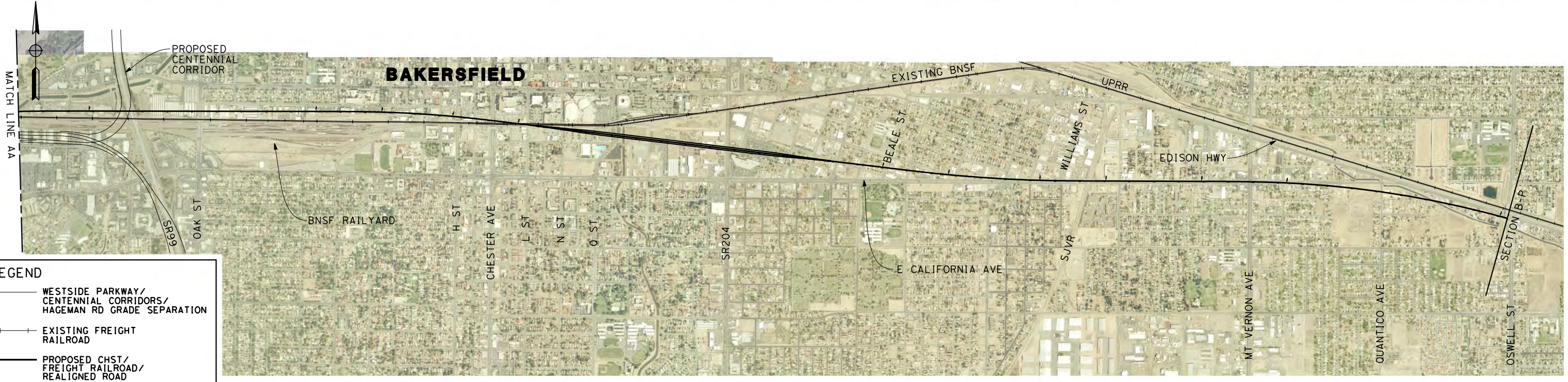
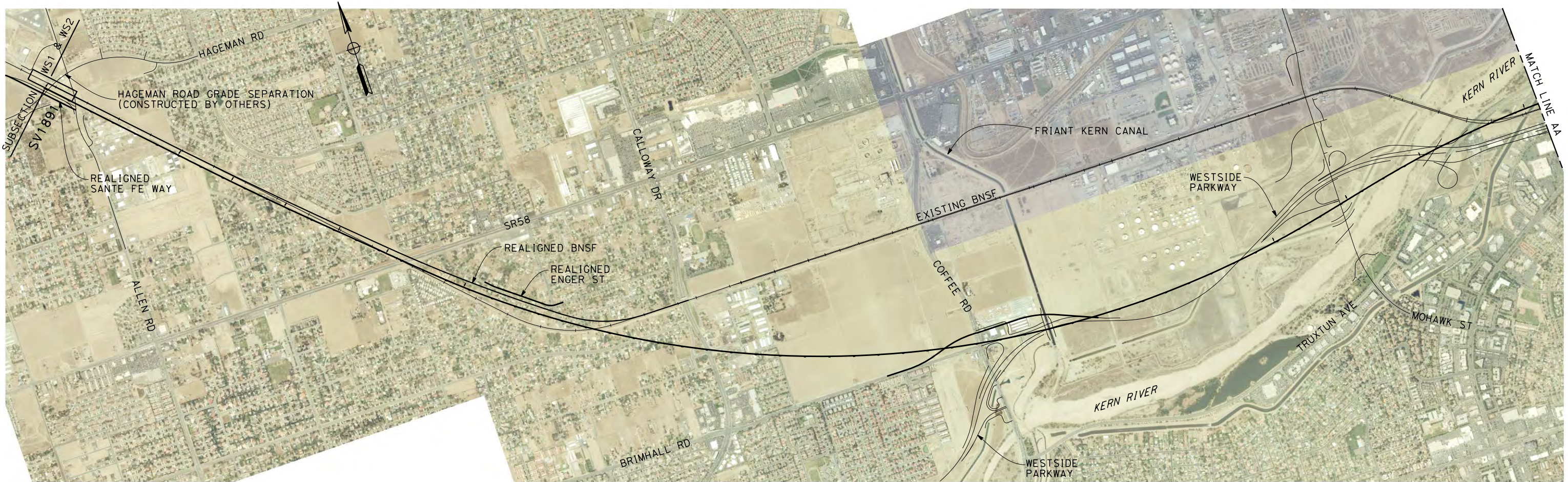
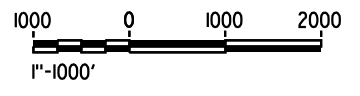


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LEGEND

- WESTSIDE PARKWAY/
CENTENNIAL CORRIDORS/
HAGEMAN RD GRADE SEPARATION
- EXISTING FREIGHT
RAILROAD
- PROPOSED CHST/
FREIGHT RAILROAD/
REALIGNED ROAD



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
N. HUTTON
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

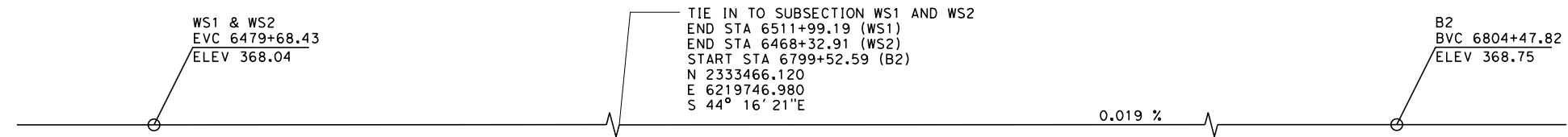
**NOT FOR
CONSTRUCTION**



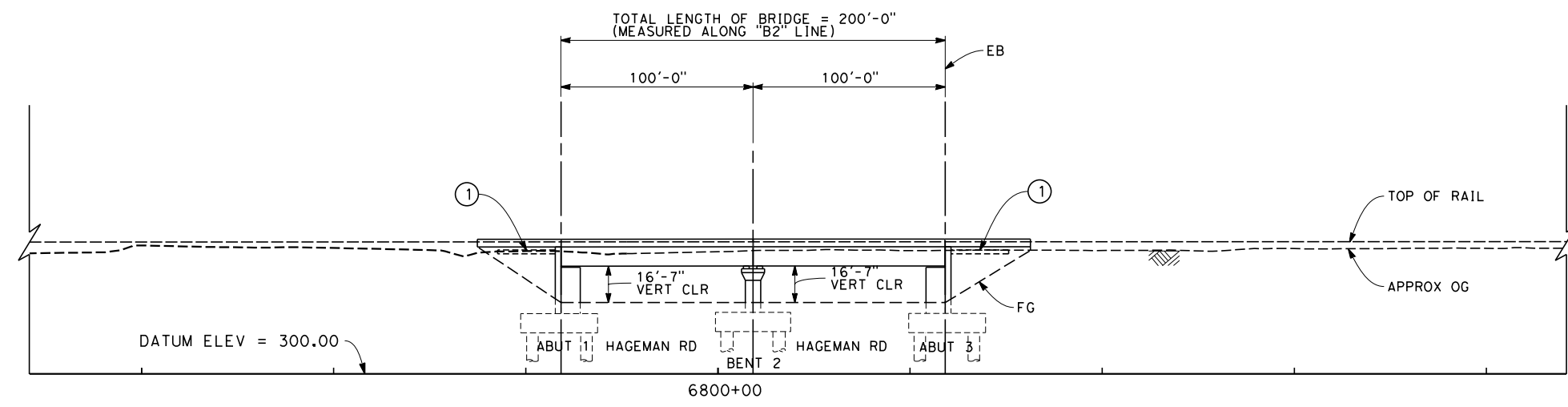
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 HAGEMAN ROAD UNDERPASS
 KEY MAP

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1890
 SCALE
AS SHOWN
 SHEET NO.
1 OF 2

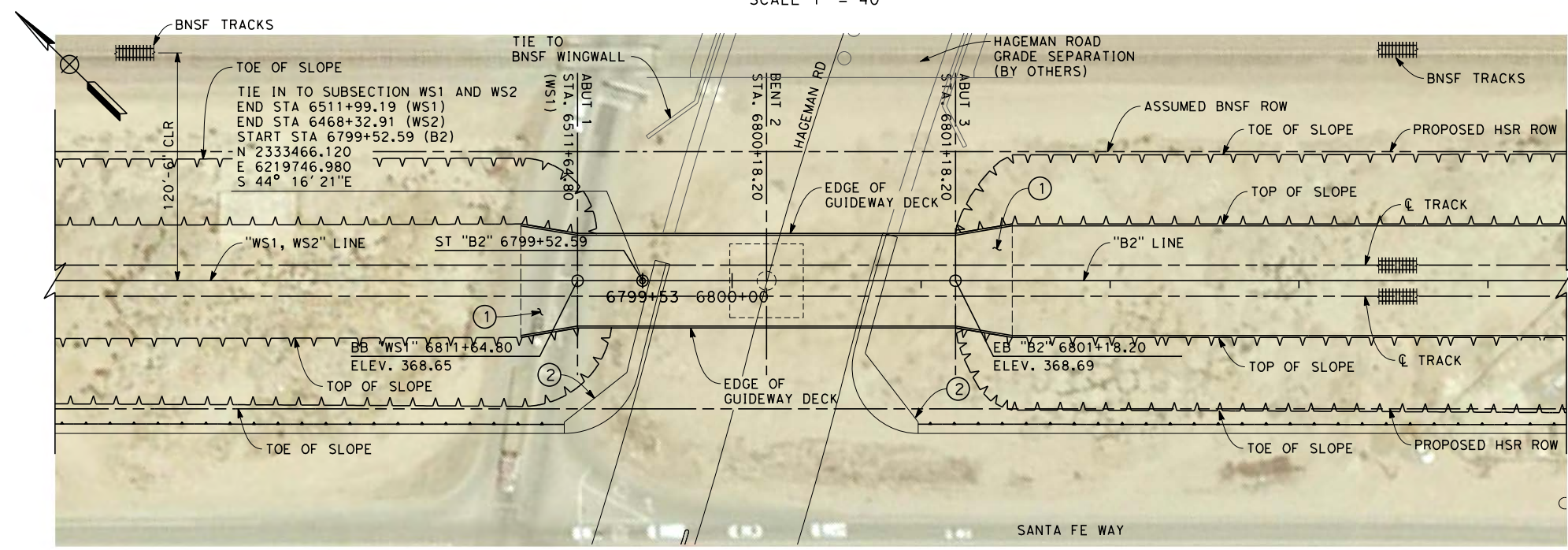
frank.palermo.12/20/2013 4:56:53 PM CAHSR-r1.tbl PDF_half_black_200dpi.plt pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-1891-B2.dgn



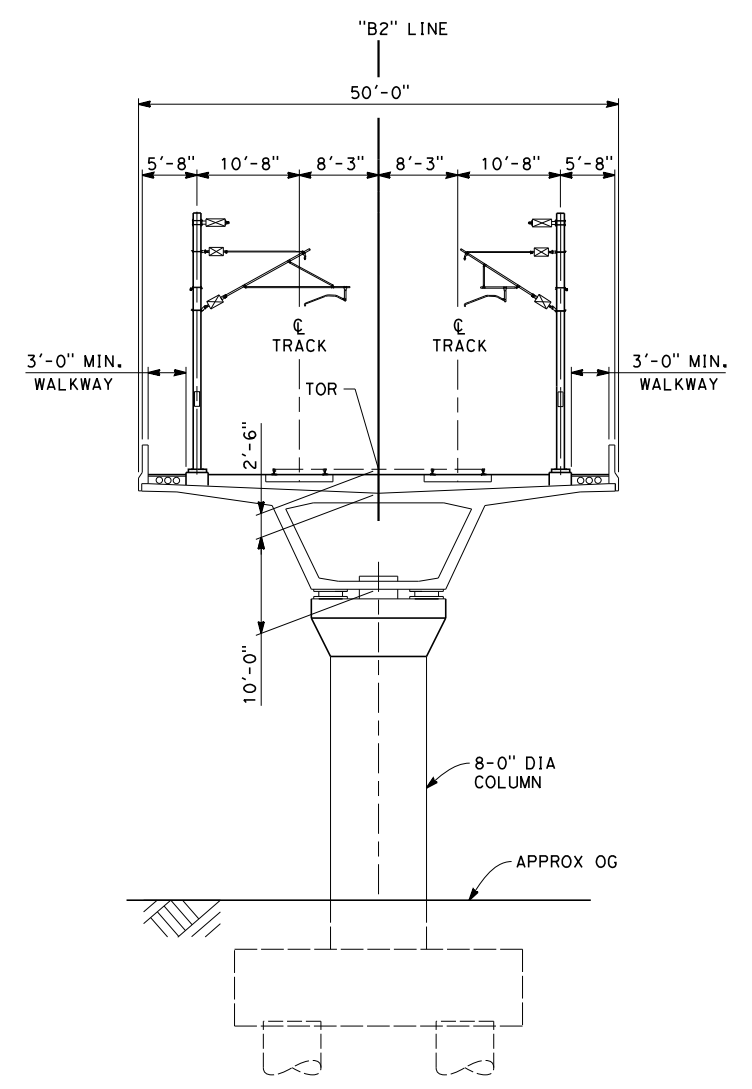
TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



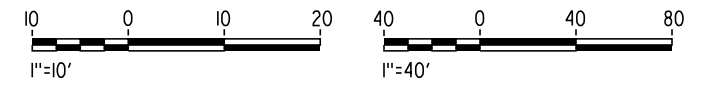
PLAN
SCALE 1" = 40'



TYPICAL SECTION
SCALE: 1" = 10'

NOTE:
1. PILE LENGTH TO BE DETERMINED.

LEGEND:
① STRUCTURE APPROACH SLAB
② RETAINING WALL



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
J. VALENZUELA
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

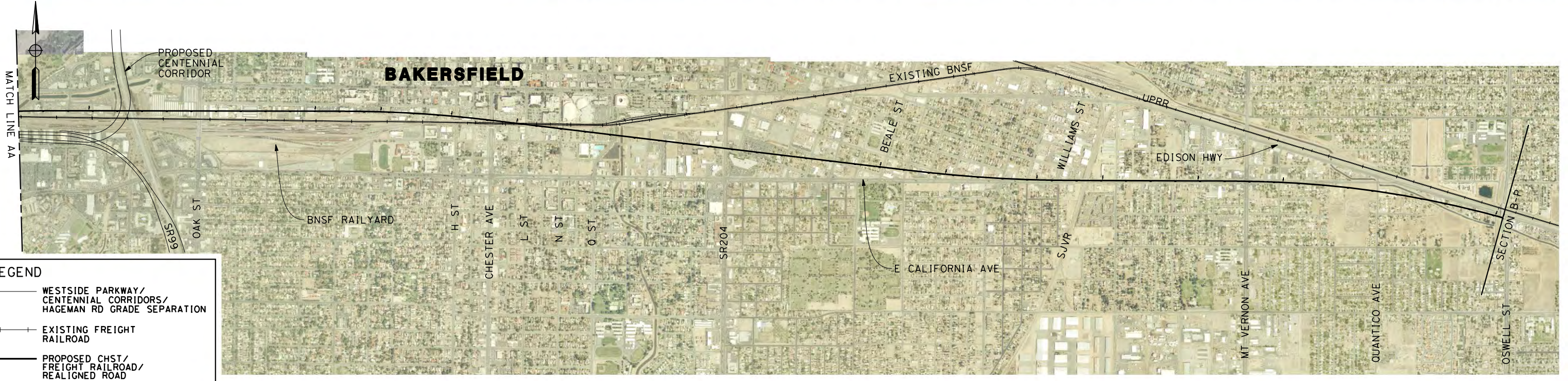
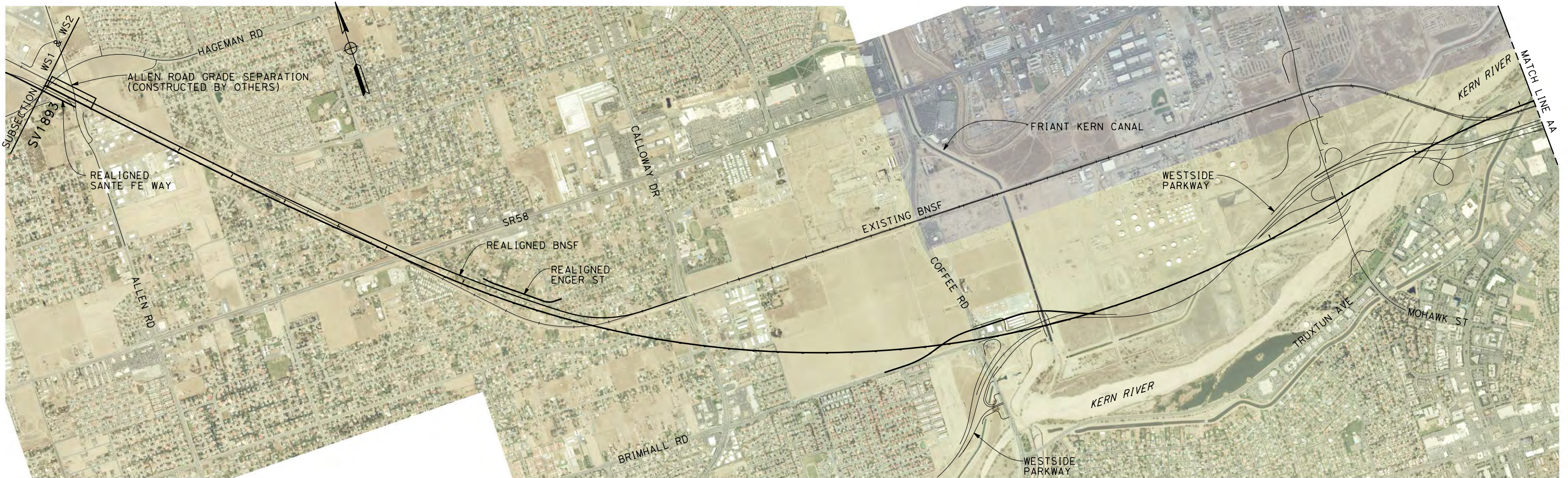
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 HAGEMAN ROAD UNDERPASS
 PLAN AND ELEVATION

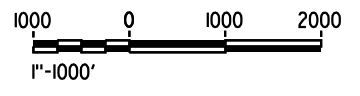
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV1891
 SCALE
AS SHOWN
 SHEET NO.
2 OF 2

frank.palermo.12/20/2013 4:57:28 PM CAHSR-r1.tbl PDF_half_black_200dpi.ppt \\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-1892-B2.dgn



LEGEND

- WESTSIDE PARKWAY/
CENTENNIAL CORRIDORS/
HAGEMAN RD GRADE SEPARATION
- EXISTING FREIGHT
RAILROAD
- PROPOSED CHST/
FREIGHT RAILROAD/
REALIGNED ROAD



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 ALLEN ROAD UNDERPASS
 KEY MAP

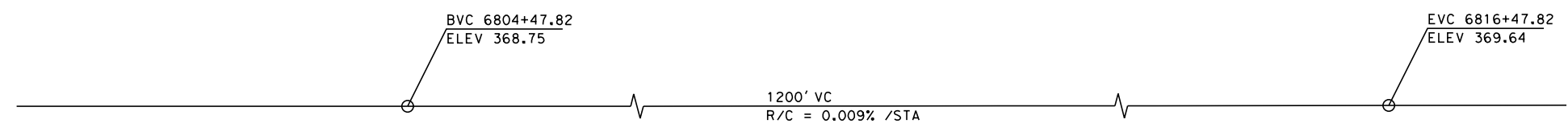
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV1892

