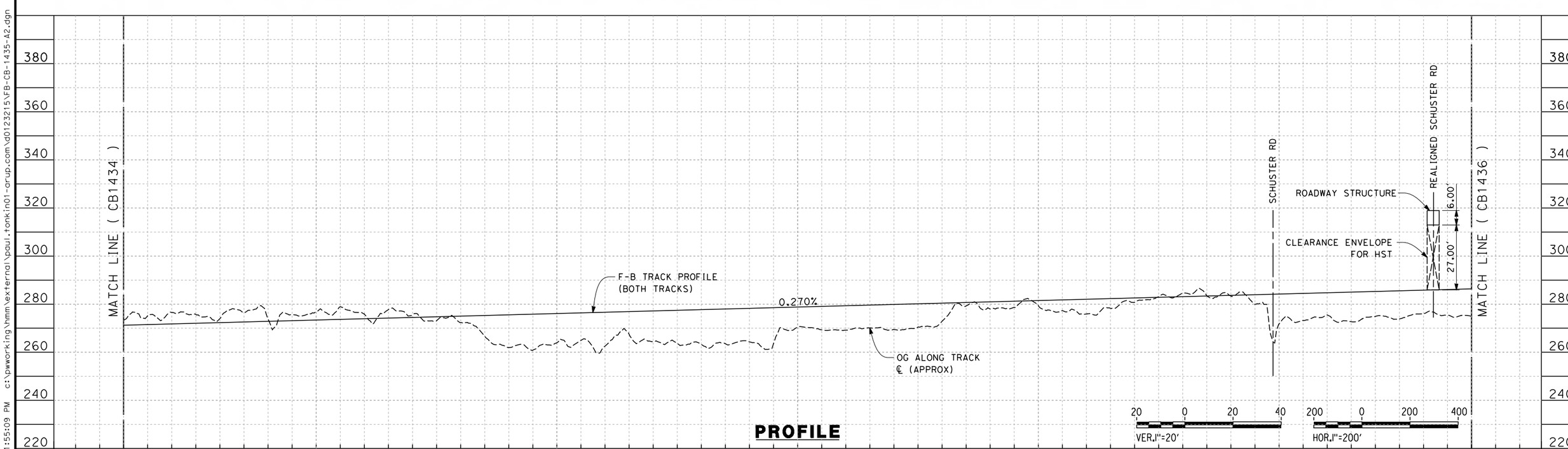


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
71	250	45000	3.75	1.81	1500	11168



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4702+00 TO 4758+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1435
SCALE AS SHOWN
SHEET NO. 16 OF 22

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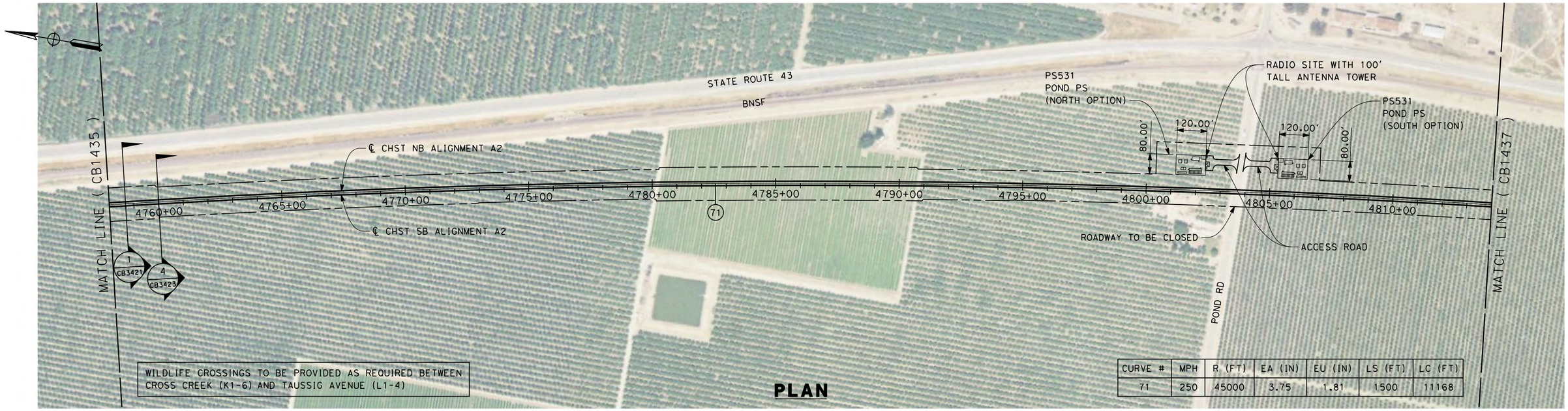
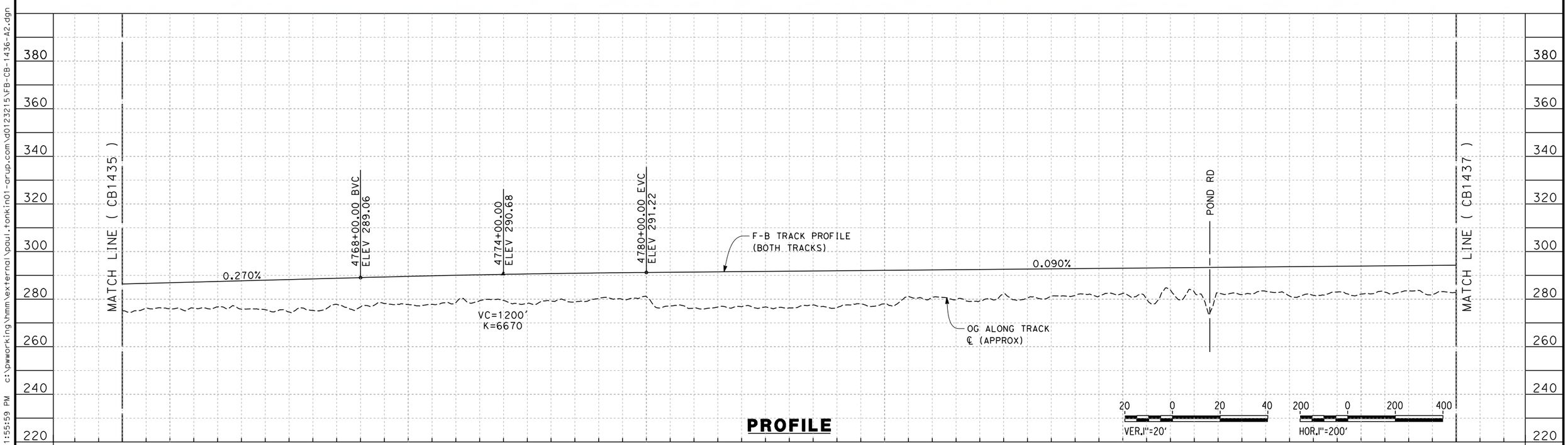