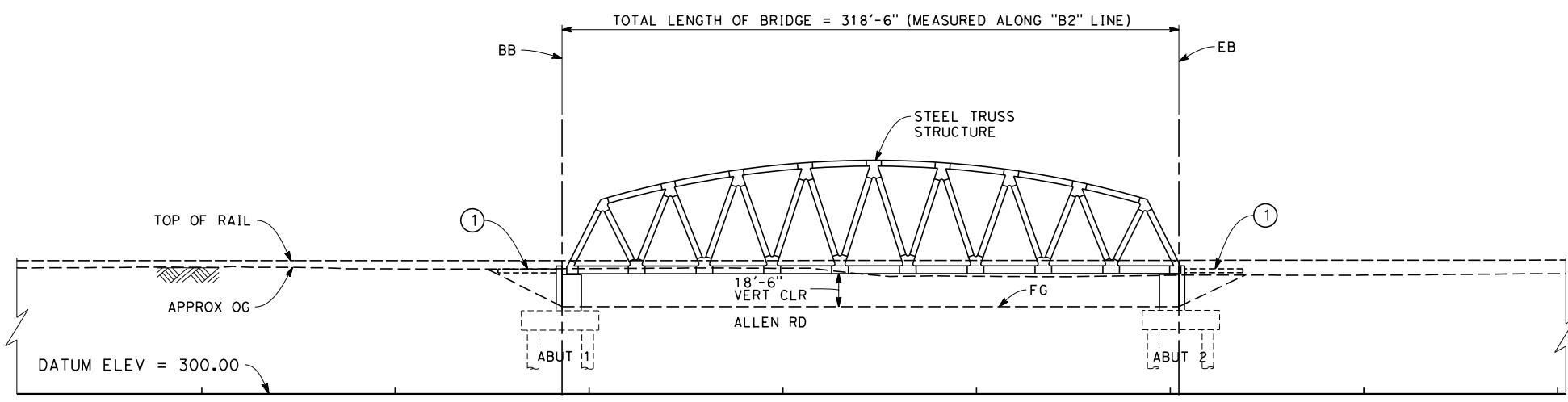
SCALE
AS SHOWN

SHEET NO.
1 OF 2

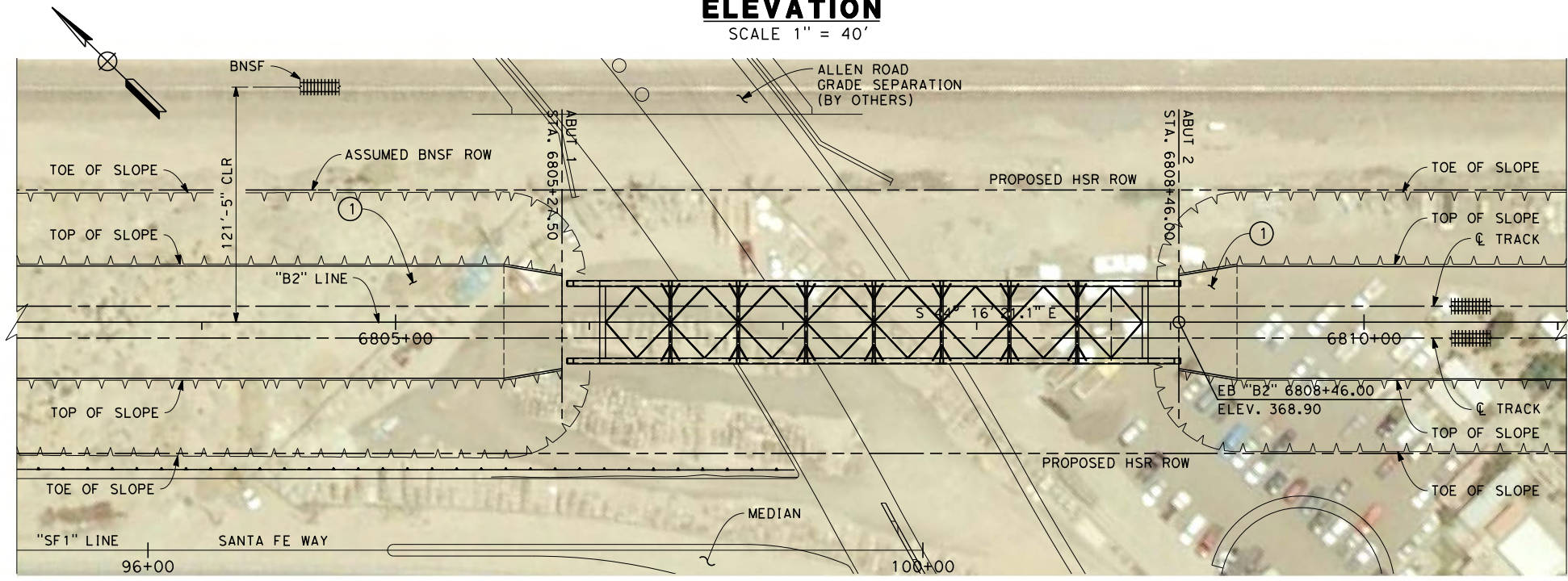
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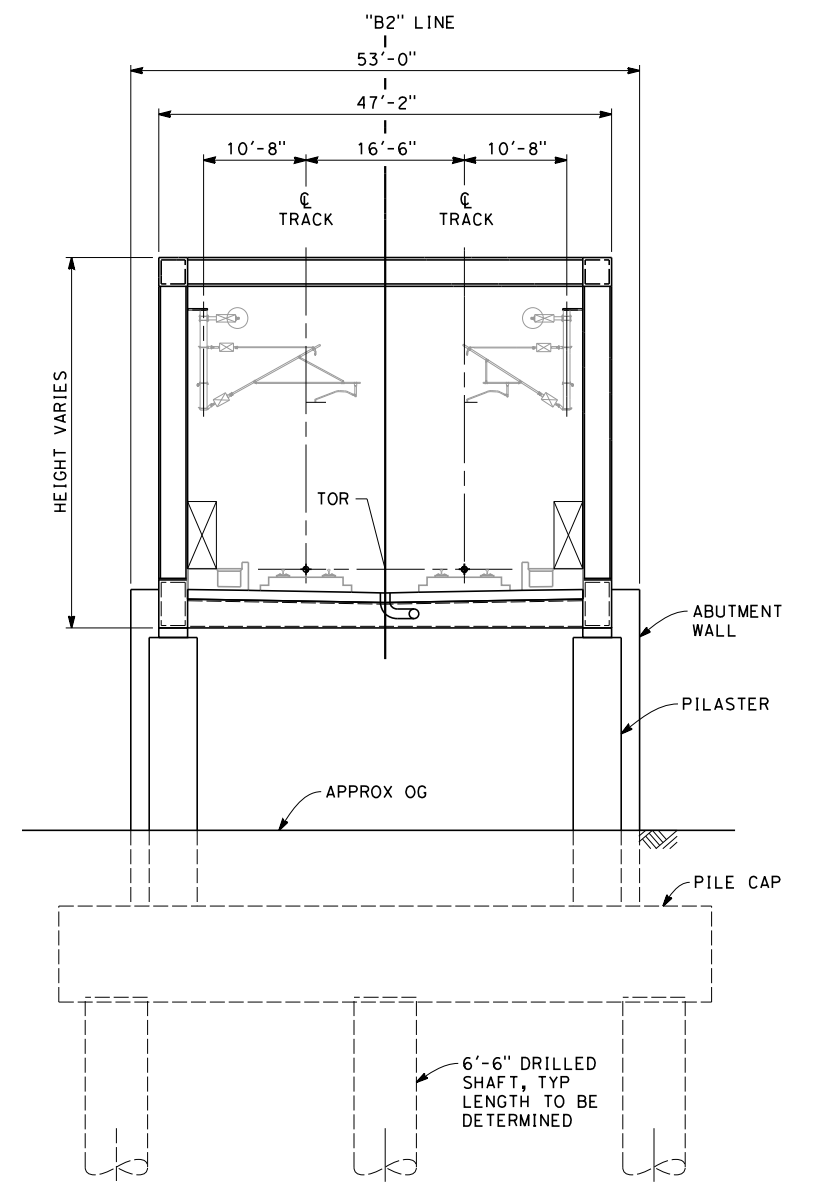
TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



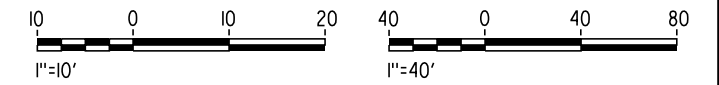
PLAN
SCALE 1" = 40'



TYPICAL SECTION
SCALE: 1" = 10'

NOTE:
1. PILE LENGTH TO BE DETERMINED.

LEGEND:
① STRUCTURE APPROACH SLAB



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
J. VALENZUELA
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

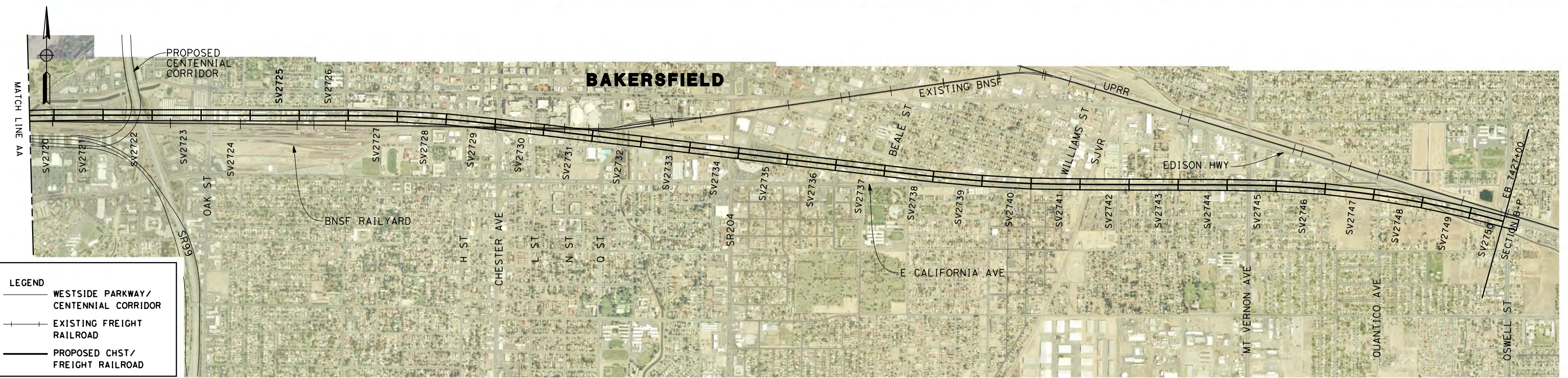
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



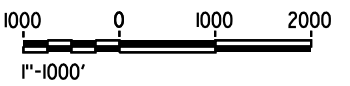
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
ALLEN ROAD UNDERPASS
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV1893
SCALE
AS SHOWN
SHEET NO.
2 OF 2



LEGEND

- WESTSIDE PARKWAY / CENTENNIAL CORRIDOR
- EXISTING FREIGHT RAILROAD
- PROPOSED CHST / FREIGHT RAILROAD



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 KEY MAP

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2700

SCALE
AS SHOWN

SHEET NO.
1 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

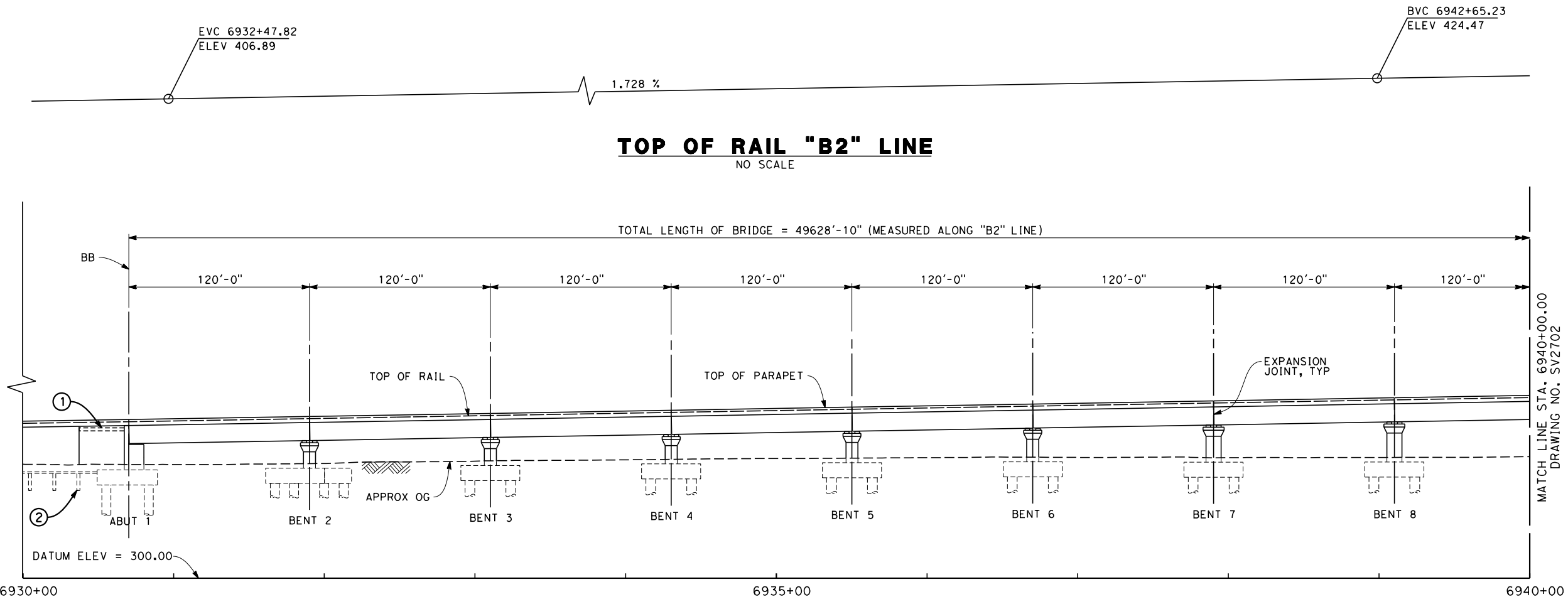
⑩1

R = 19508.25'

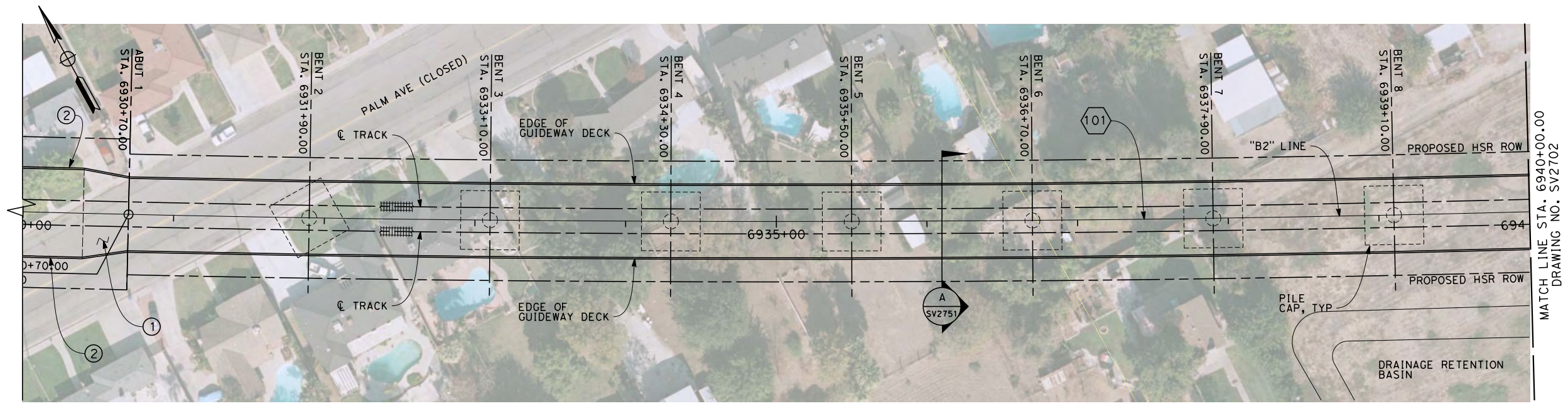
Δ = 50° 11' 03.7"

T = 9135.1'

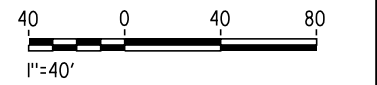
L = 17086.9'



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

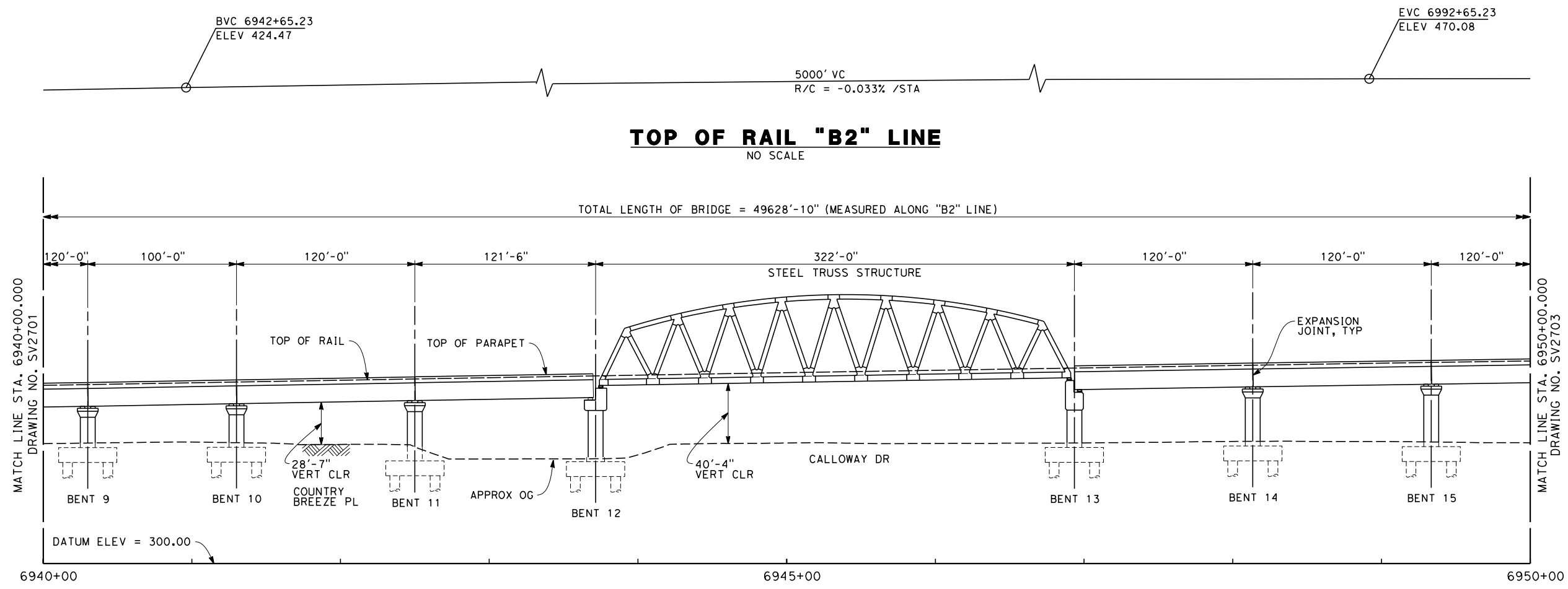
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2701

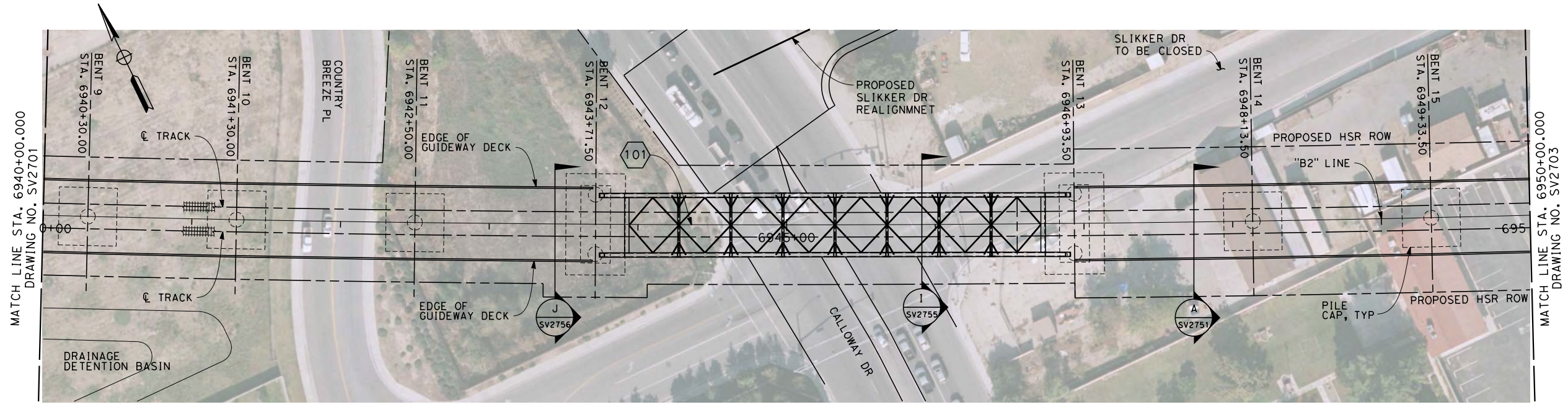
SCALE
AS SHOWN

SHEET NO.
2 OF 57

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

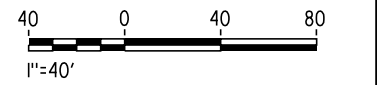
101

R = 19508.25'

Δ = 50° 11' 03.7"

T = 9135.1'

L = 17086.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2702

SCALE
AS SHOWN

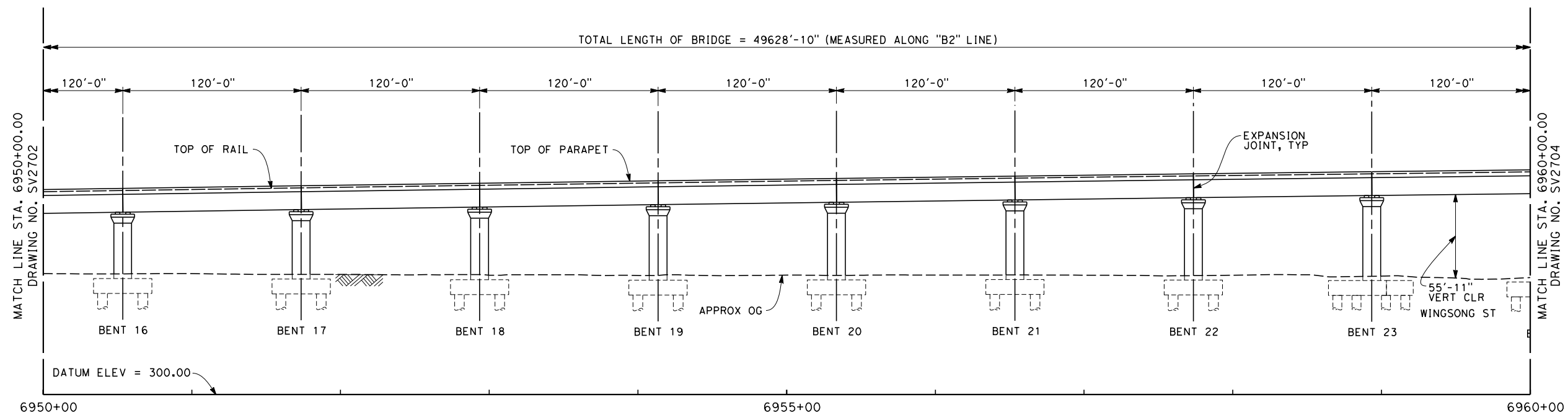
SHEET NO.
3 OF 57

BVC 6942+65.23
ELEV 424.47

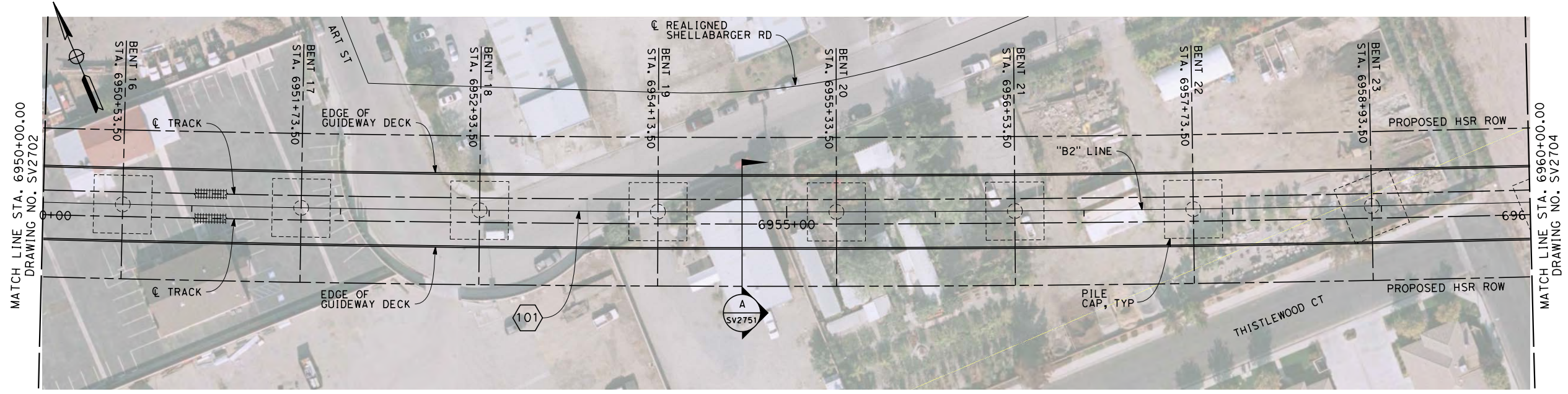
EVC 6992+65.23
ELEV 470.08

5000' VC
R/C = -0.033% /STA

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

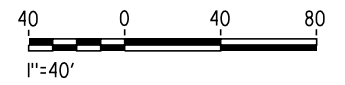
101

R = 19508.25'

Δ = 50° 11' 03.7"

T = 9135.1'

L = 17086.9'



12/20/2013 4:33:49 PM c:\pwworking\hmm\external\frank.palermo01-ar.com\dms71887\FB-SV-2703-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

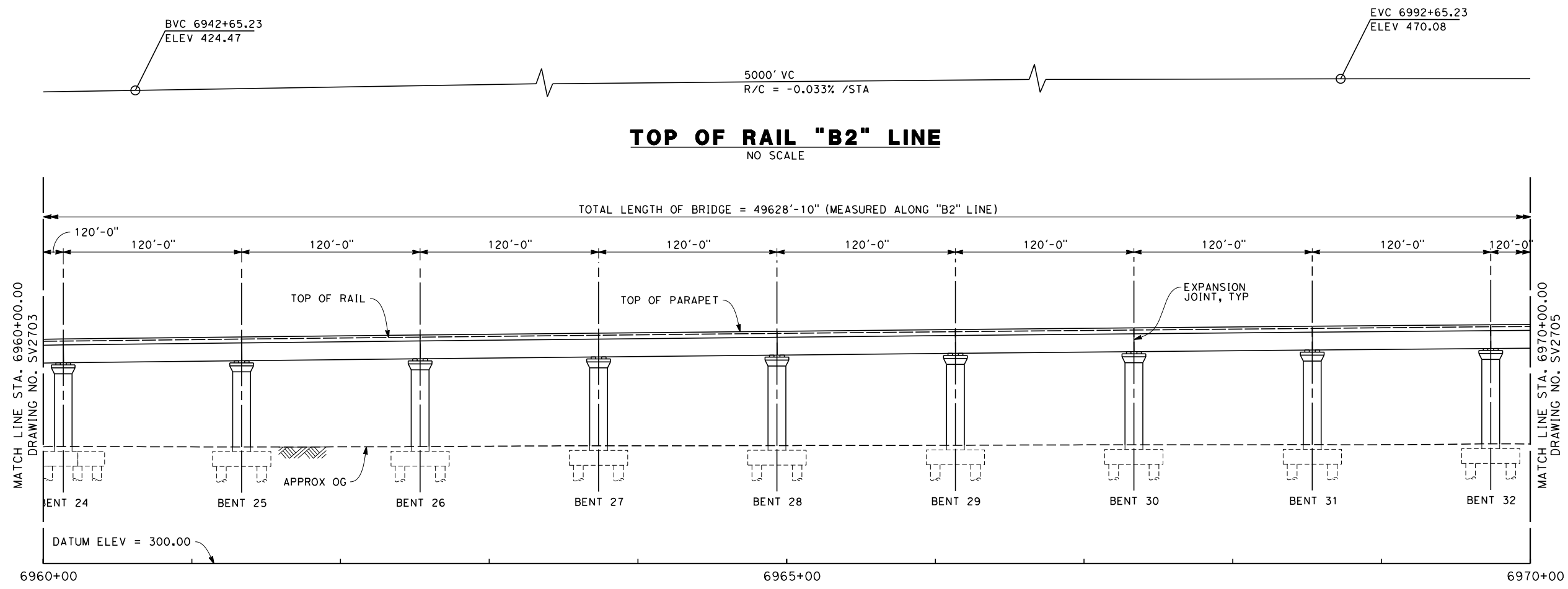
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HSR 06-0003

DRAWING NO.
SV2703

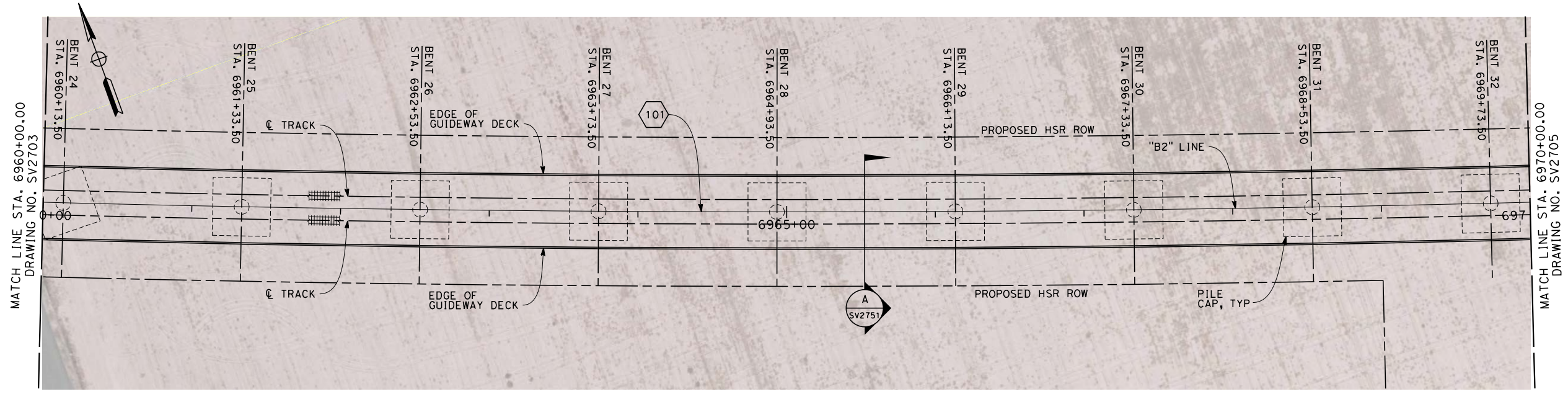
SCALE
AS SHOWN

SHEET NO.
4 OF 57

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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

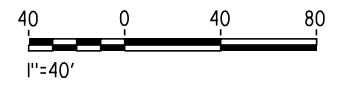
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑩

R = 19508.25'
 Δ = 50° 11' 03.7"
 T = 9135.1'
 L = 17086.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2704

SCALE
AS SHOWN

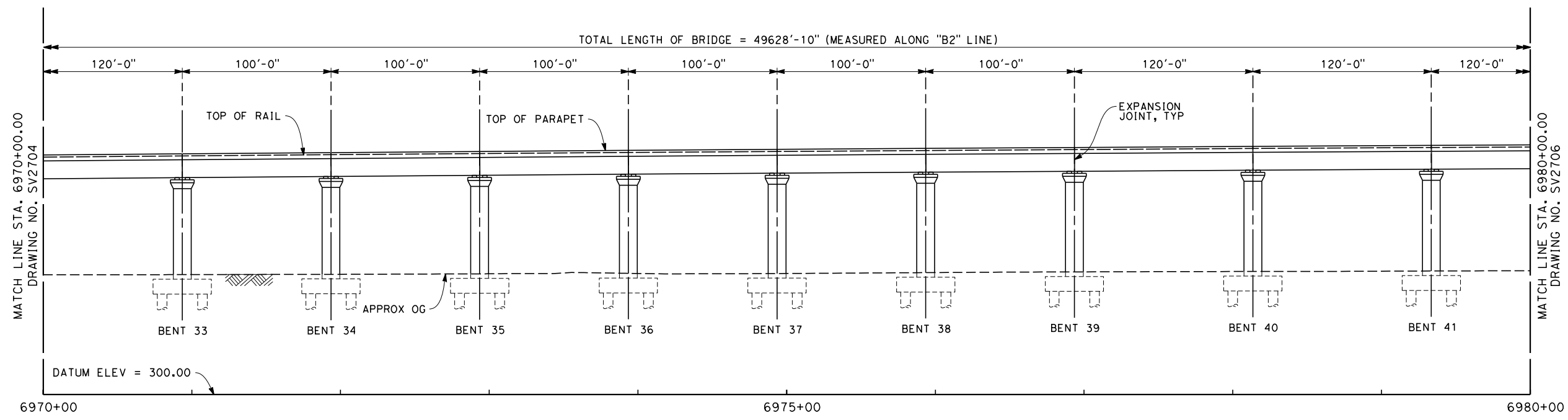
SHEET NO.
5 OF 57

BVC 6942+65.23
ELEV 424.47

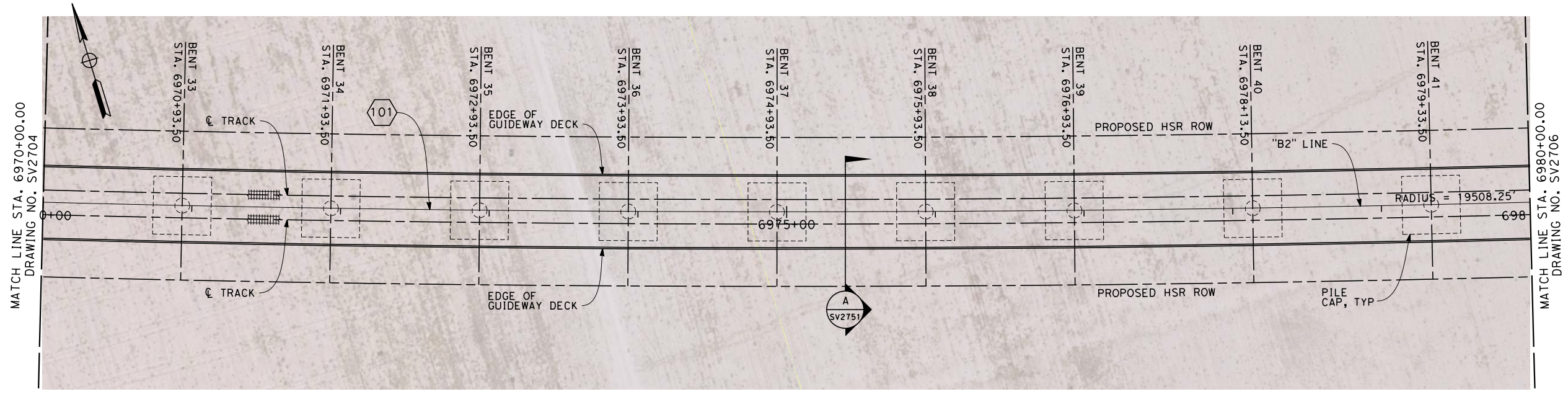
EVC 6992+65.23
ELEV 470.08

5000' VC
R/C = -0.033% /STA

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

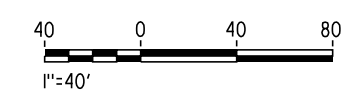
⑩ 101

R = 19508.25'

Δ = 50° 11' 03.7"

T = 9135.1'

L = 17086.9'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

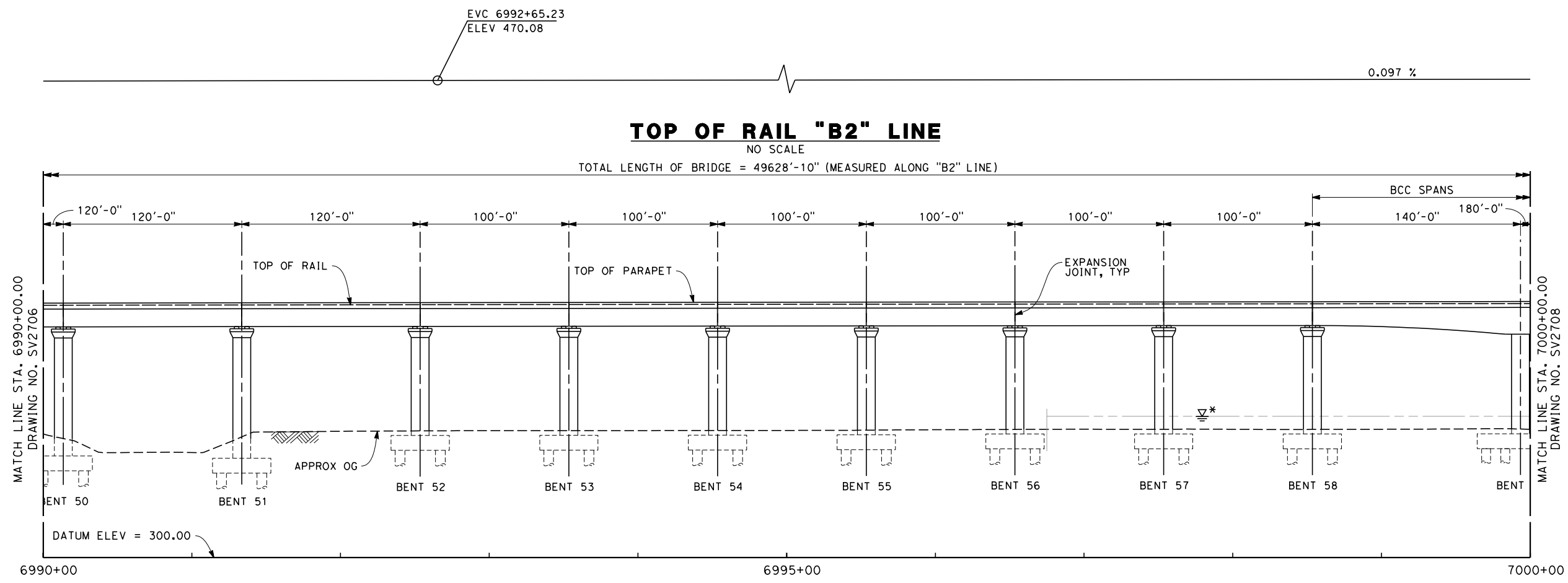
DRAWING NO.
SV2705

SCALE
AS SHOWN

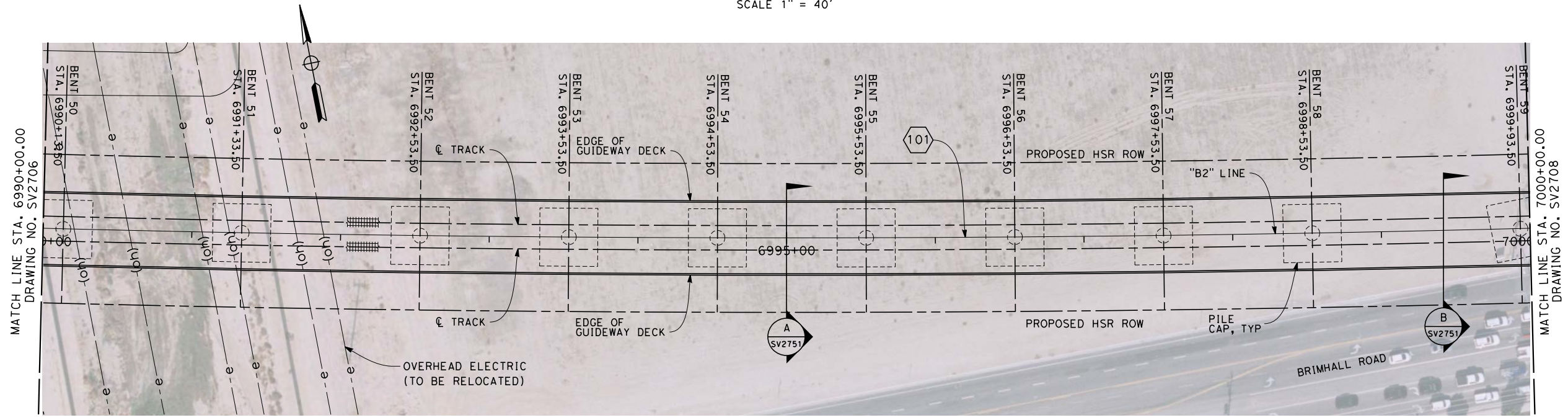
SHEET NO.
6 OF 57

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- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
 ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



ELEVATION
SCALE 1" = 40'

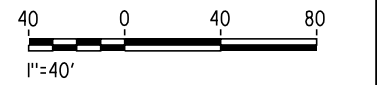


- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑩ 101

R = 19508.25'
 Δ = 50° 11' 03.7"
 T = 9135.1'
 L = 17086.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

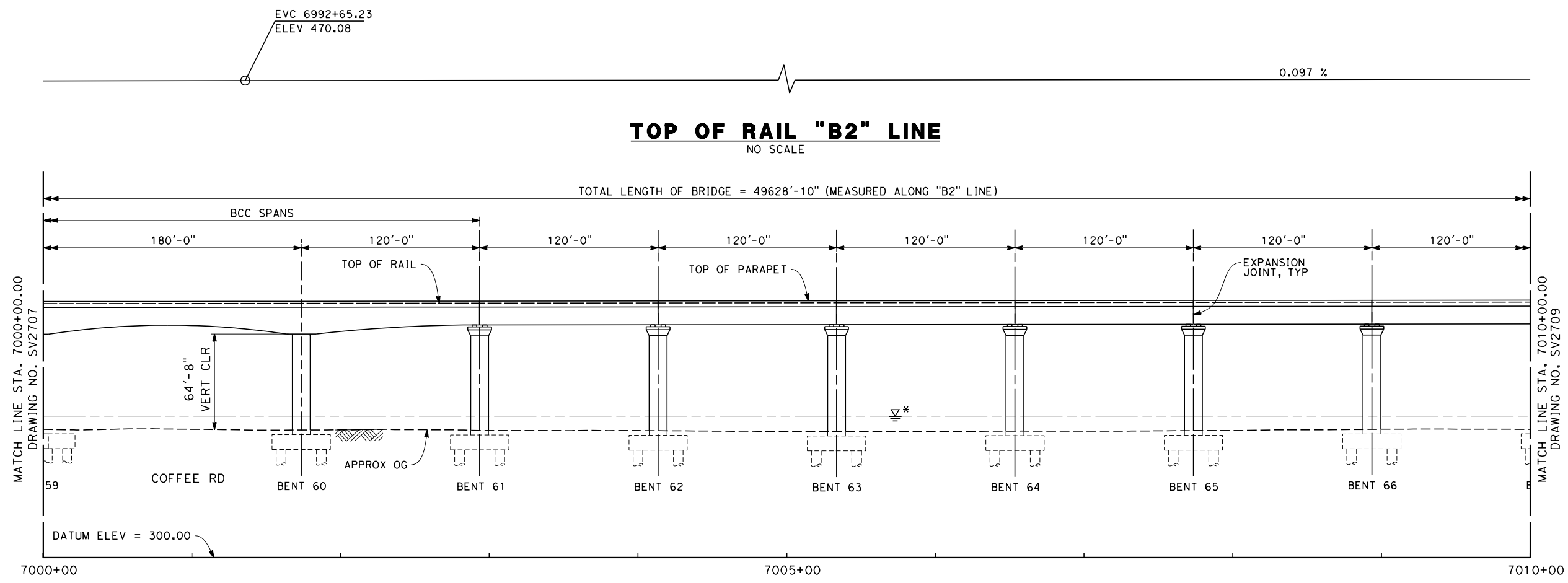
DRAWING NO.
SV2707

SCALE
AS SHOWN

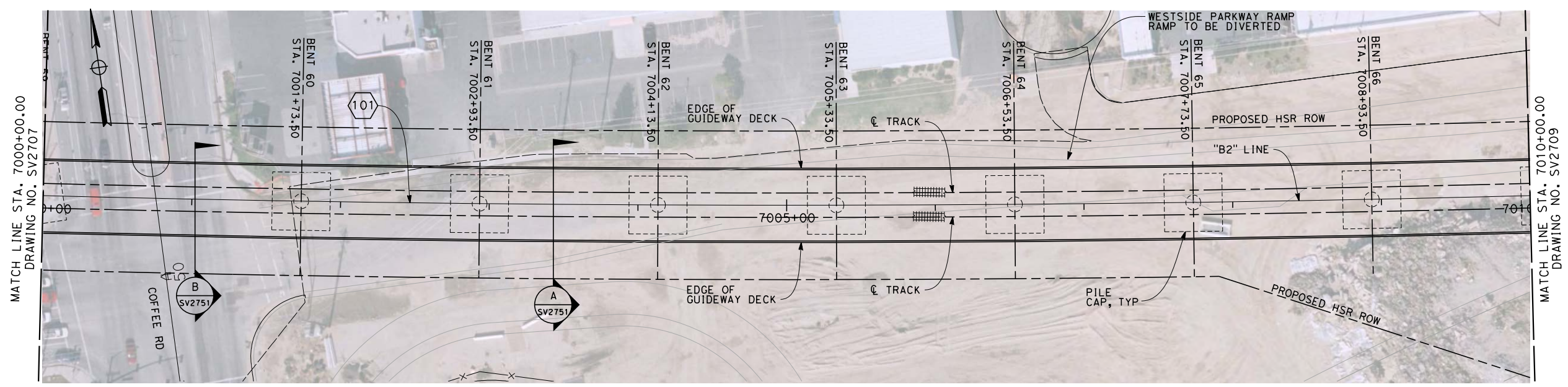
SHEET NO.
8 OF 57

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- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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 4. UTILITY LOCATIONS TO BE DETERMINED
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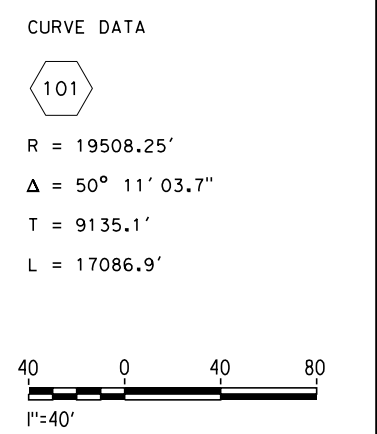


ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

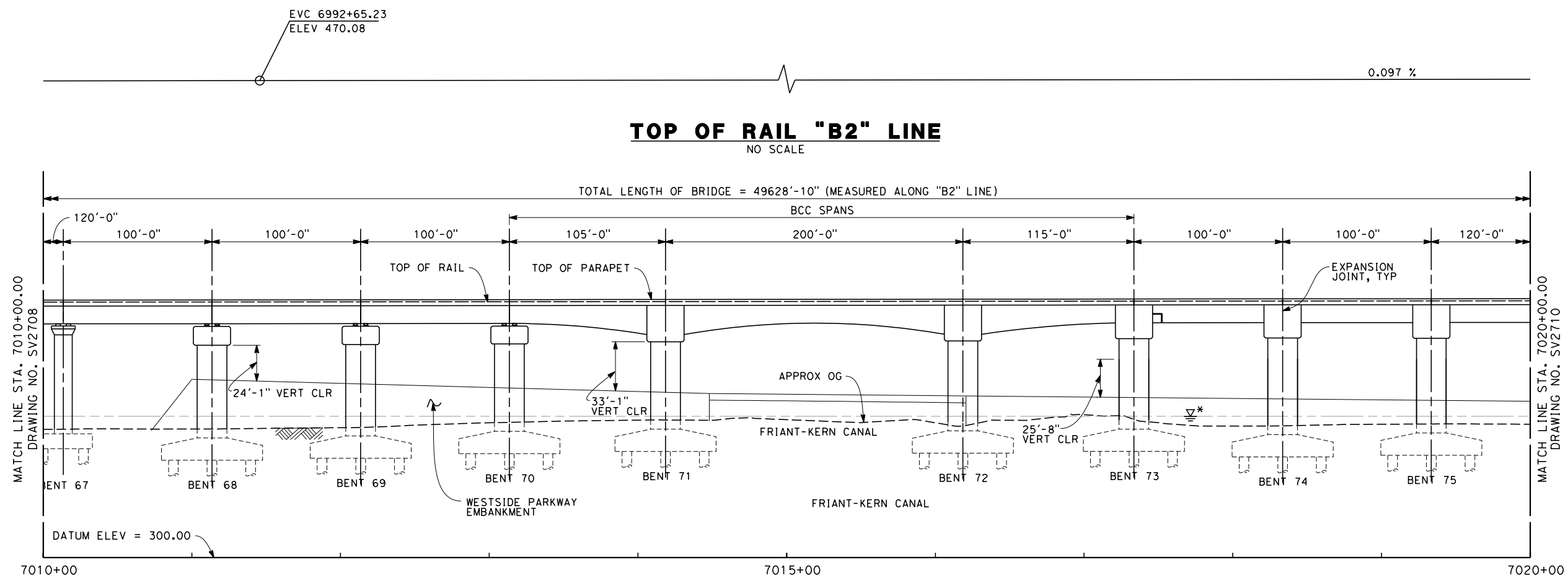
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SV2708