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
71	250	45000	3.75	1.81	1500	11168

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4758+00 TO 4814+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1436
SCALE AS SHOWN
SHEET NO. 17 OF 22

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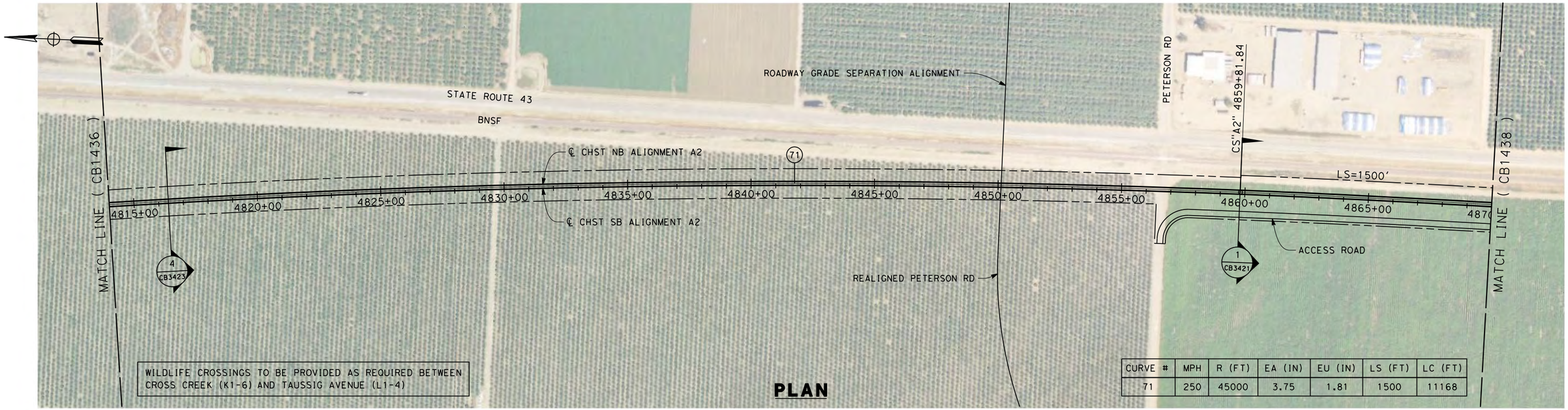
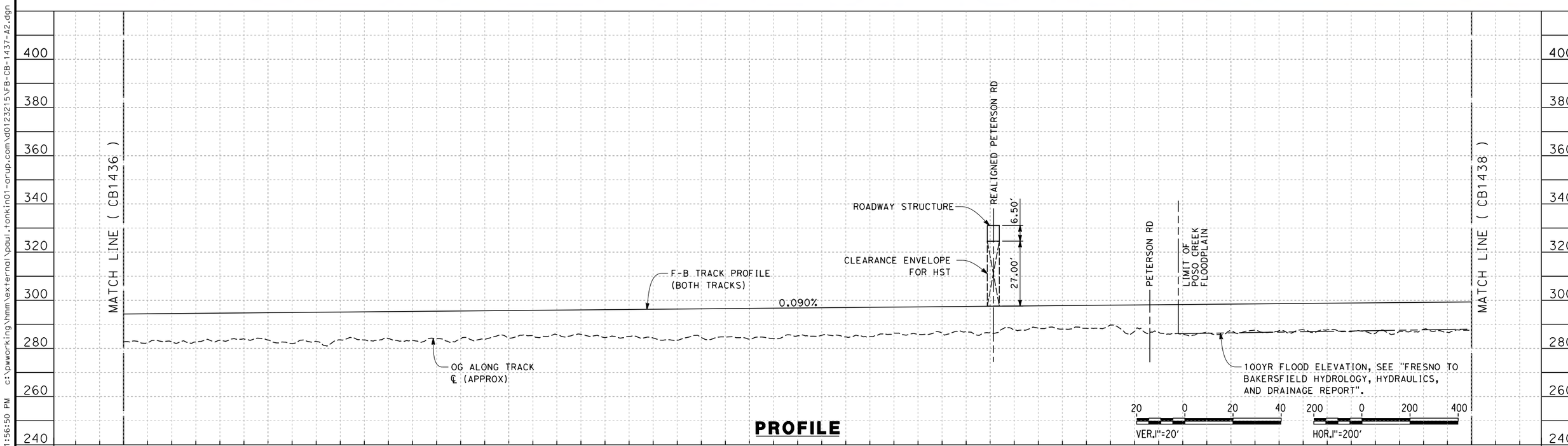


WILDLIFE CROSSINGS TO BE PROVIDED AS REQUIRED BETWEEN CROSS CREEK (K1-6) AND TAUSSIG AVENUE (L1-4)

PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
71	250	45000	3.75	1.81	1500	11168



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4814+00 TO 4870+00
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1437
SCALE AS SHOWN
SHEET NO. 18 OF 22