SCALE
AS SHOWN

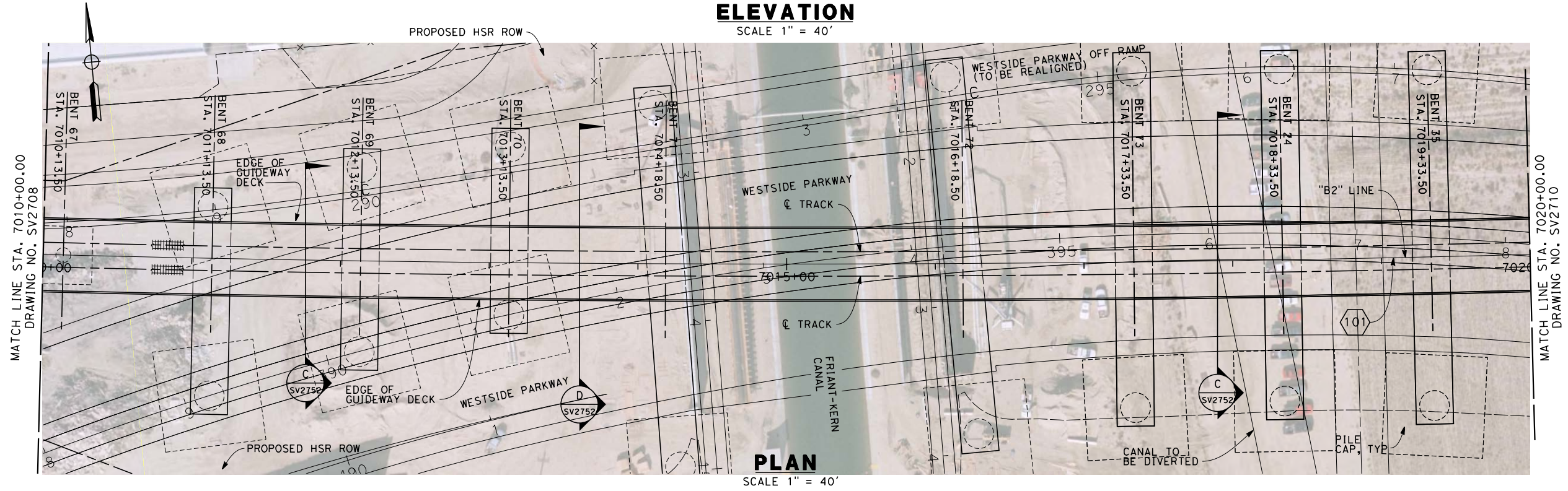
SHEET NO.
9 OF 57

12/20/2013 4:36:07 PM c:\pwworking\hmm\external\frank.palermo01-ar-up.com\dms71887\FB-SV-2709-B2.dgn

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
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ELEVATION
SCALE 1" = 40'



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

101

R = 19508.25'

Δ = 50° 11' 03.7"

T = 9135.1'

L = 17086.9'

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

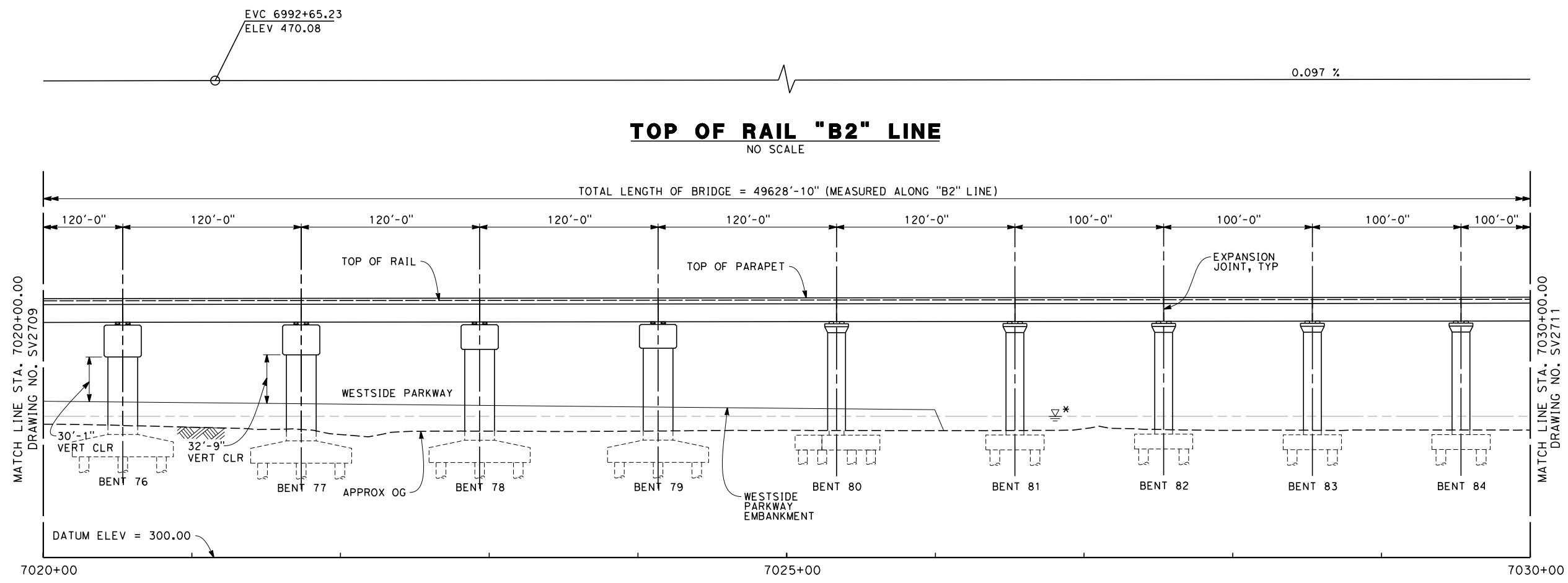
DRAWING NO.
SV2709

SCALE
AS SHOWN

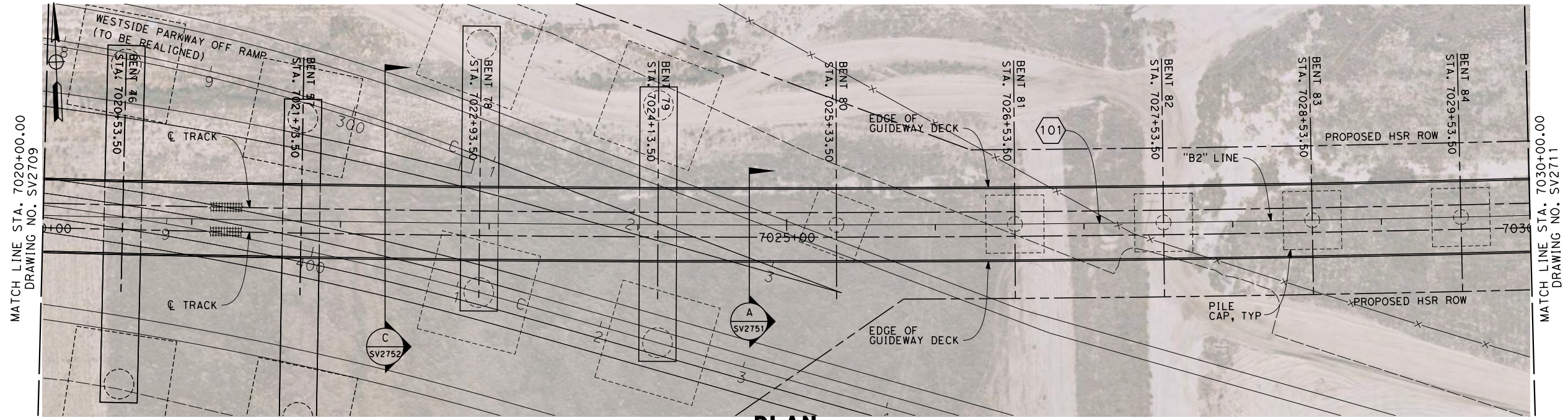
SHEET NO.
10 OF 57

c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2710-B2.dgn

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 SIMPLE SPANS - MSS OR FLPM
 CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 STEEL TRUSS - INSITU, SLID OR LAUNCHED
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ELEVATION
SCALE 1" = 40'



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑩1

R = 19508.25'
 $\Delta = 50^\circ 11' 03.7''$
 T = 9135.1'
 L = 17086.9'

Scale: 40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2710

SCALE
AS SHOWN

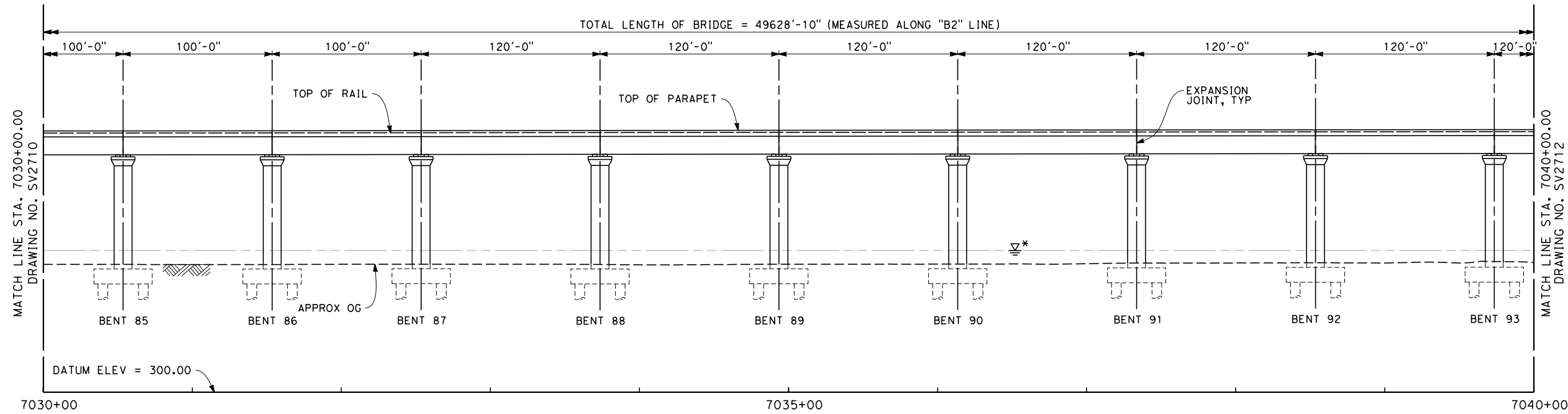
SHEET NO.
11 OF 57

EVC 6992+65.23
ELEV 470.08

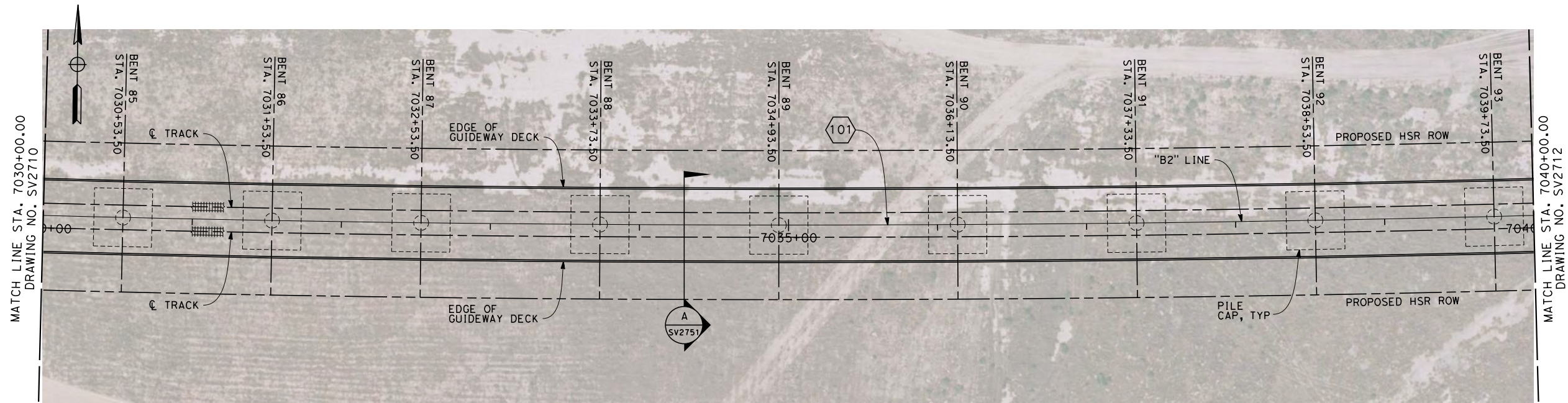
0.097 %

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

- NOT ALL PILES SHOWN
- PILE LENGTH TO BE DETERMINED
- SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
- UTILITY LOCATIONS TO BE DETERMINED
- ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

101

R = 19508.25'
Δ = 50° 11' 03.7"
T = 9135.1'
L = 17086.9'



12/20/2013 4:36:42 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2711-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2711

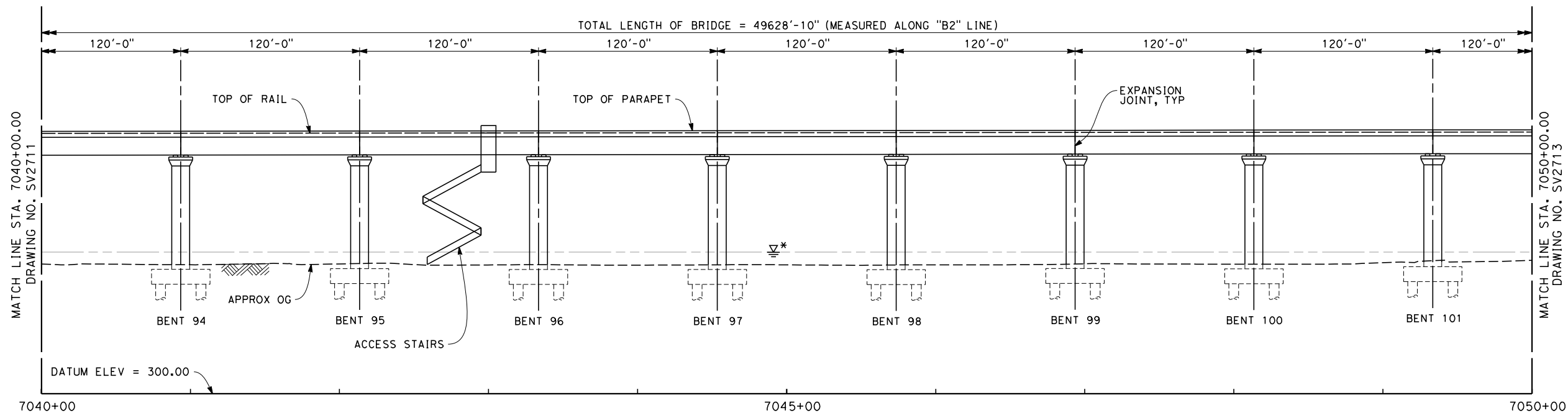
SCALE
AS SHOWN

SHEET NO.
12 OF 57

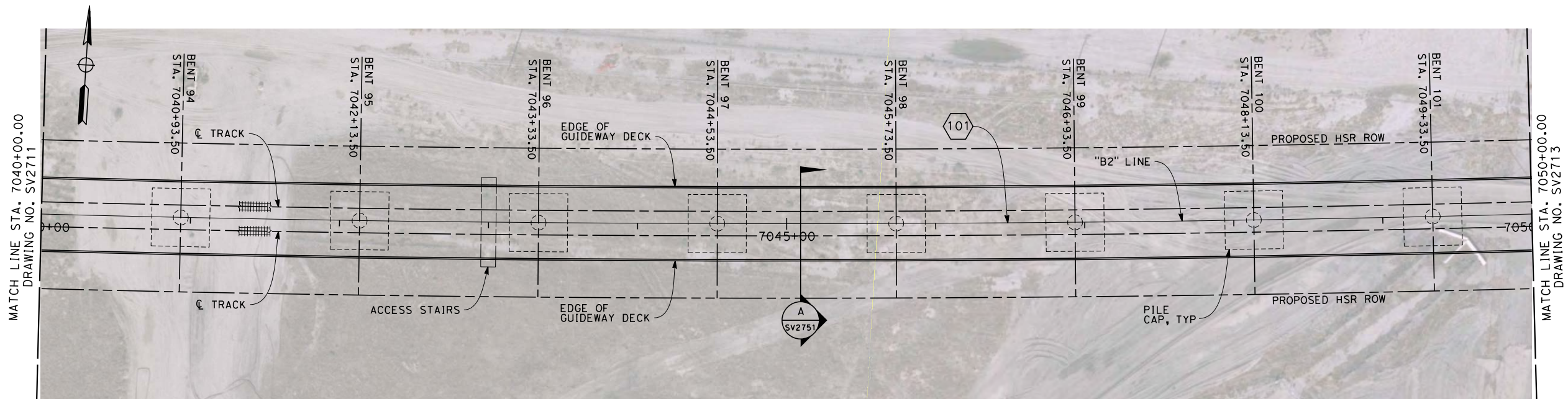
EVC 6992+65.23
ELEV 470.08

0.097 %

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑩ 101
 R = 19508.25'
 Δ = 50° 11' 03.7"
 T = 9135.1'
 L = 17086.9'



12/20/2013 4:37:03 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2712-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
N. HUTTON
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

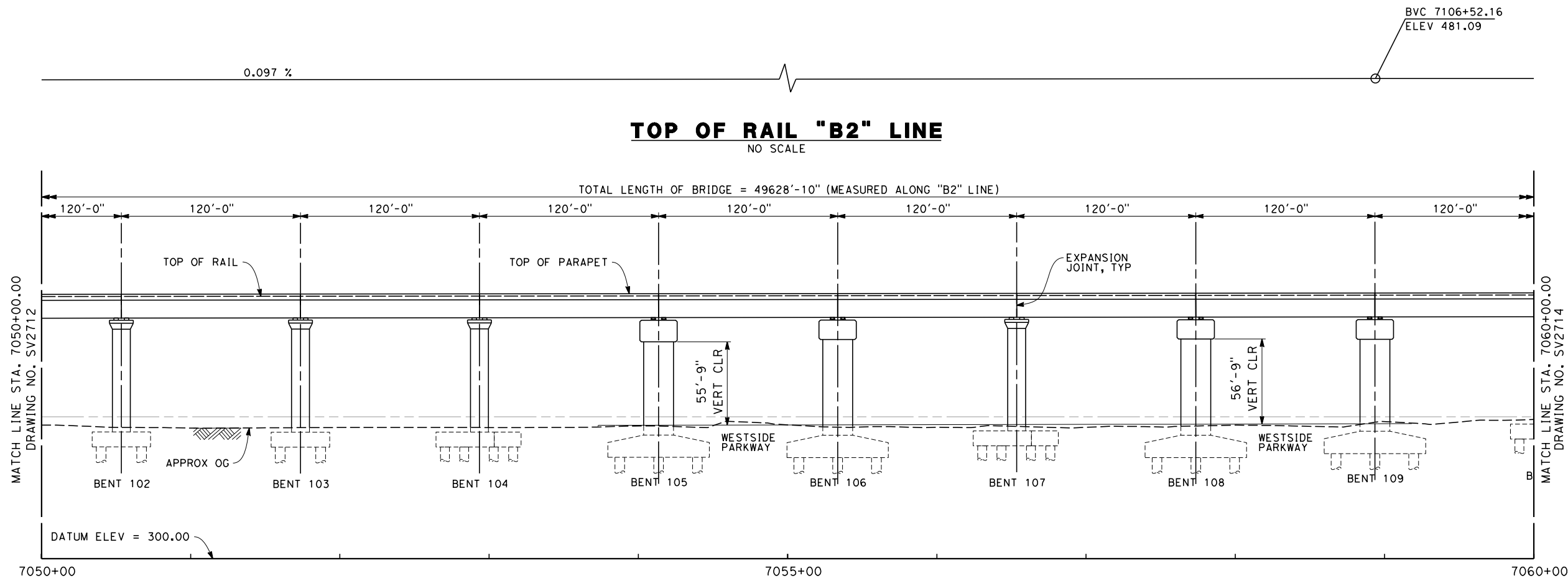
**NOT FOR
CONSTRUCTION**



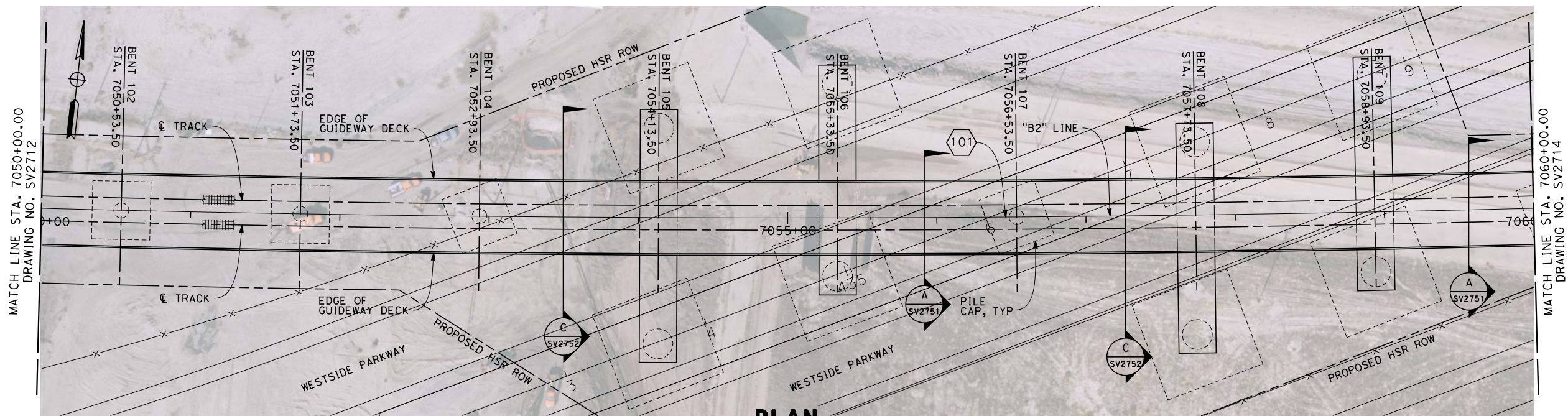
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2712
 SCALE
AS SHOWN
 SHEET NO.
13 OF 57