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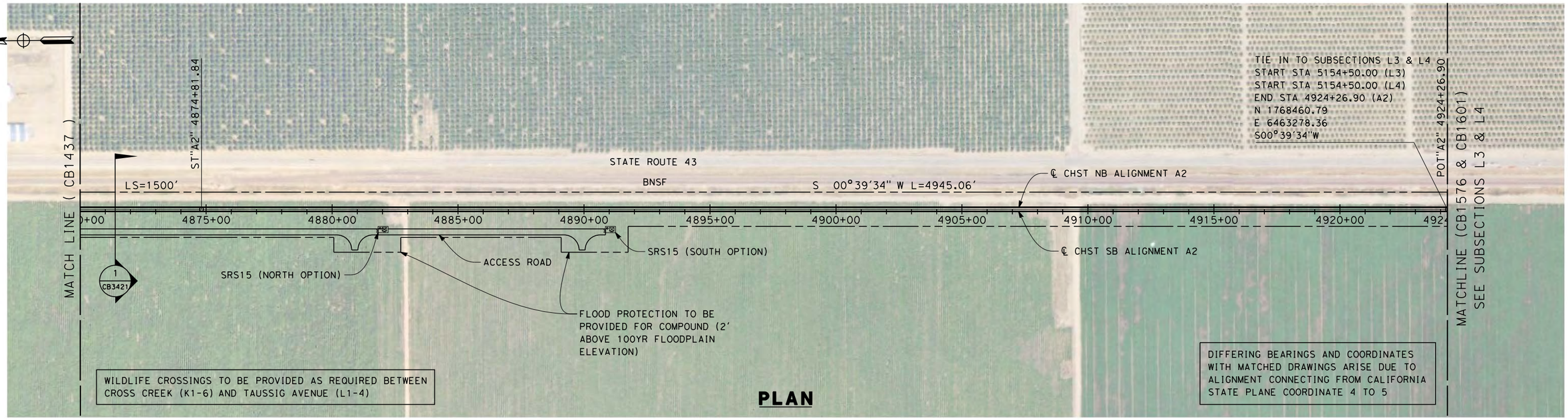
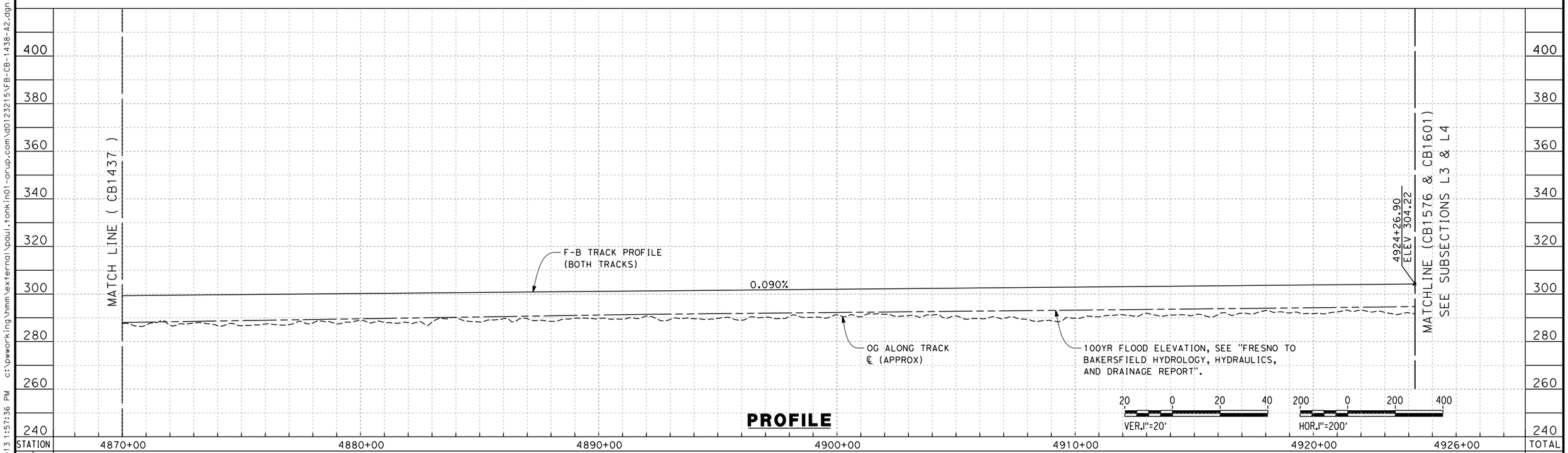


PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
STA. 4870+00 TO 4924+27
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1438
SCALE AS SHOWN
SHEET NO. 19 OF 22

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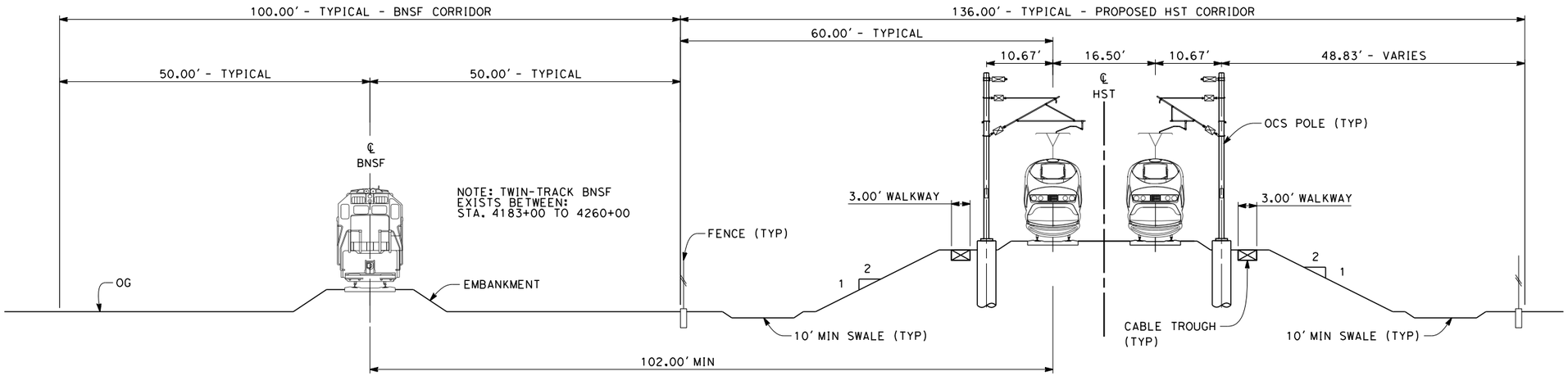
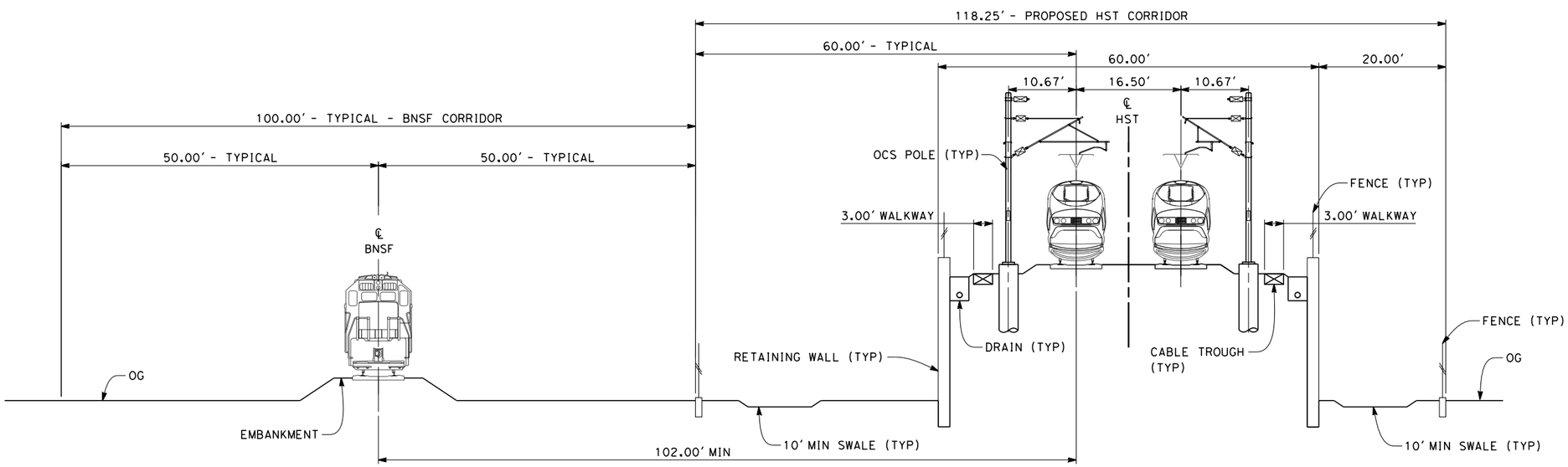
NOTES:

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



SECTION 1

TWIN TRACK - ADJACENT TO SINGLE TRACK BNSF
STA 3919+50 THROUGH STA 3994+00
STA 4094+05 THROUGH STA 4260+00
STA 4360+00 THROUGH STA 4452+94
STA 4453+92 THROUGH STA 4528+40
STA 4529+38 THROUGH STA 4760+00
STA 4859+80 THROUGH STA 4924+26.90



SECTION 2

TWIN TRACK - RETAINED EMBANKMENT ADJACENT TO SINGLE TRACK BNSF
STA 3994+00 THROUGH STA 4006+05
STA 4075+85 THROUGH STA 4094+05

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3421
SCALE AS SHOWN
SHEET NO. 20 OF 22

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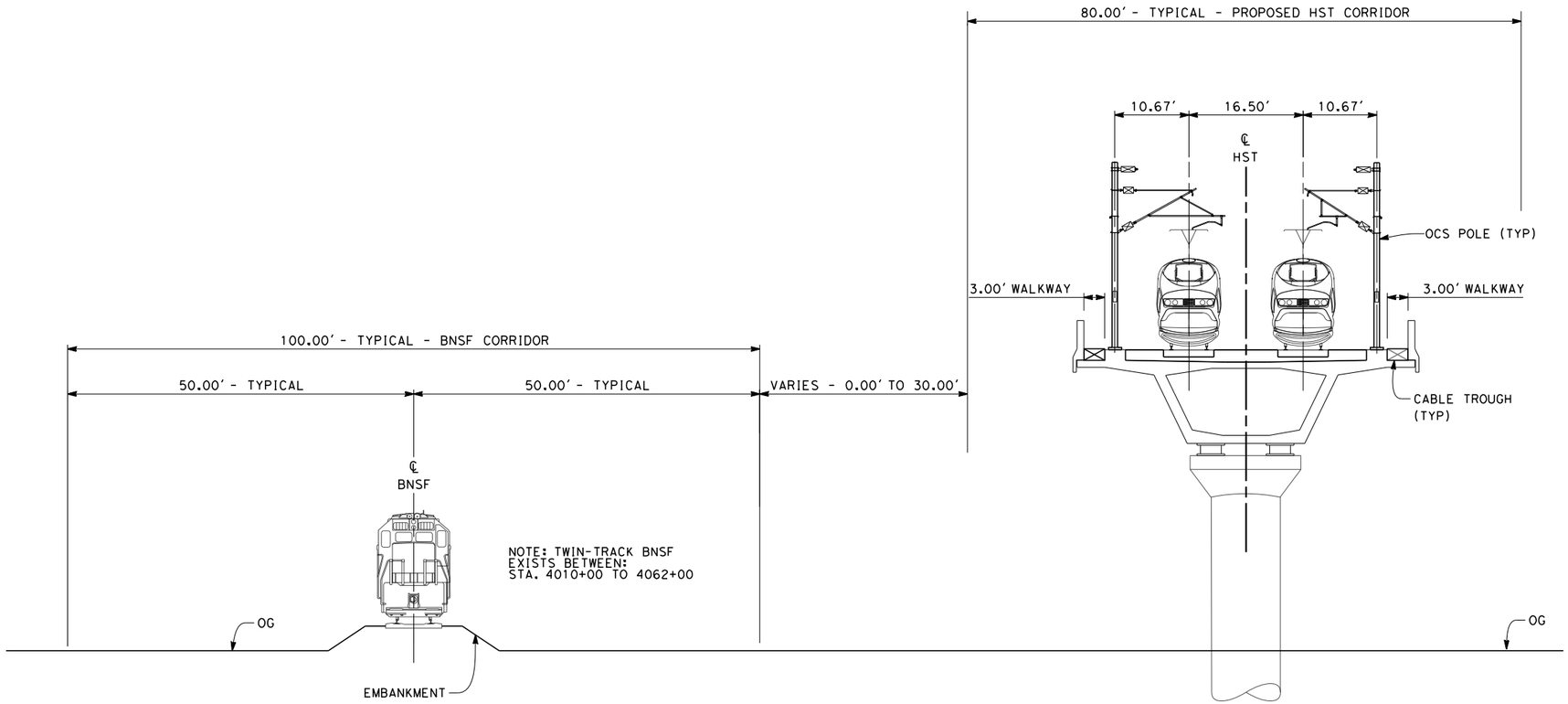
NOTES:

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



SECTION 3

TWIN TRACK - AERIAL VIADUCT ADJACENT TO SINGLE TRACK BNSF
STA 4006+05 THROUGH STA 4075+85

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3422
SCALE AS SHOWN
SHEET NO. 21 OF 22

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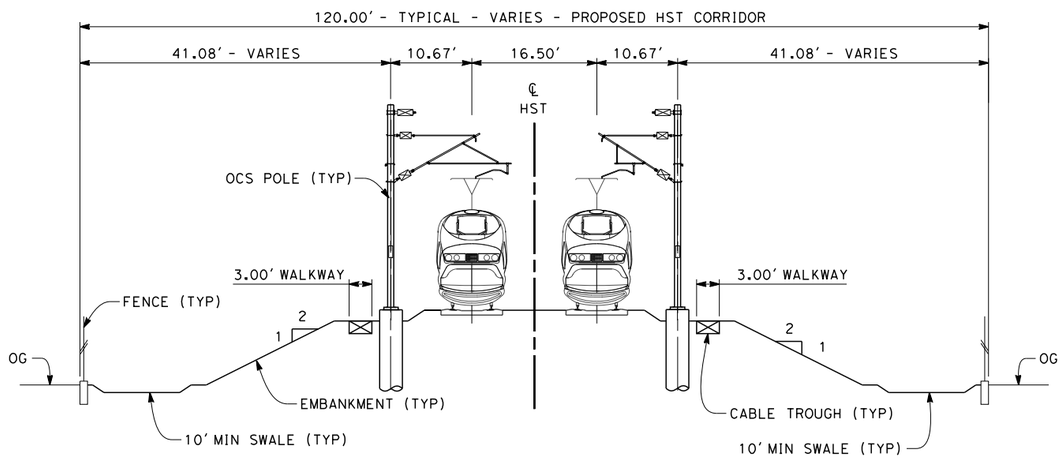
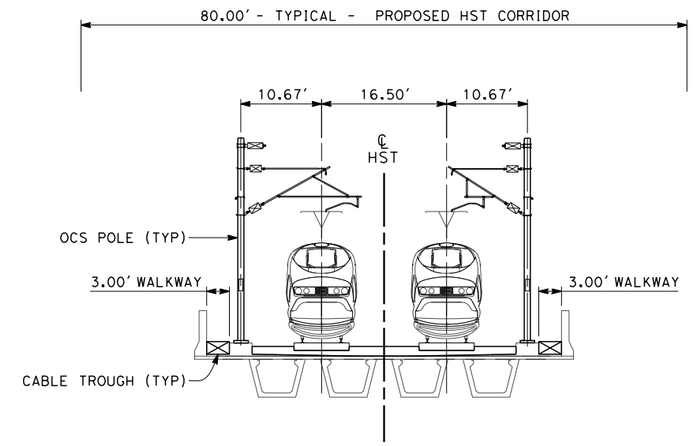
NOTES:

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



SECTION 4

TWIN TRACK - AT-GRADE WITH OPEN DRAINAGE
STA 4260+00 THROUGH STA 4360+00
STA 4760+00 THROUGH STA 4859+80



SECTION 5

TWIN TRACK - ELEVATED PRECAST CONCRETE GIRDER STRUCTURE
STA 4452+94 THROUGH STA 4453+92
STA 4528+40 THROUGH STA 4529+38

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY E. TANAKA
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
THROUGH ALLENSWORTH SUBSECTION
ALIGNMENT A2
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3423
SCALE AS SHOWN
SHEET NO. 22 OF 22

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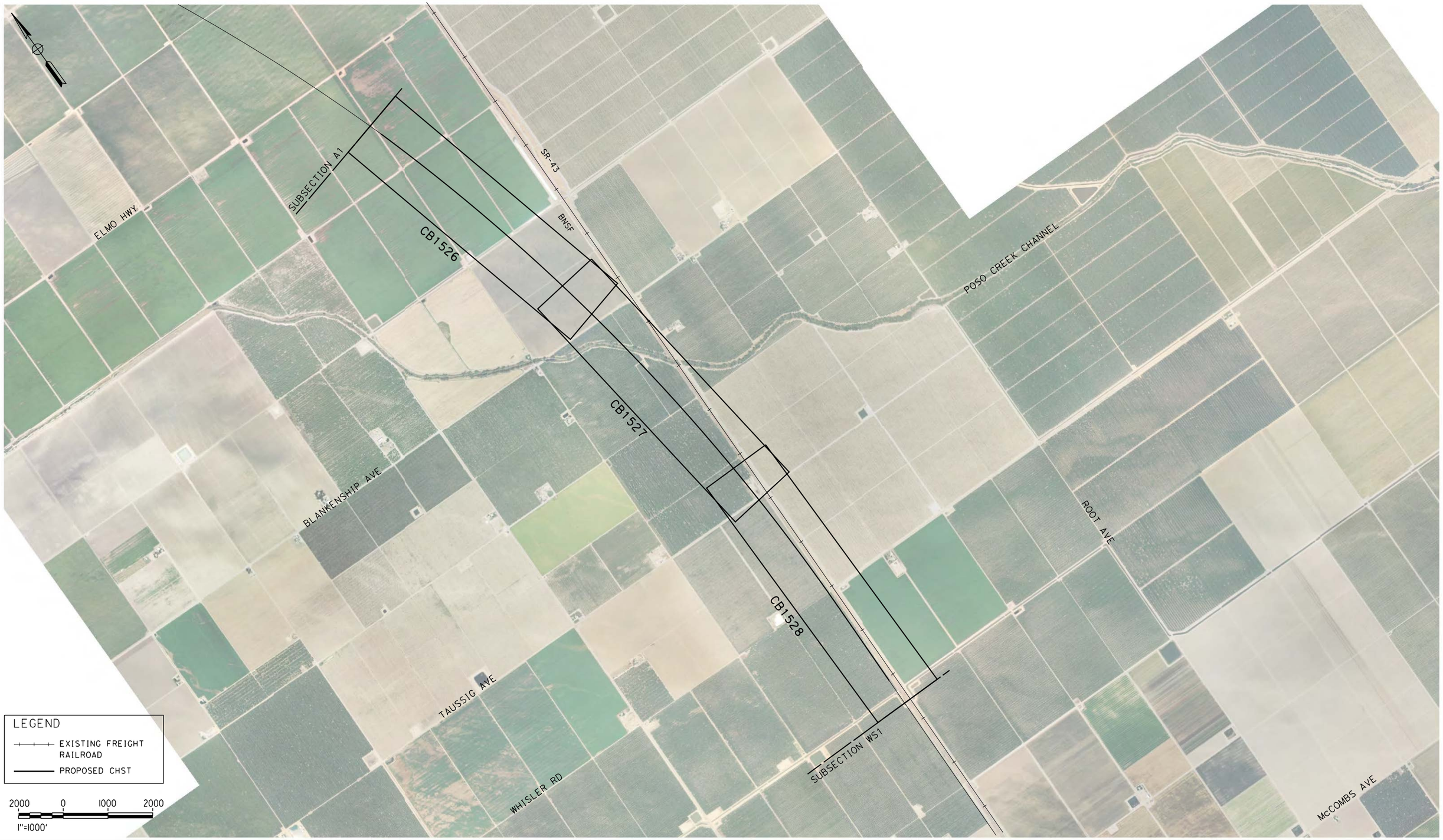

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
STA. 5154+50 TO 5322+33
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1525
SCALE AS SHOWN
SHEET NO. 1 OF 6

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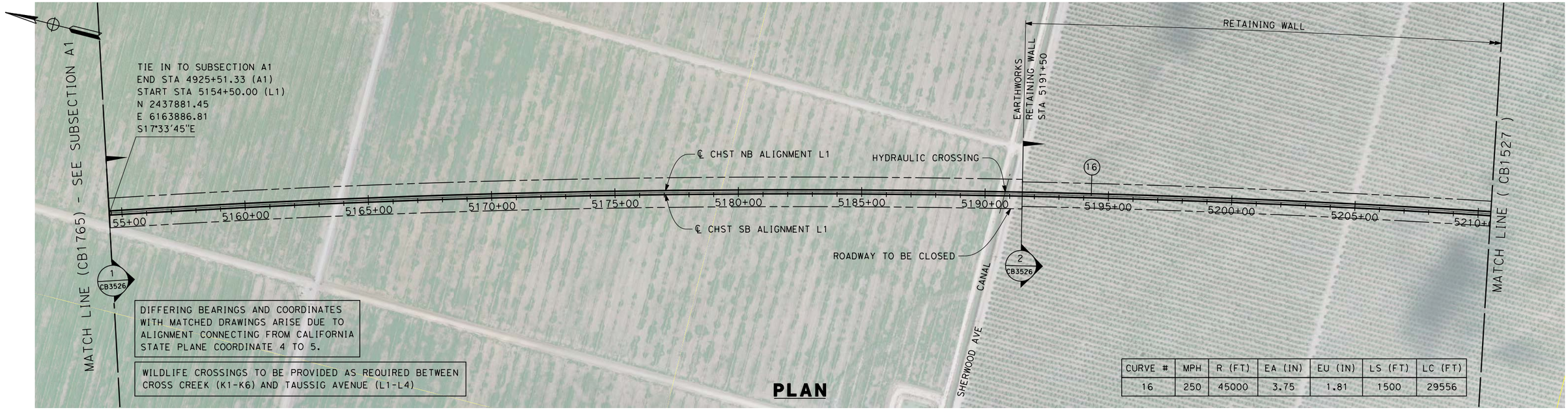
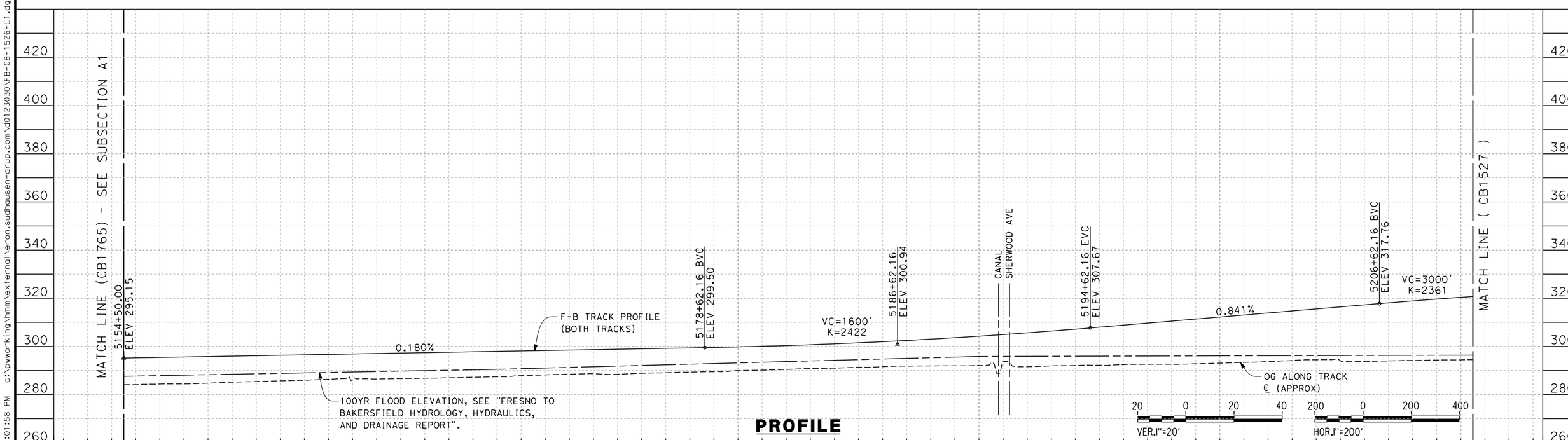


PLAN

CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
STA. 5154+50 TO 5210+50
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1526
SCALE AS SHOWN
SHEET NO. 2 OF 6

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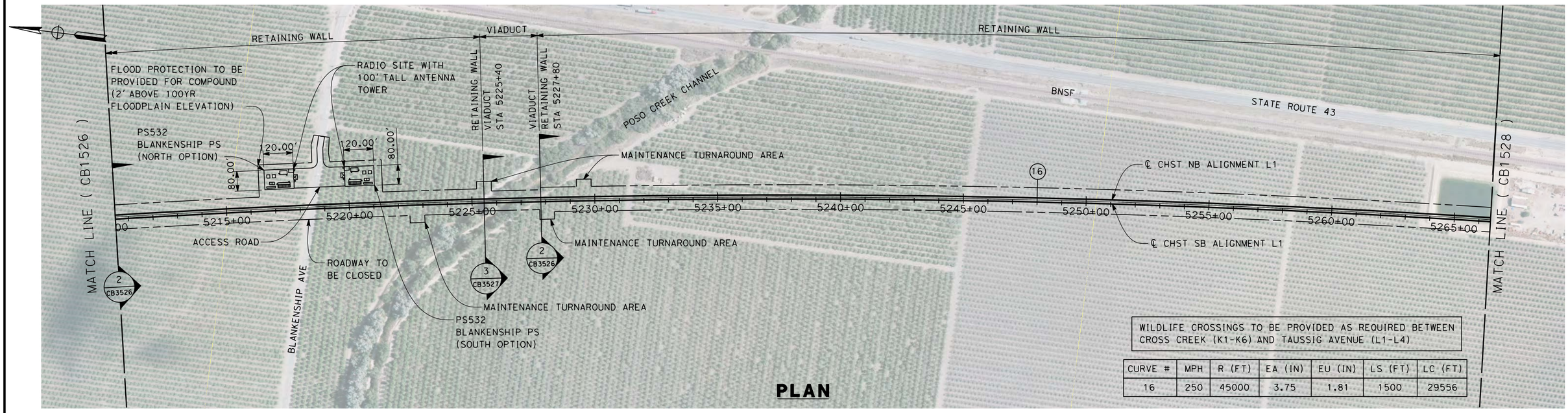
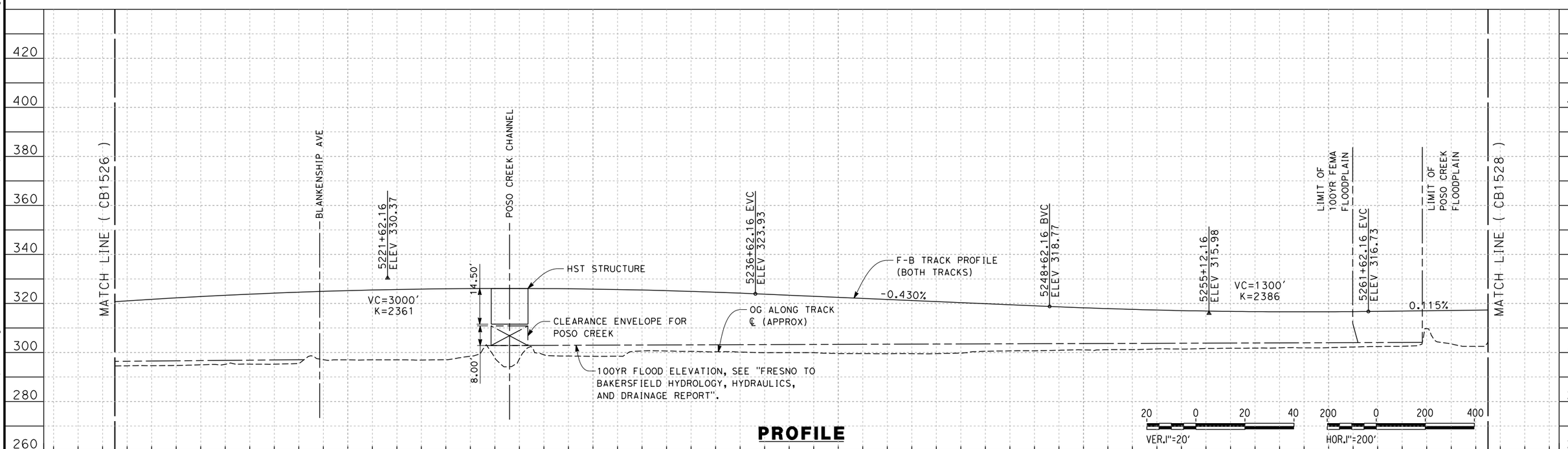