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ELEVATION
SCALE 1" = 40'



NOTES

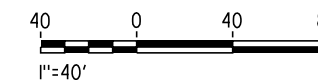
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
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5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

101
R = 19508.25'
Δ = 50° 11' 03.7"
T = 9135.1'
L = 17086.9'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

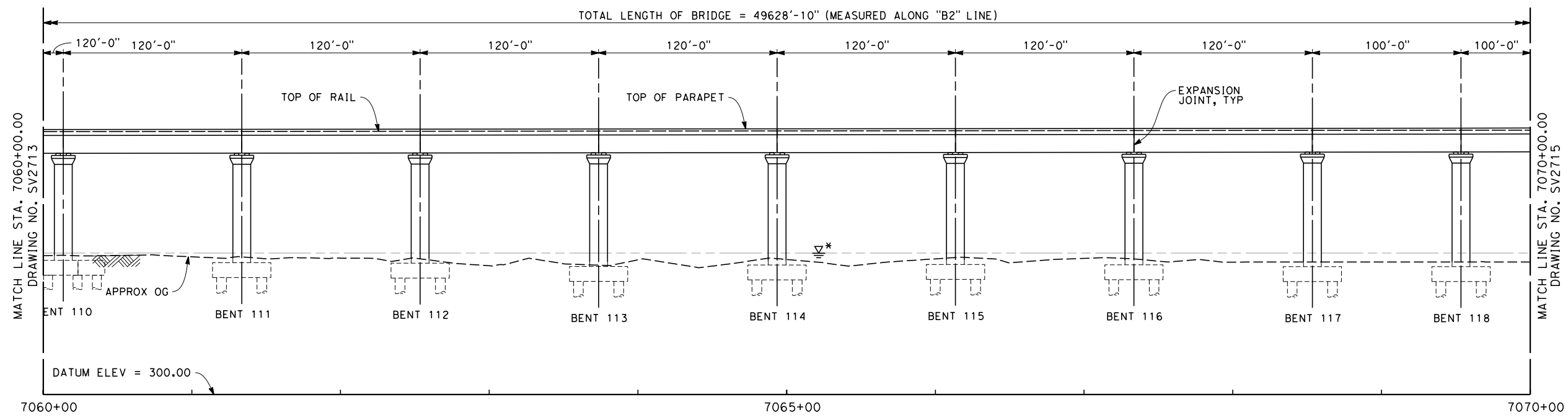
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2713
SCALE
AS SHOWN
SHEET NO.
14 OF 57

0.097 %

BVC 7106+52.16
ELEV 481.09

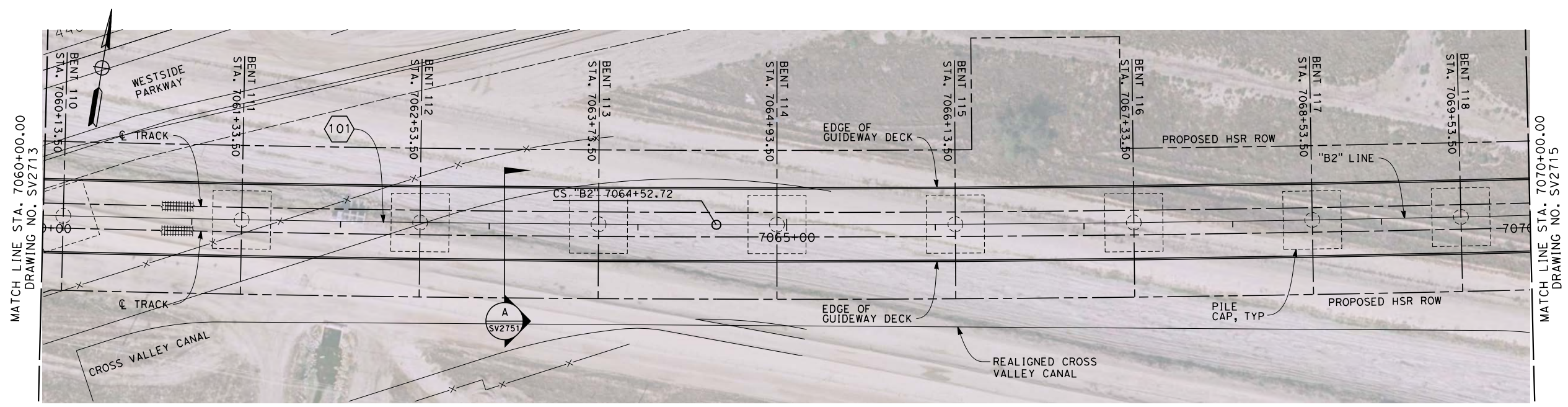
TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
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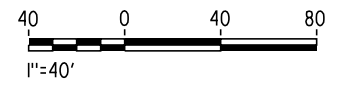
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

⑩ 101

R = 19508.25'
Δ = 50° 11' 03.7"
T = 9135.1'
L = 17086.9'



c:\pwworking\hmm\external\jojo.valenzuela-arup.com\dms71887\FB-SV-2714-B2.dgn 12/28/2013 1:47:59 PM jojo.valenzuela

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2714

SCALE
AS SHOWN

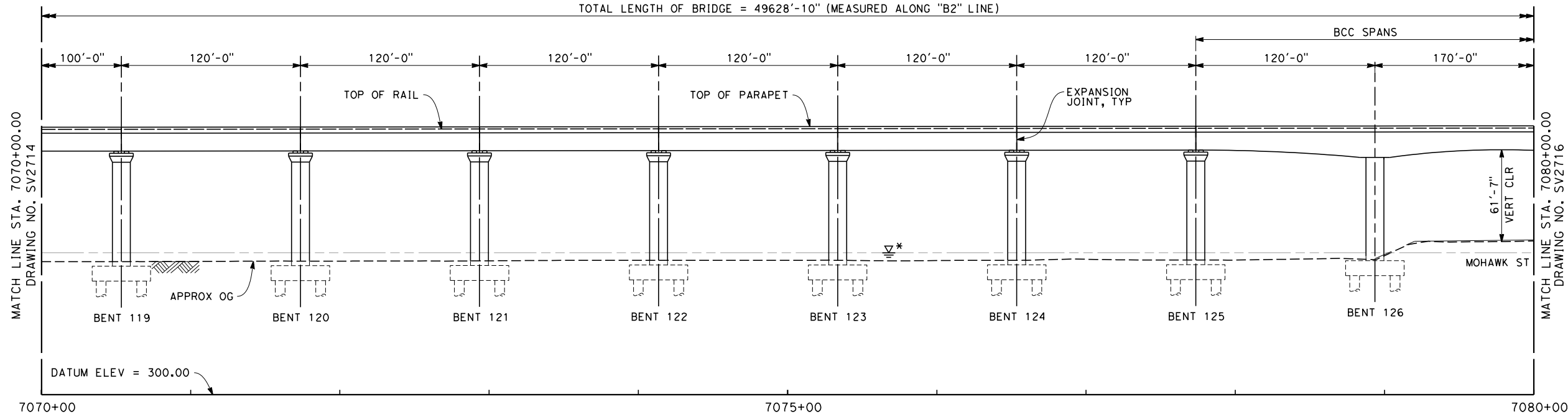
SHEET NO.
15 OF 57

0.097 %

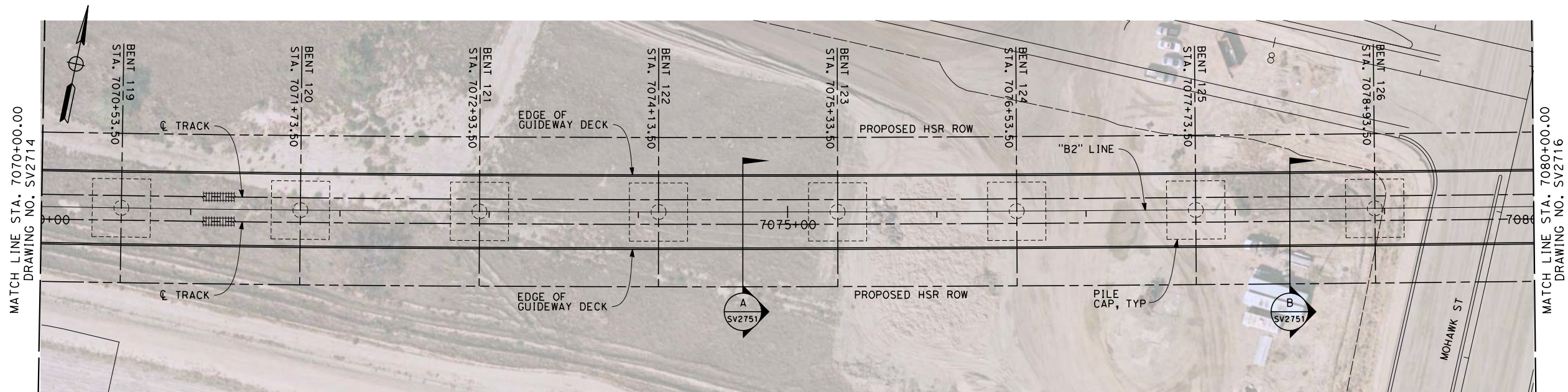
BVC 7106+52.16
ELEV 481.09

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



12/20/2013 4:37:59 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2715-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2715
SCALE
AS SHOWN
SHEET NO.
16 OF 57

12/20/2013 4:38:16 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2716-B2.dgn

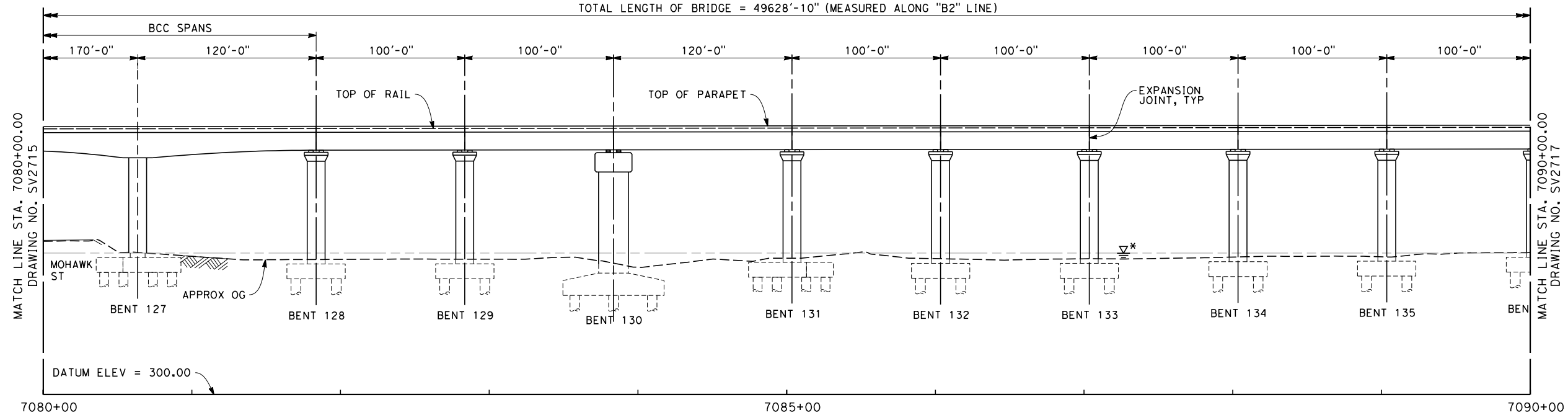
BVC 7106+52.16
ELEV 481.09

0.097 %

TOP OF RAIL "B2" LINE

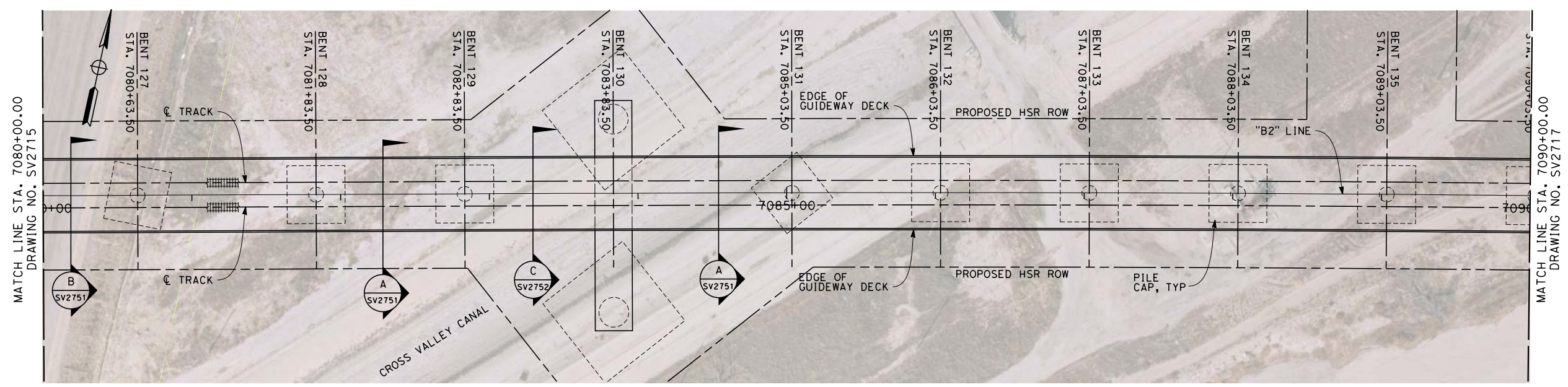
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION

SCALE 1" = 40'

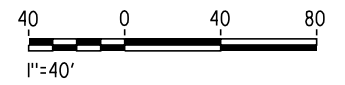


PLAN

SCALE 1" = 40'

- #### NOTES
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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- #### LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



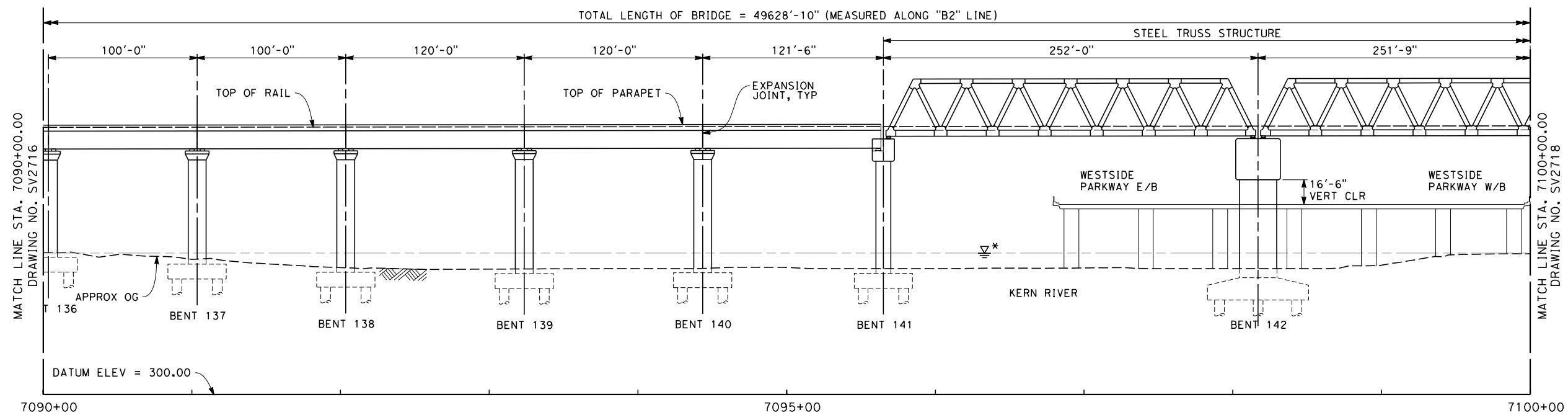
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2716
SCALE
AS SHOWN
SHEET NO.
17 OF 57

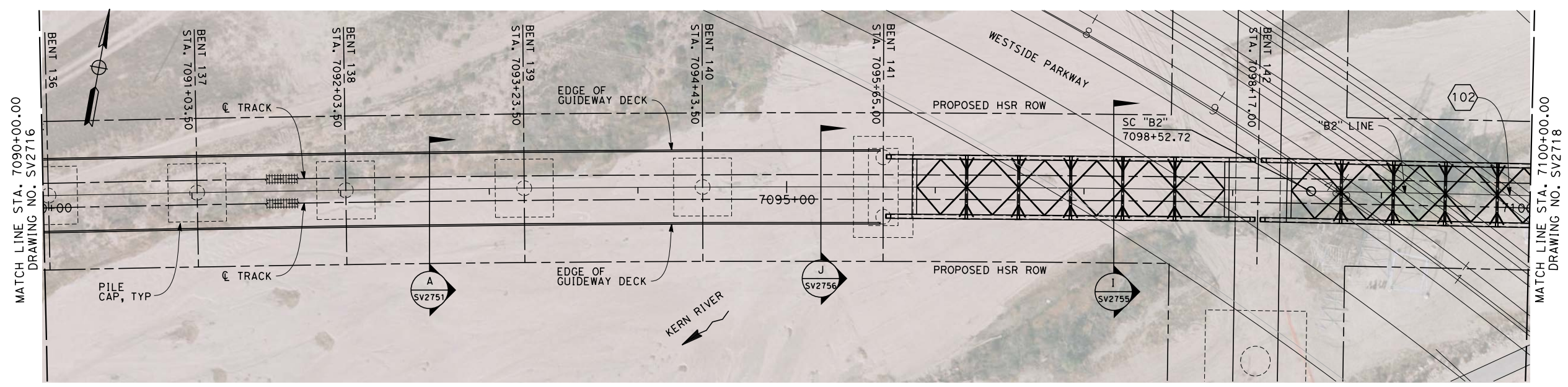
BVC 7106+52.16
ELEV 481.09

0.097 %

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

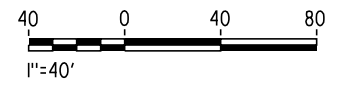
102

R = 19680.00'

Δ = 06° 54' 55.9"

T = 1189.1'

L = 2375.4'



12/20/2013 4:38:37 PM c:\pwworking\hmm\external\frank.palermo01-ar.com\dms71887\FB-SV-2717-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

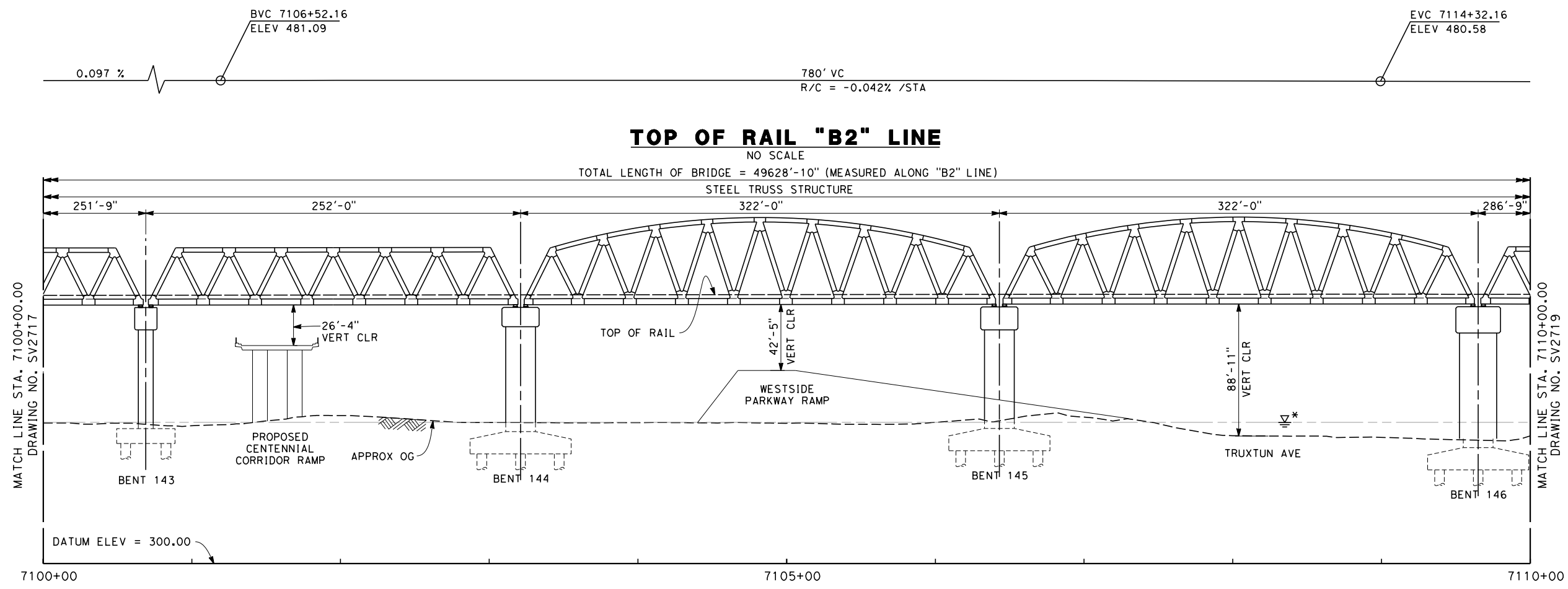
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2717

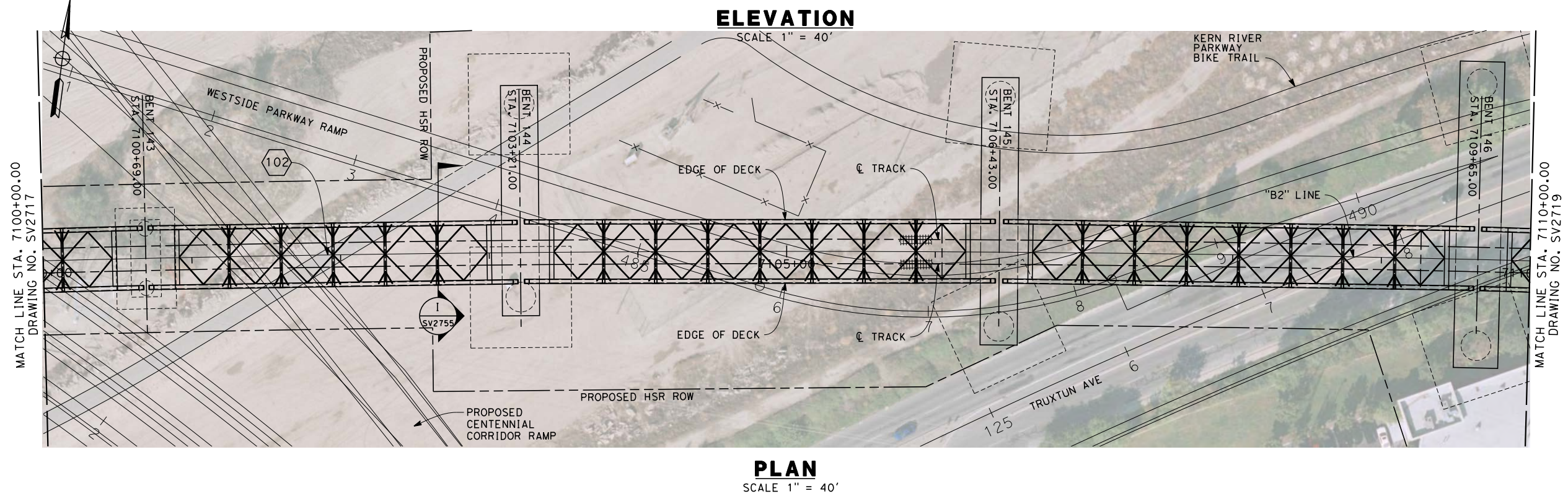
SCALE
AS SHOWN

SHEET NO.
18 OF 57

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- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".
- CURVE DATA**
- 102
- R = 19680.00'
- Δ = 06° 54' 55.9"
- T = 1189.1'
- L = 2375.4'
- 40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2718