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
STA. 5210+50 TO 5266+50
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1527
SCALE AS SHOWN
SHEET NO. 3 OF 6

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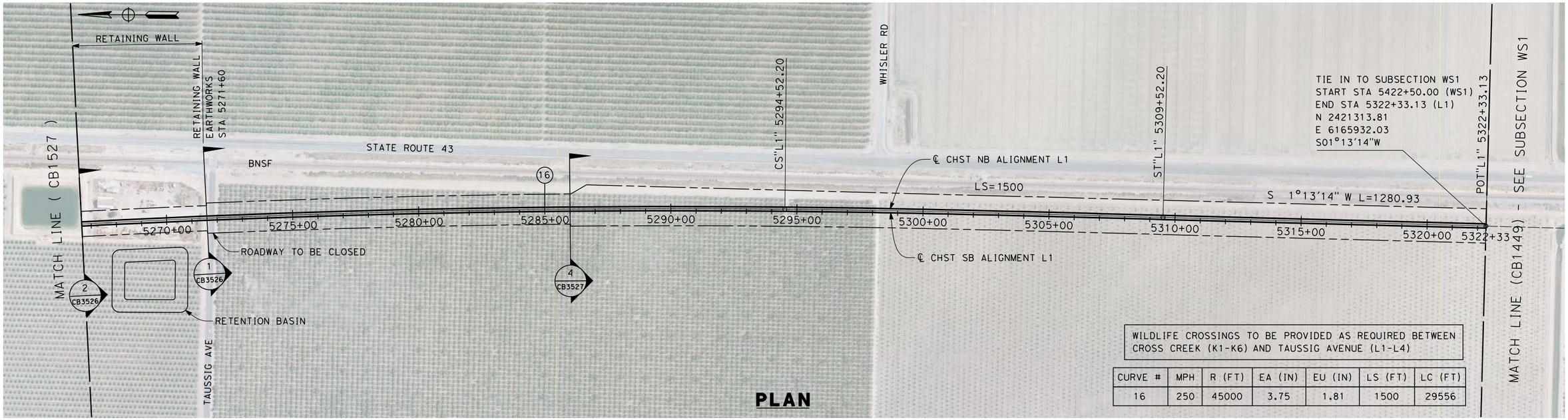
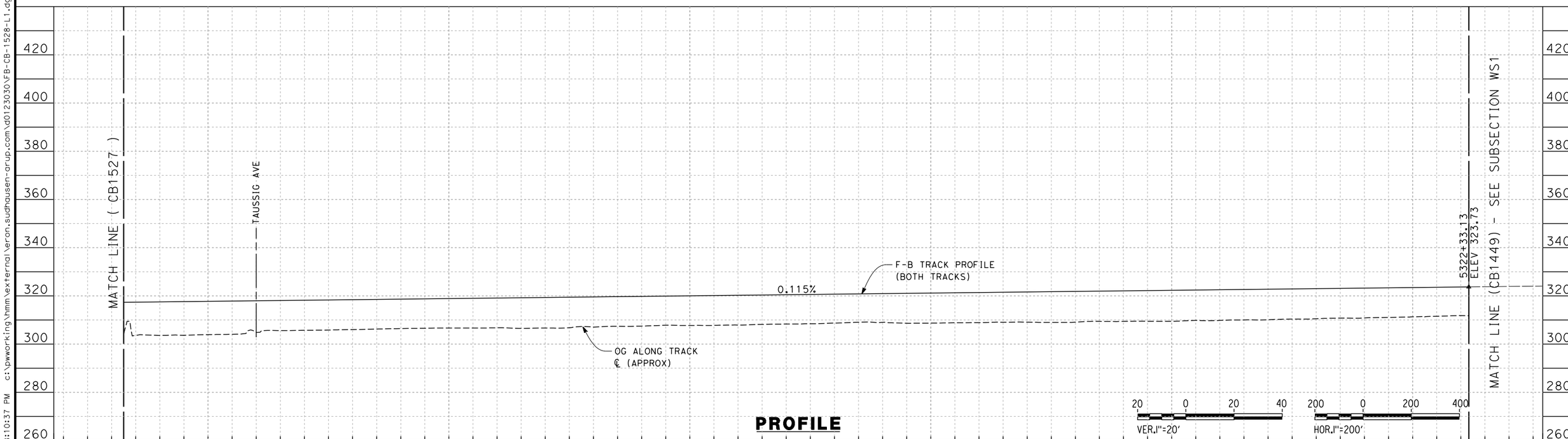


CURVE #	MPH	R (FT)	EA (IN)	EU (IN)	LS (FT)	LC (FT)
16	250	45000	3.75	1.81	1500	29556

PLAN



PROFILE

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
STA. 5266+50 TO 5322+33
PLAN AND PROFILE