SCALE
AS SHOWN

SHEET NO.
19 OF 57

BVC 7106+52.16
ELEV 481.09

EVC 7114+32.16
ELEV 480.58

780' VC
R/C = -0.042% /STA

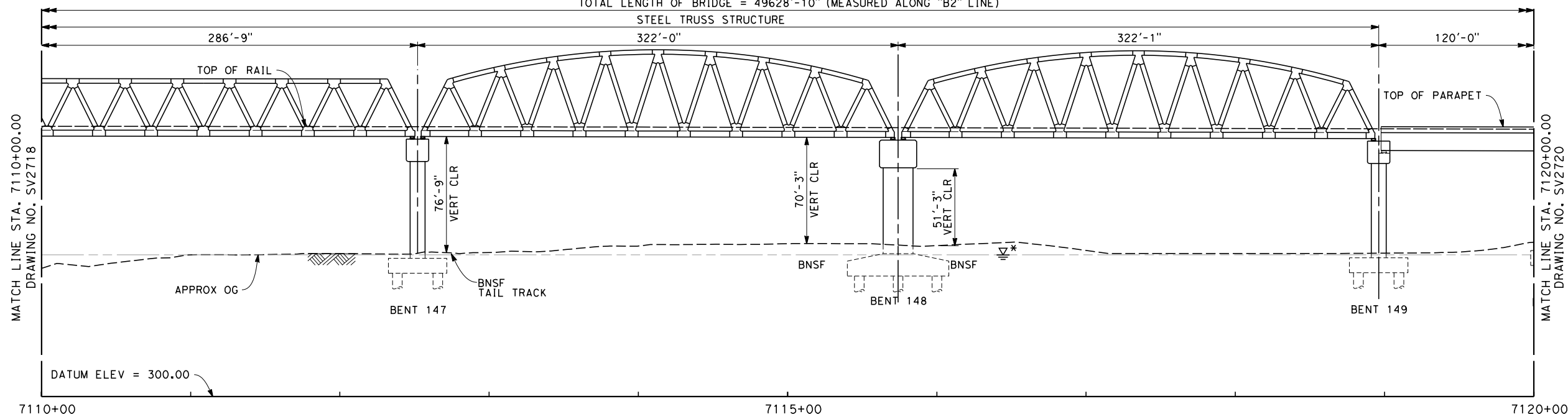
-0.228 %

TOP OF RAIL "B2" LINE

NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)

STEEL TRUSS STRUCTURE



ELEVATION

SCALE 1" = 40'

NOTES

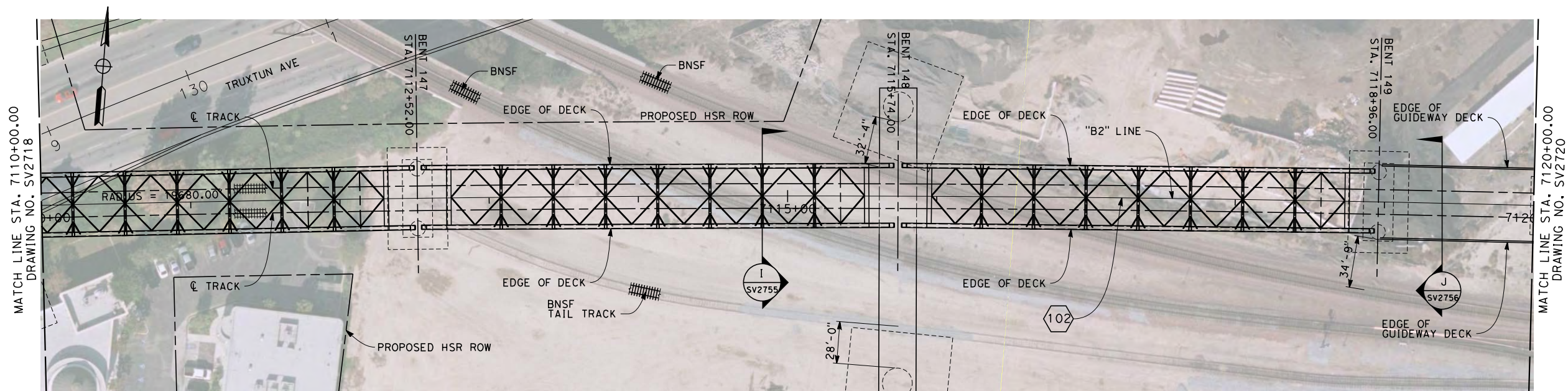
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

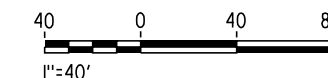
CURVE DATA

102
R = 19680.00'
Δ = 06° 54' 55.9"
T = 1189.1'
L = 2375.4'



PLAN

SCALE 1" = 40'



jojo.valenzuela 12/23/2013 10:42:22 AM c:\pwworking\hmm\external\jojo.valenzuela-arup.com\dms71887\FB-SV-2719-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

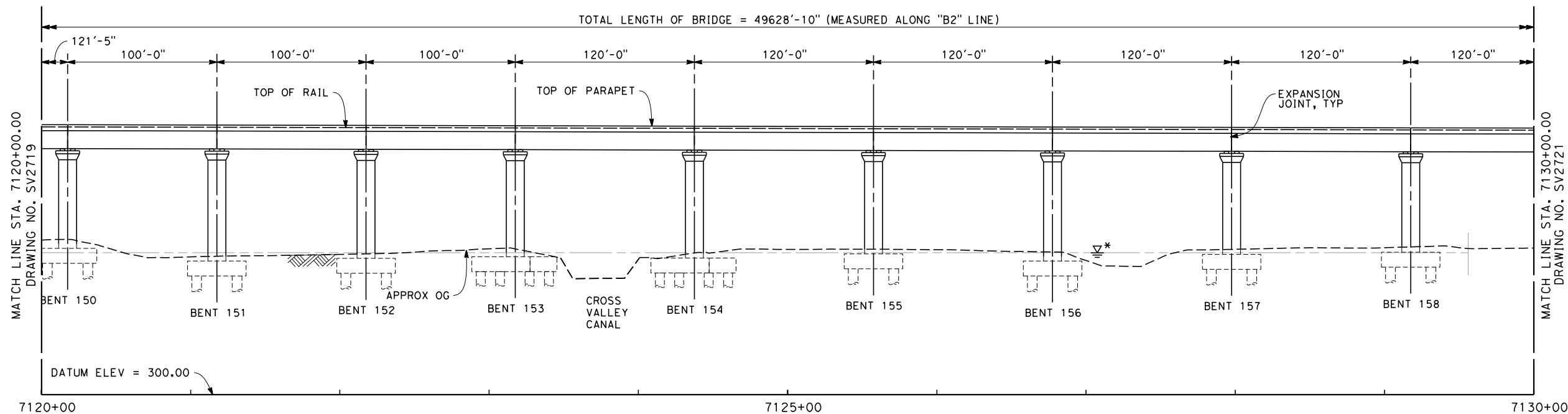
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2719
SCALE
AS SHOWN
SHEET NO.
20 OF 57

EVC 7114+32.16
ELEV 480.58

-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE

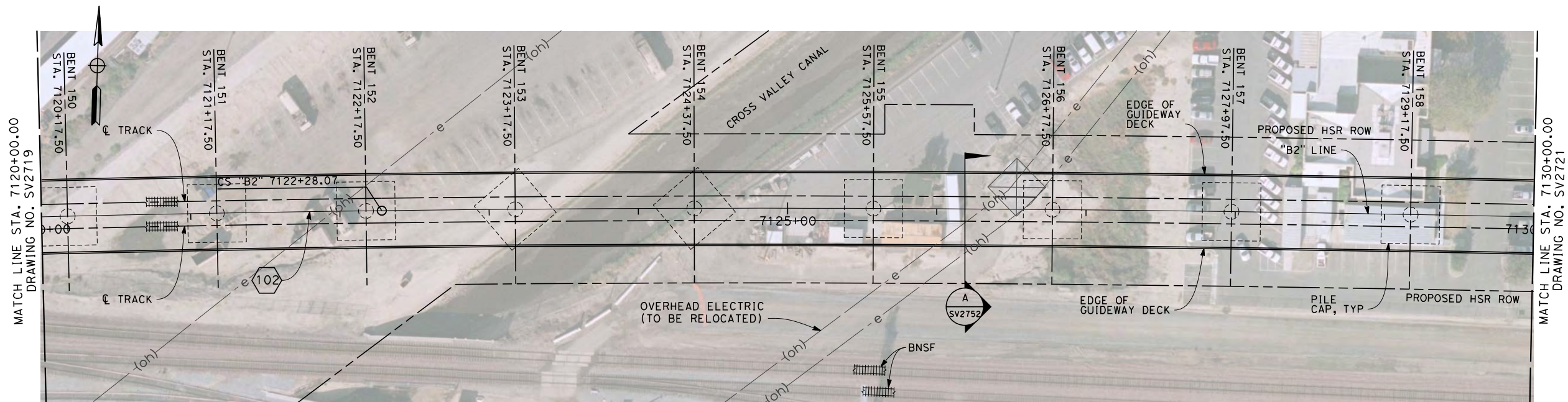
TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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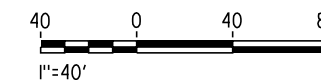
PLAN
SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

102
R = 19680.00'
Δ = 06° 54' 55.9"
T = 1189.1'
L = 2375.4'



jojo.valenzuela 12/23/2013 10:45:14 AM c:\pwworking\hmm\external\jojo.valenzuela-arup.com\dms71887\FB-SV-2720-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

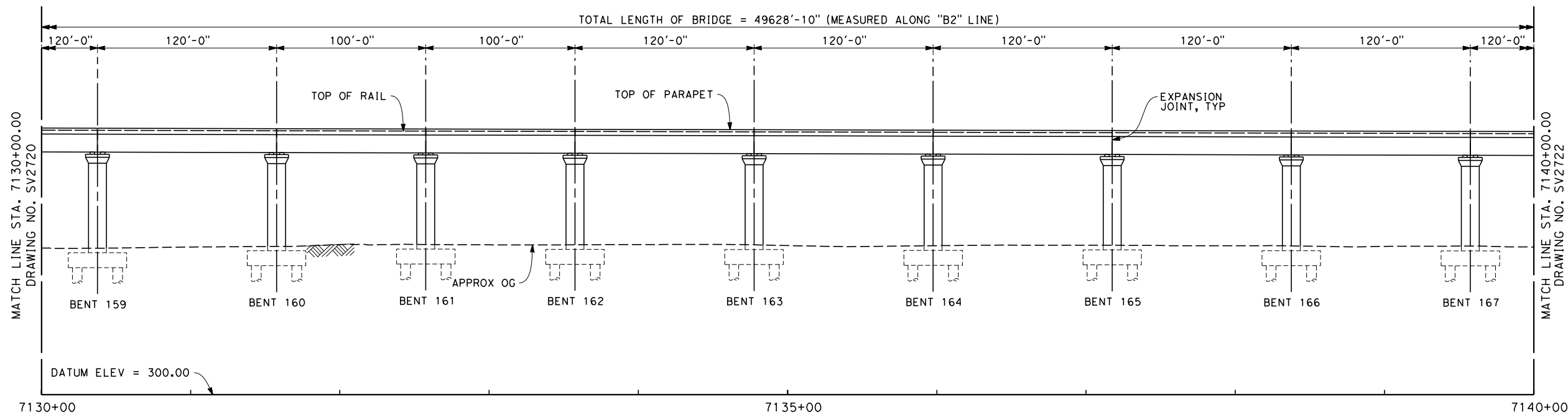
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2720
SCALE
AS SHOWN
SHEET NO.
21 OF 57

EVC 7114+32.16
ELEV 480.58

-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE

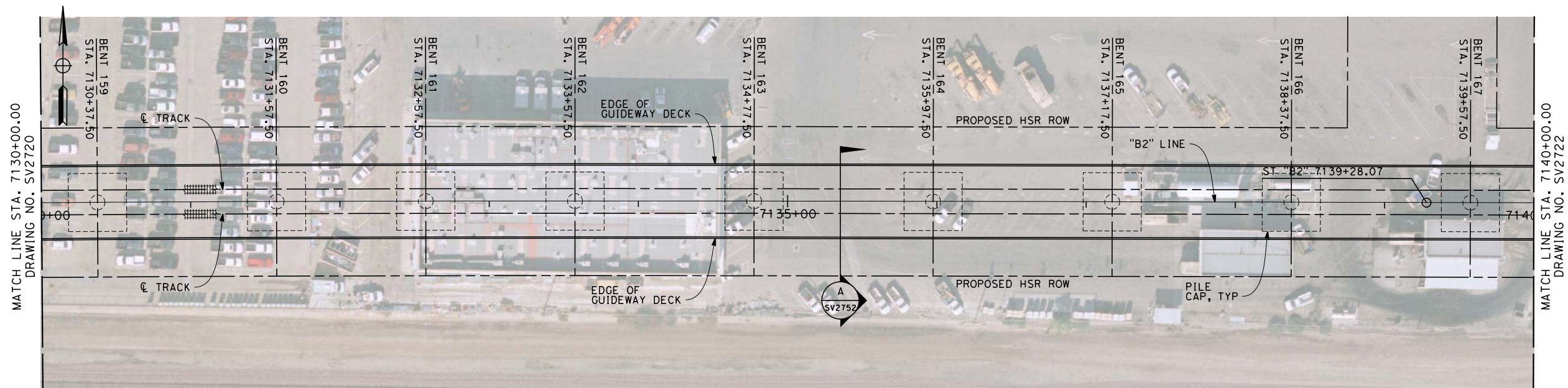
TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'

NOTES

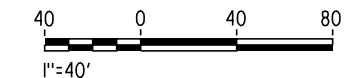
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



PLAN
SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



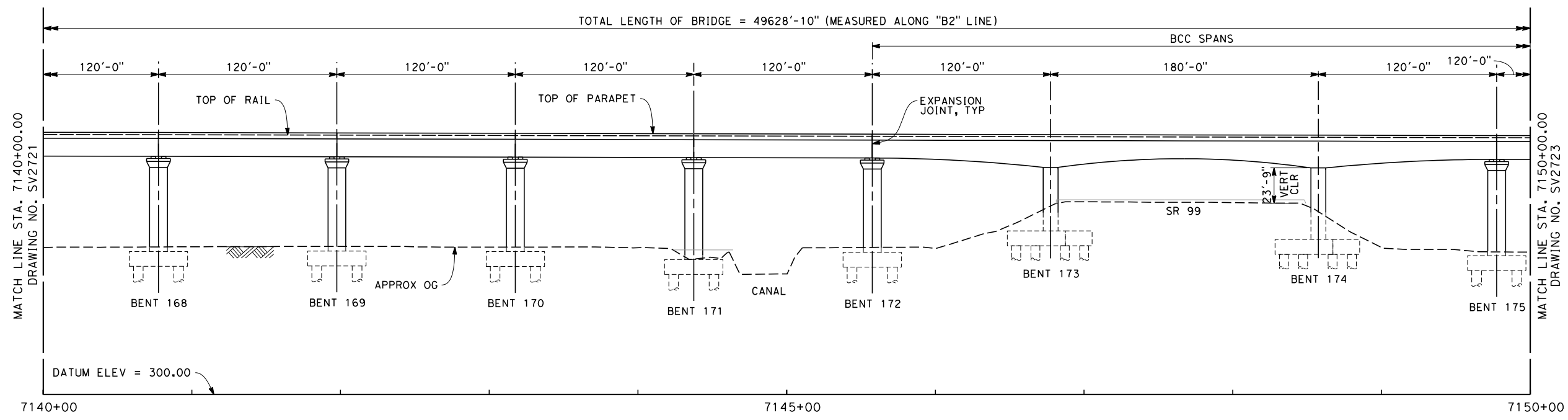
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2721
SCALE
AS SHOWN
SHEET NO.
22 OF 57

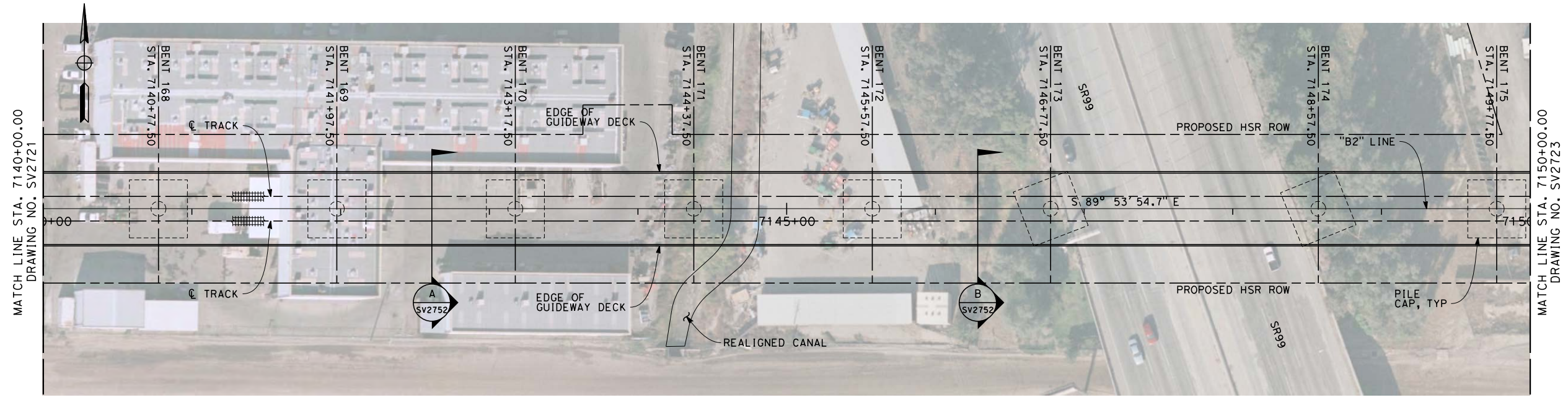
EVC 7114+32.16
ELEV 480.58

-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE



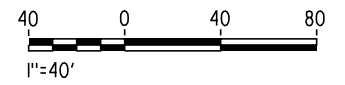
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

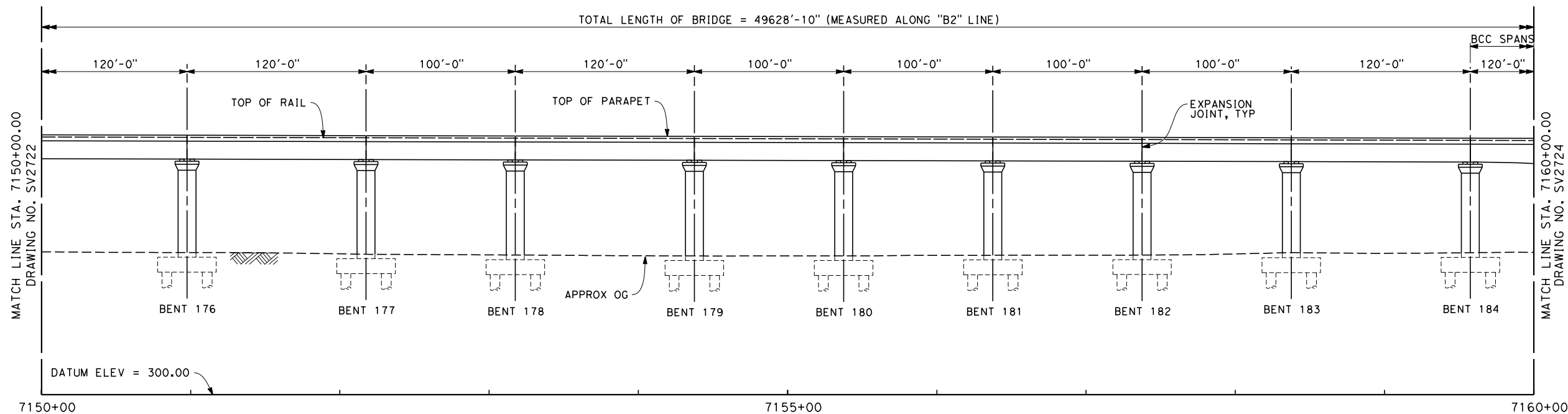
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2722
SCALE
AS SHOWN
SHEET NO.
23 OF 57

EVC 7114+32.16
ELEV 480.58

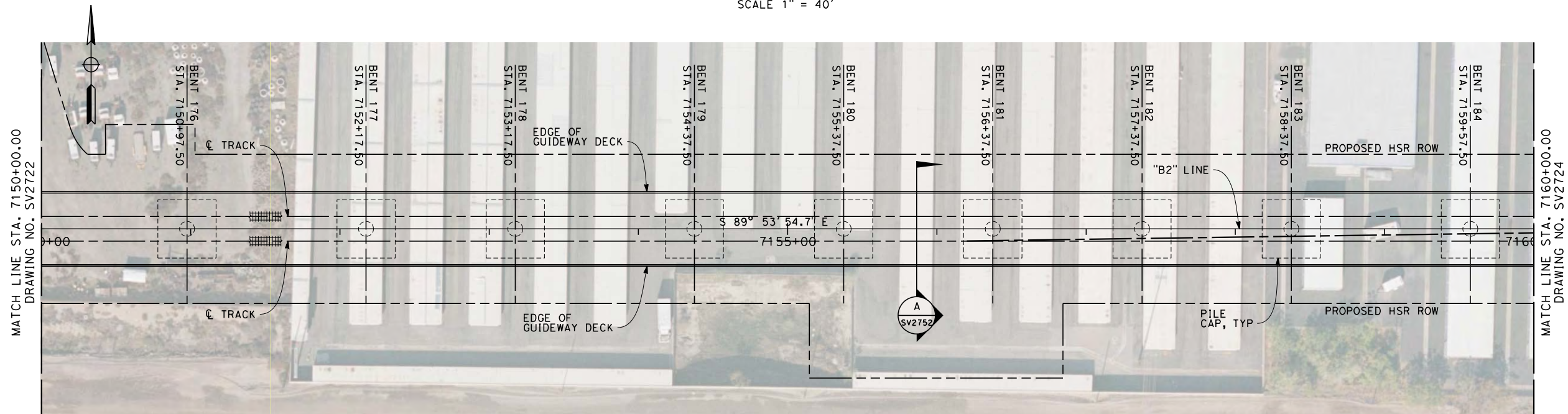
-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'