CONTRACT NO. HSR 06-0003
DRAWING NO. CB1528
SCALE AS SHOWN
SHEET NO. 4 OF 6

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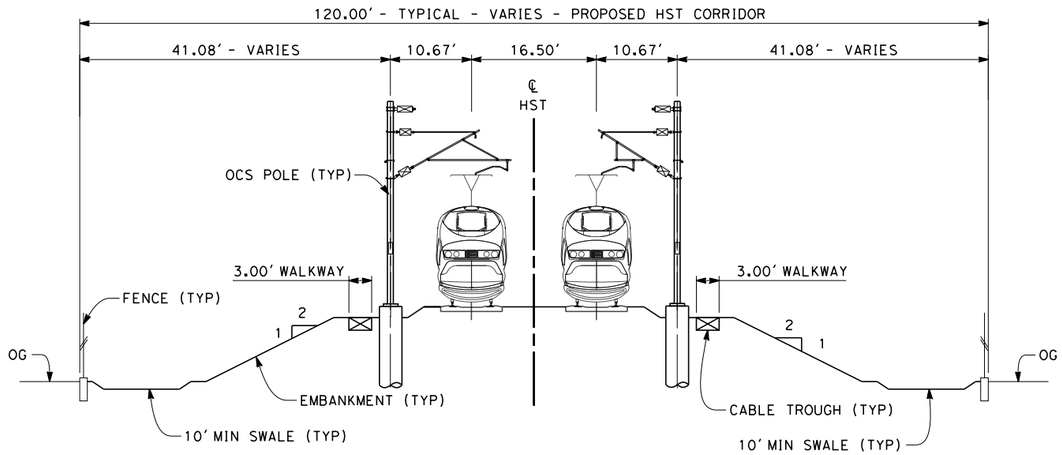
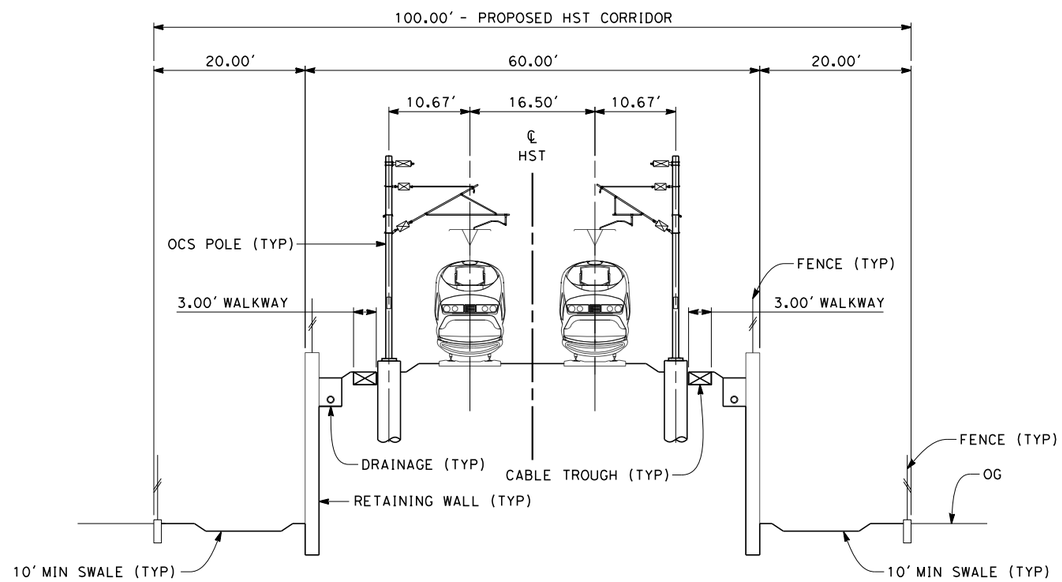
NOTES:

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



SECTION 1

TWIN TRACK - AT-GRADE WITH OPEN DRAINAGE
STA 5154+50 THROUGH STA 5191+50
STA 5271+60 THROUGH STA 5286+00



SECTION 2

TWIN TRACK - RETAINED EMBANKMENT
STA 5191+50 THROUGH STA 5225+40
STA 5227+80 THROUGH STA 5271+60

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3526
SCALE AS SHOWN
SHEET NO. 5 OF 6

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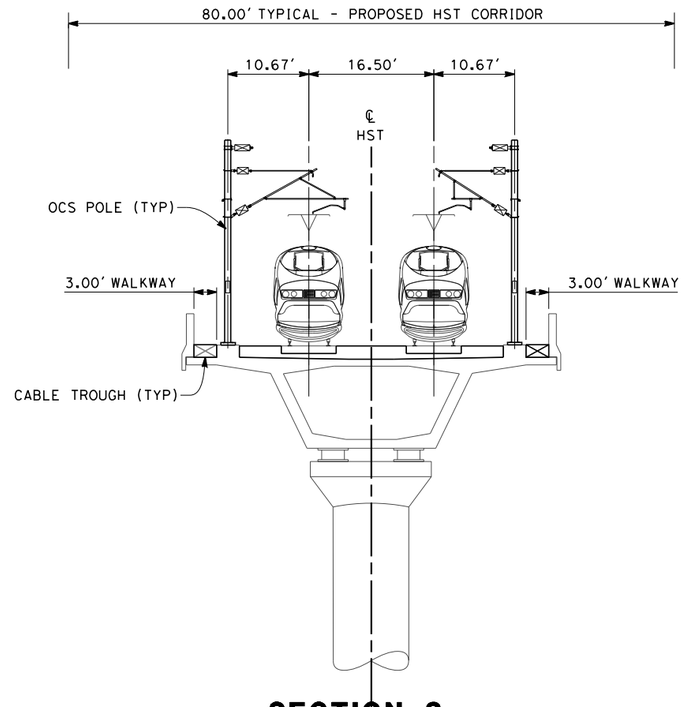
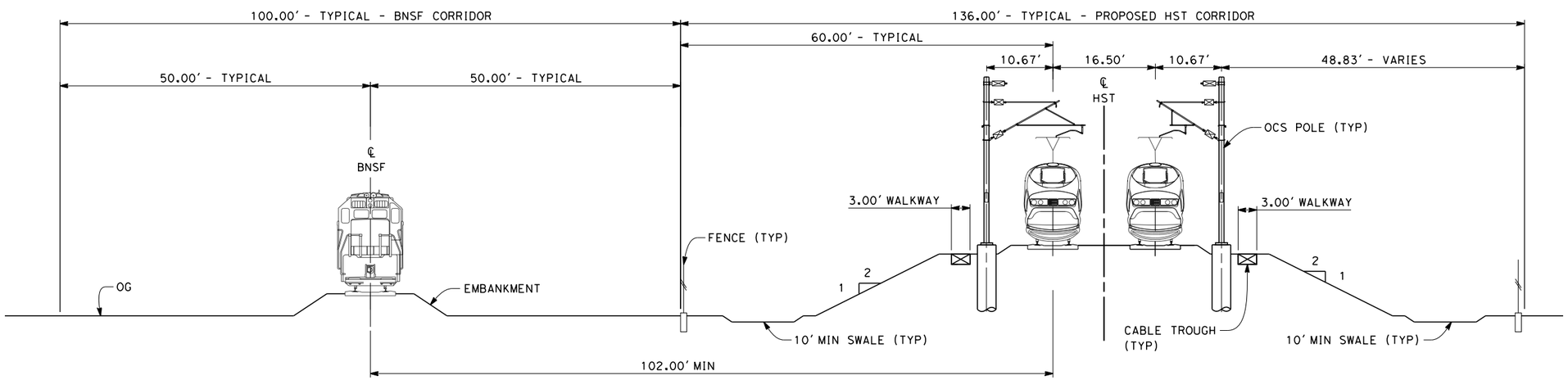
NOTES:

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



SECTION 3

TWIN TRACK - AERIAL VIADUCT
STA 5225+40 THROUGH STA 5227+80



SECTION 4

TWIN TRACK - ADJACENT TO SINGLE TRACK BNSF
STA 5286+00 TO STA 5322+33

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY S. LITSAS
DRAWN BY J. BORGHESI
CHECKED BY G. WALKER
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
POSO CREEK SUBSECTION
ALIGNMENT L1
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. CB3527
SCALE AS SHOWN
SHEET NO. 6 OF 6

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