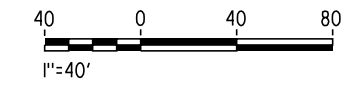
PLAN
SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



12/20/2013 4:40:12 PM c:\pwworking\hmm\external\frank.palermo01-ar.com\dms71887\FB-SV-2723-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



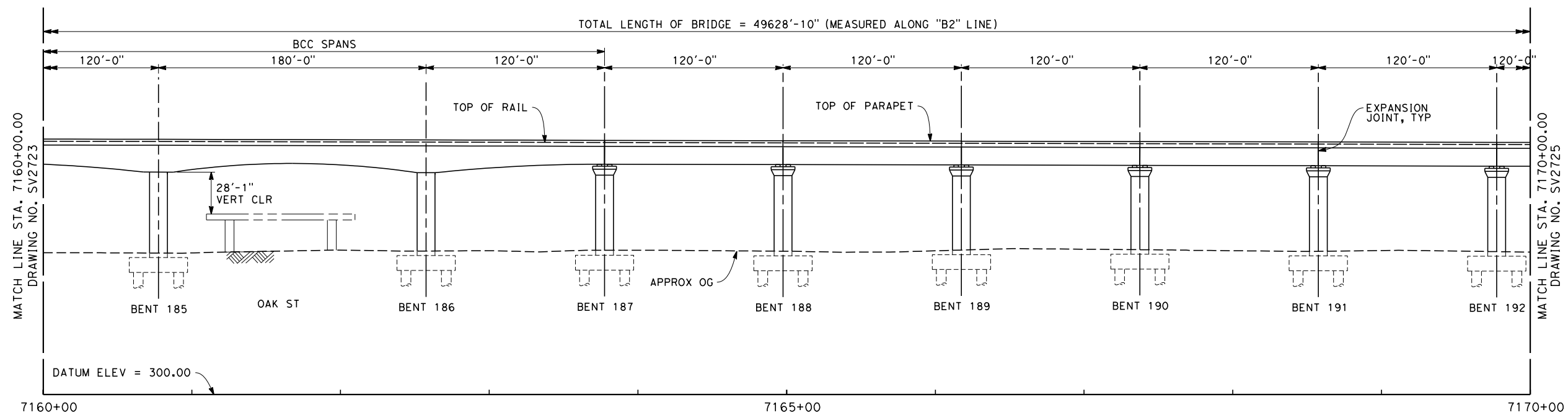
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2723
SCALE
AS SHOWN
SHEET NO.
24 OF 57

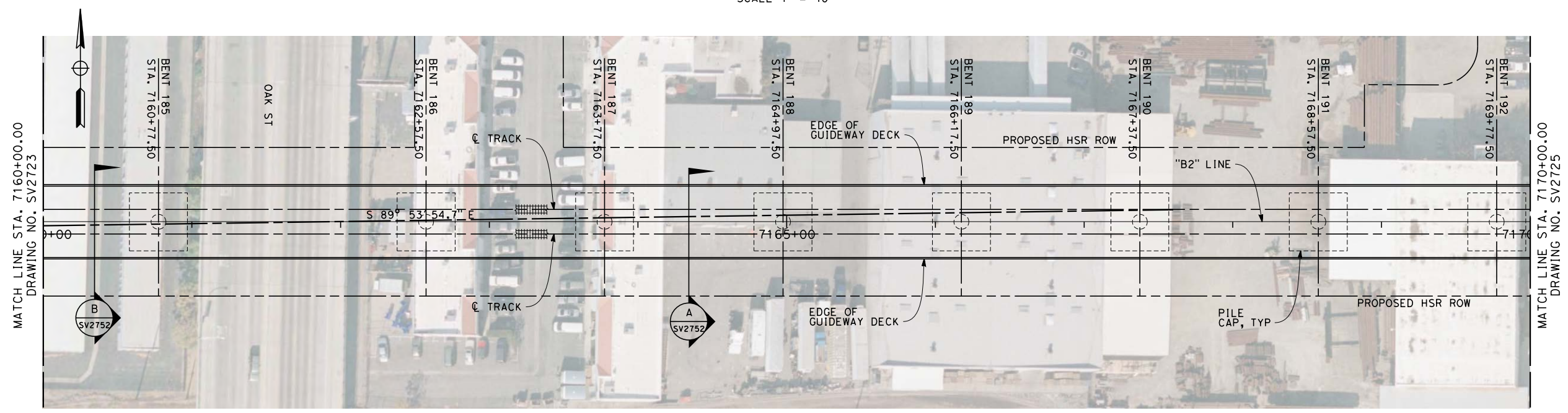
EVC 7114+32.16
ELEV 480.58

-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE



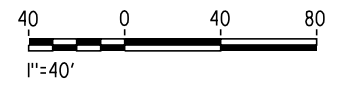
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

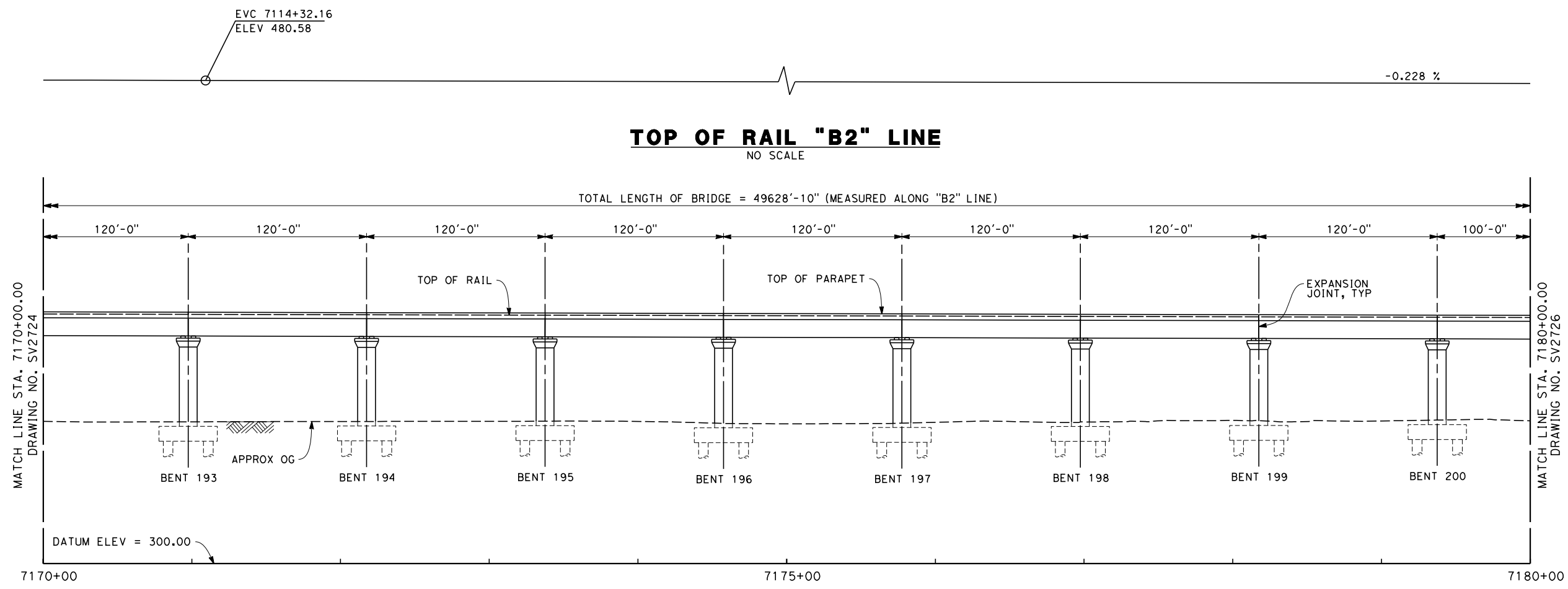
**NOT FOR
CONSTRUCTION**



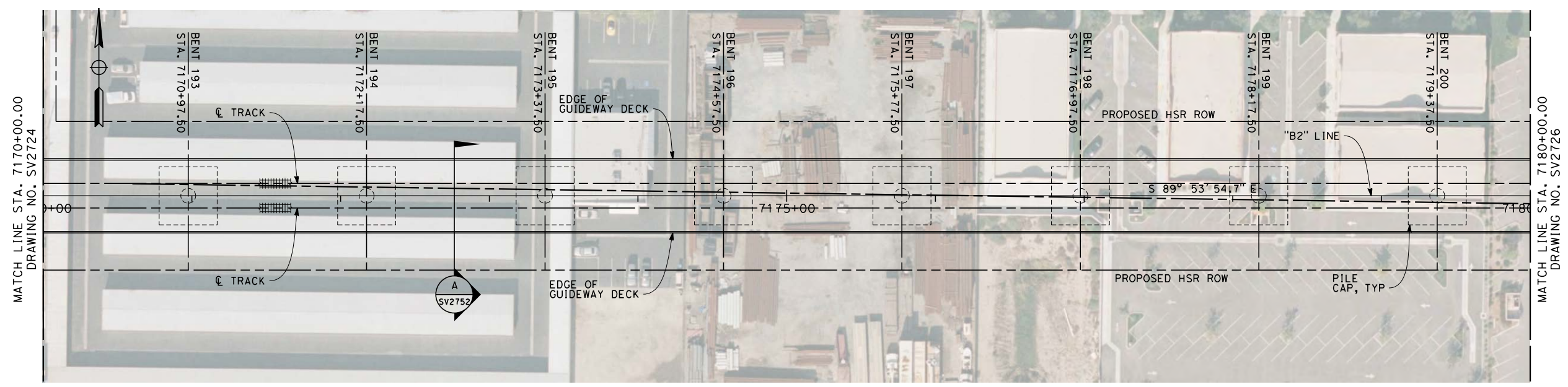
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2724
SCALE
AS SHOWN
SHEET NO.
25 OF 57

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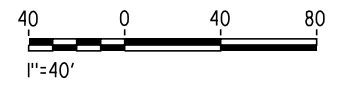
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

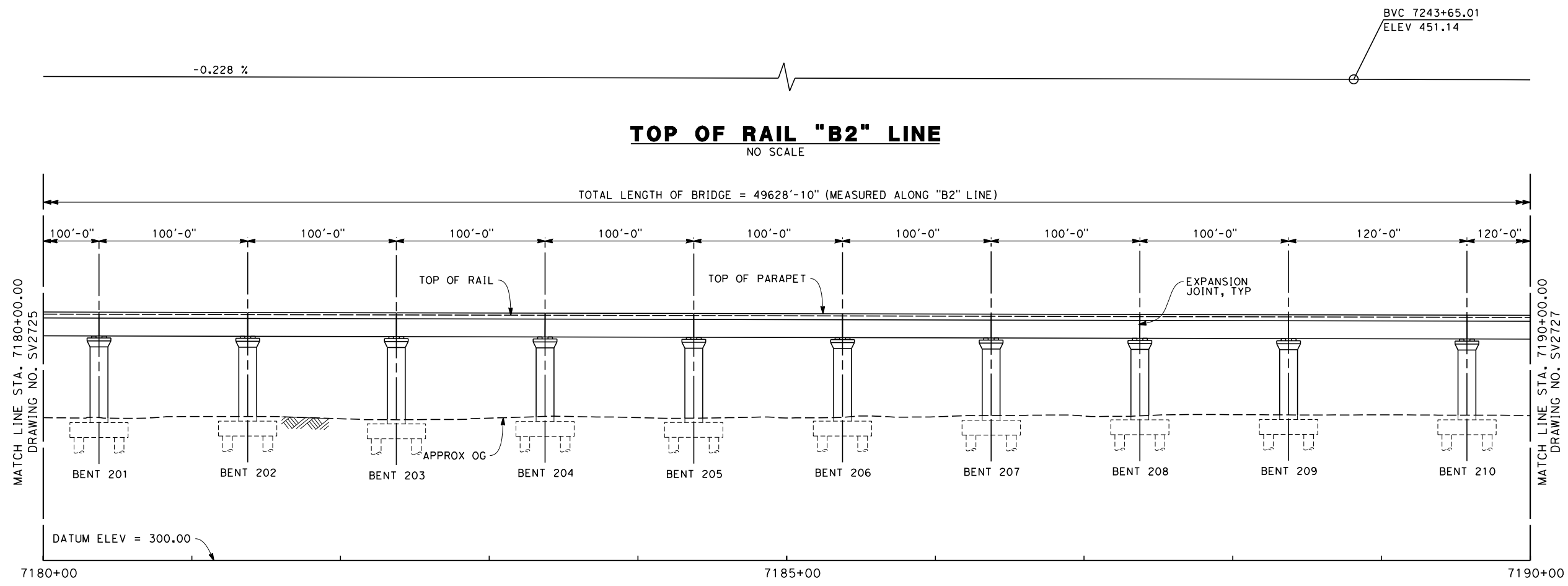
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2725

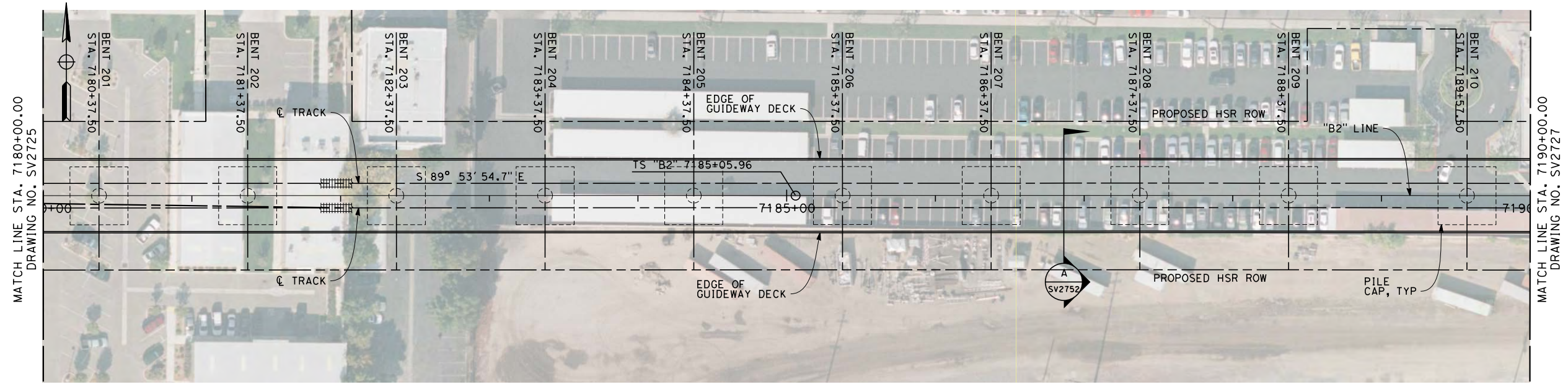
SCALE
AS SHOWN

SHEET NO.
26 OF 57

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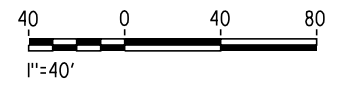
ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
N. HUTTON
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

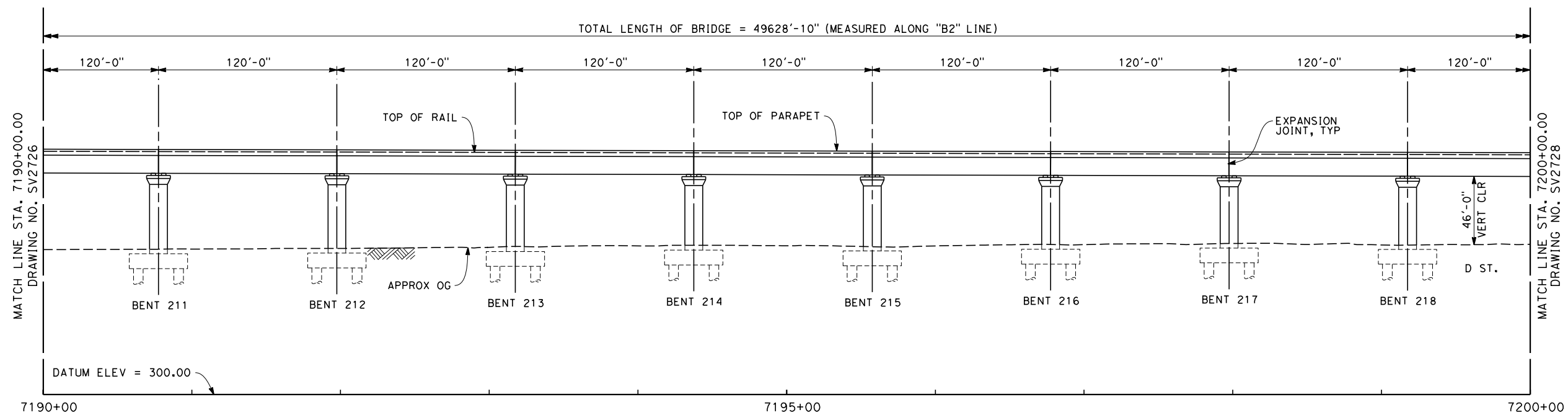
CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2726
 SCALE
AS SHOWN
 SHEET NO.
27 OF 57

BVC 7243+65.01
ELEV 451.14

-0.228 %

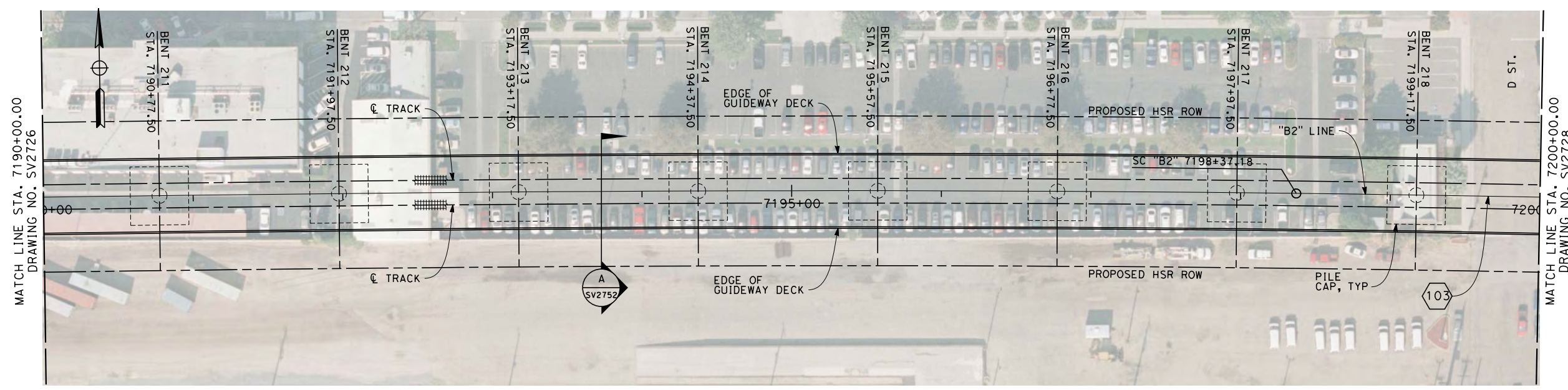
TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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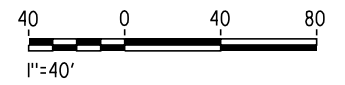


PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

103
 R = 23508.34'
 Δ = 03° 29' 24.7"
 T = 716.2'
 L = 1432.0'



12/20/2013 4:41:22 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2727-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2727

SCALE
AS SHOWN

SHEET NO.
28 OF 57

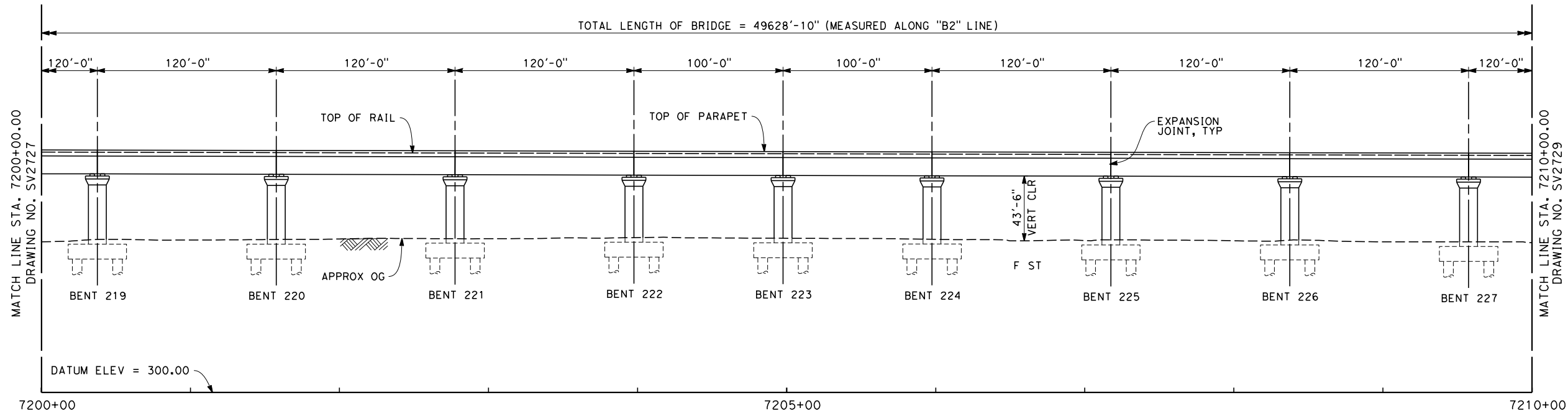
-0.228 %

BVC 7243+65.01
ELEV 451.14

TOP OF RAIL "B2" LINE

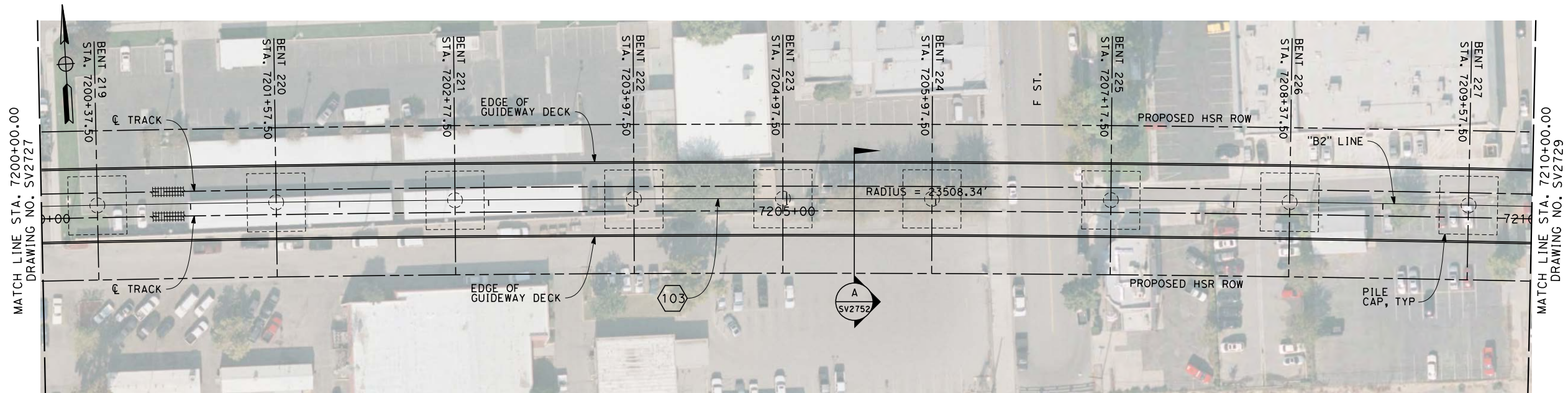
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



ELEVATION

SCALE 1" = 40'



PLAN

SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

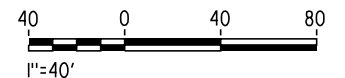
103

R = 23508.34'

Δ = 03° 29' 24.7"

T = 716.2'

L = 1432.0'



12/20/2013 4:41:39 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2728-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2728

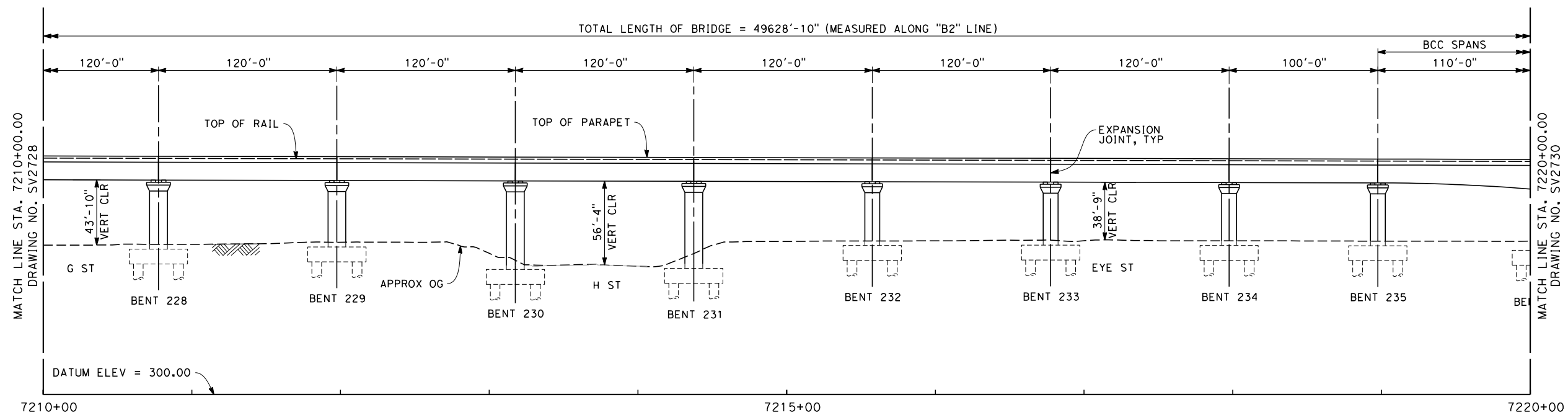
SCALE
AS SHOWN

SHEET NO.
29 OF 57

BVC 7243+65.01
ELEV 451.14

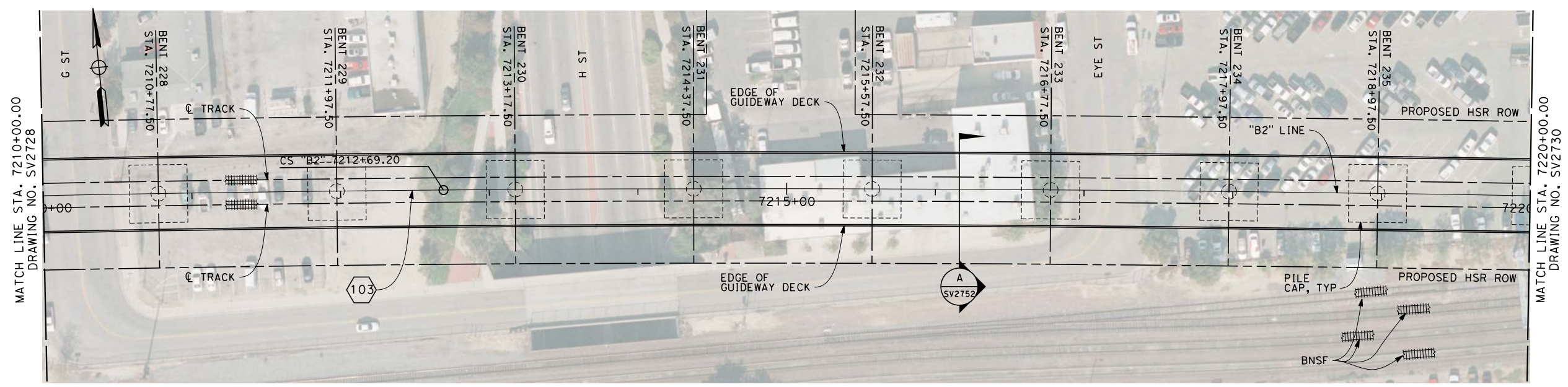
-0.228 %

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

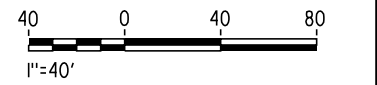
103

R = 23508.34'

Δ = 03° 29' 24.7"

T = 716.2'

L = 1432.0'



12/20/2013 4:41:56 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2729-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

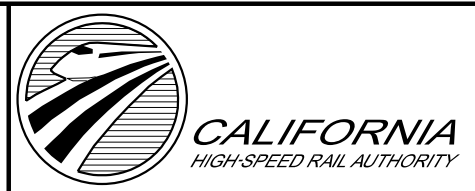
CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2729

SCALE
AS SHOWN

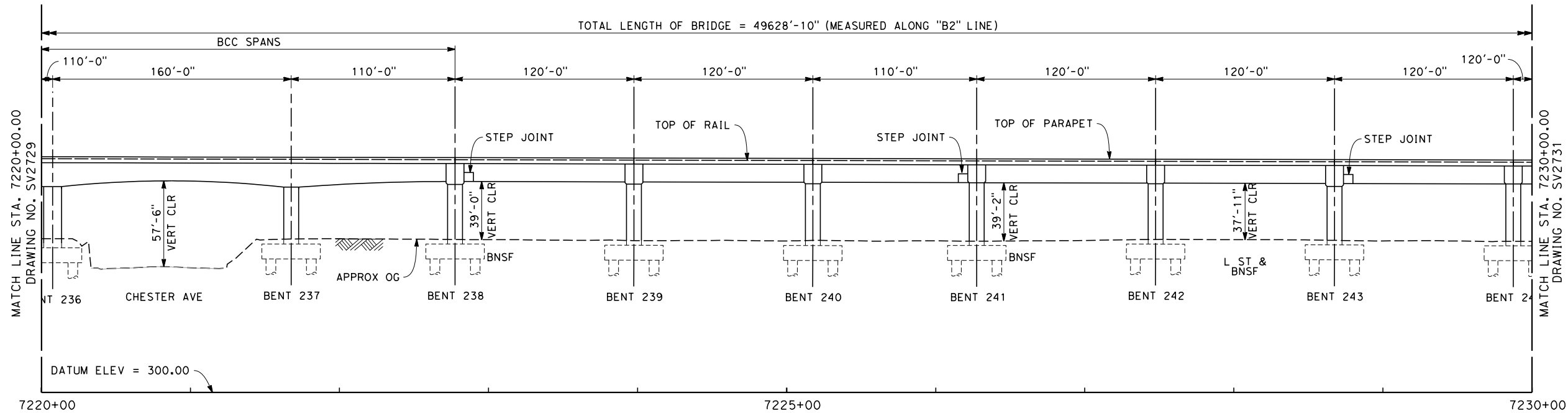
SHEET NO.
30 OF 57

-0.228 %

BVC 7243+65.01
ELEV 451.14

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)

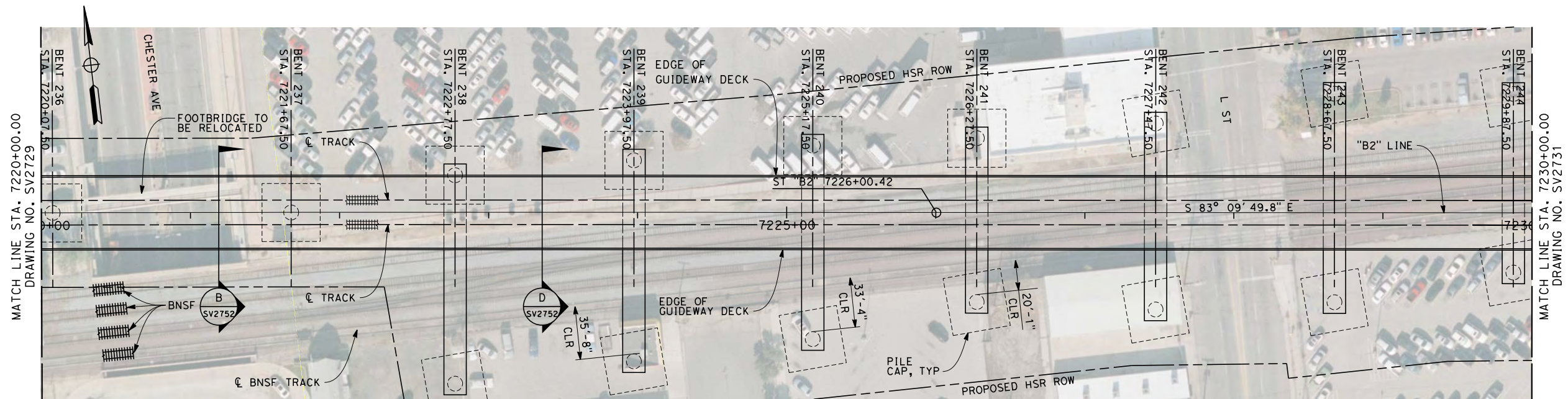


ELEVATION
SCALE 1" = 40'

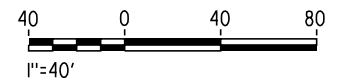
- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



PLAN
SCALE 1" = 40'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

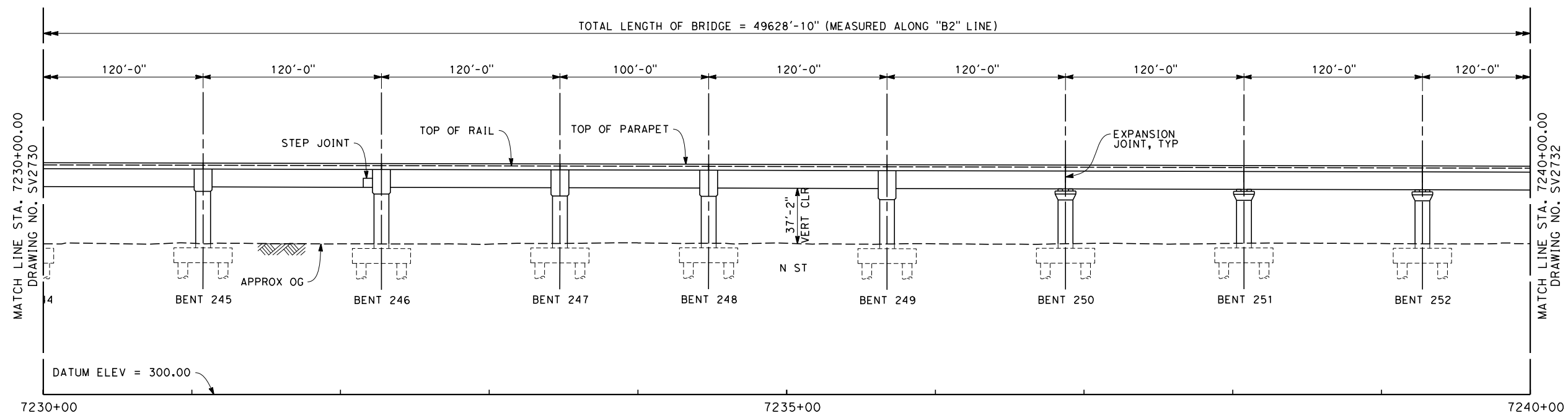
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2730
SCALE
AS SHOWN
SHEET NO.
31 OF 57

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BVC 7243+65.01
ELEV 451.14

-0.228 %

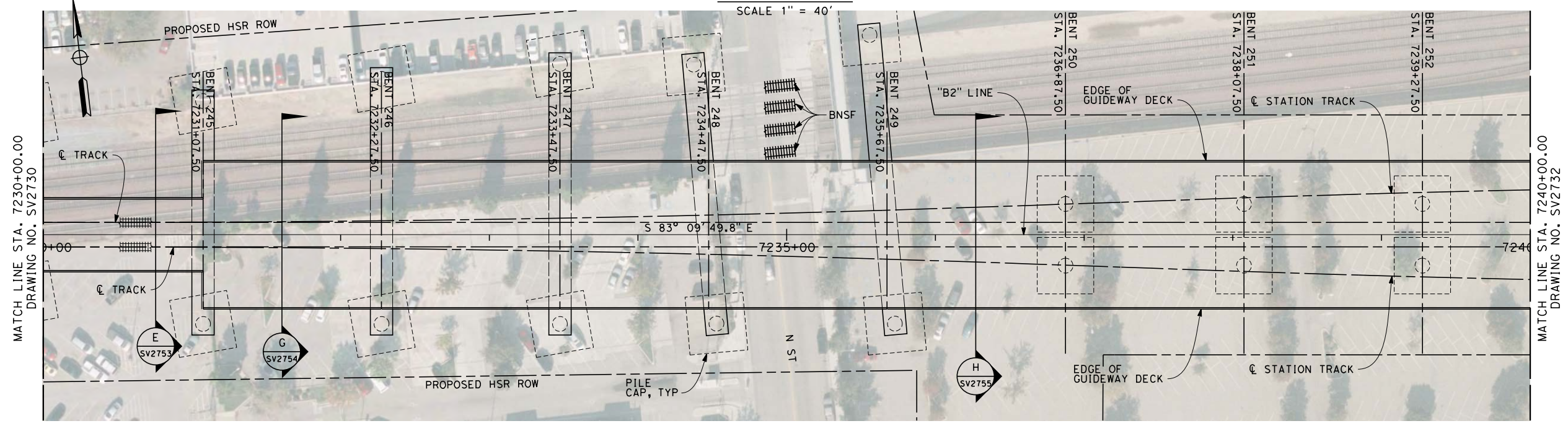
TOP OF RAIL "B2" LINE
NO SCALE



- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

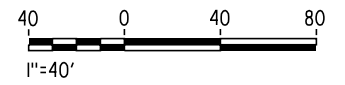
ELEVATION

SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

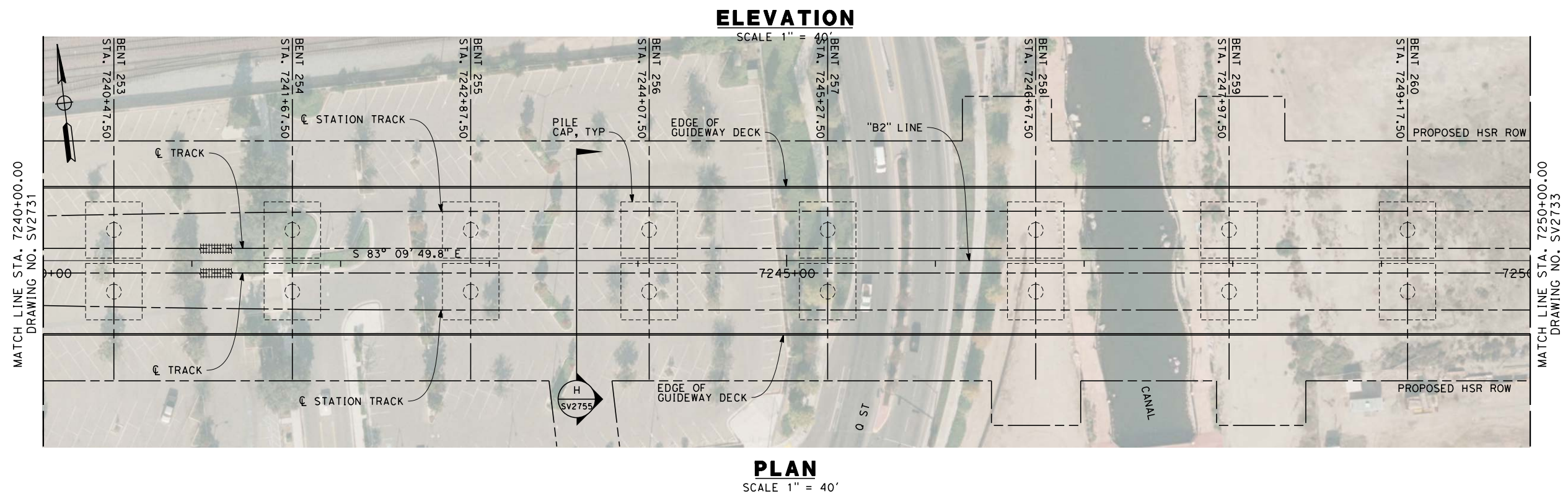
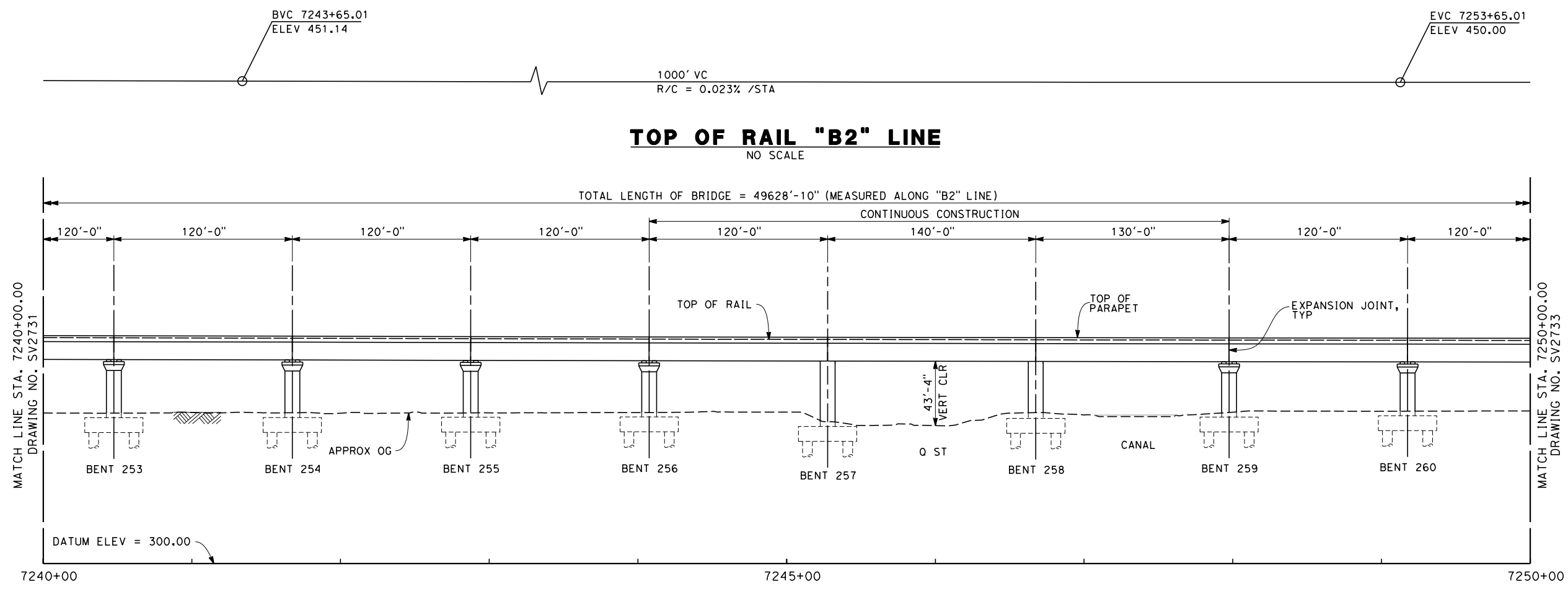
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2731
SCALE
AS SHOWN
SHEET NO.
32 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

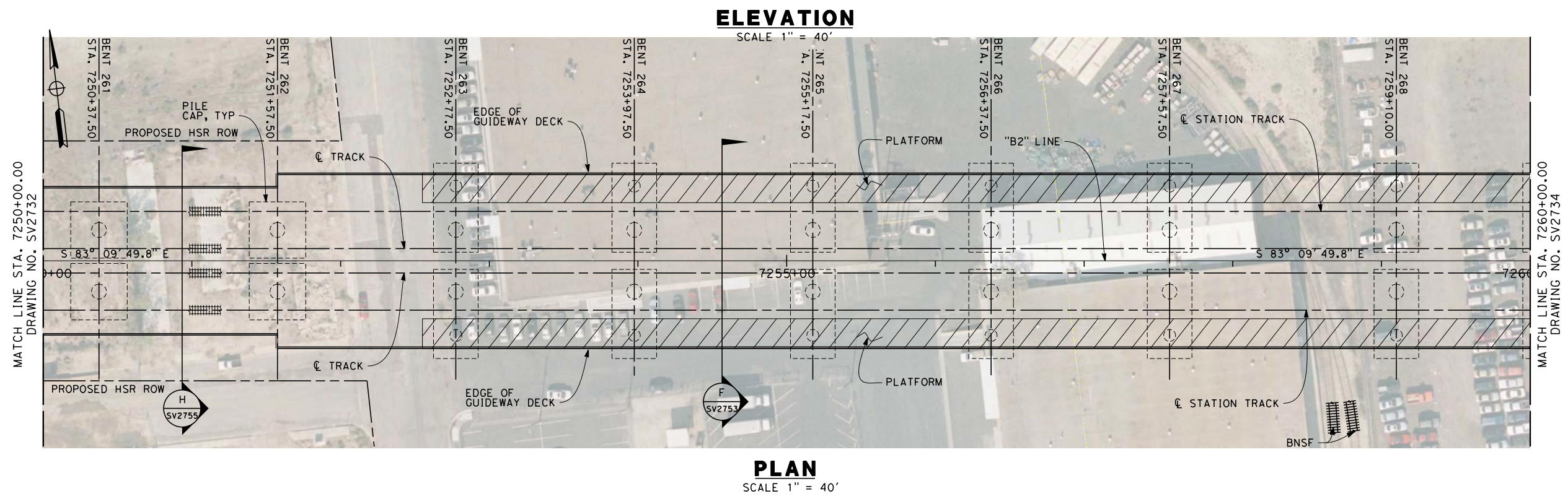
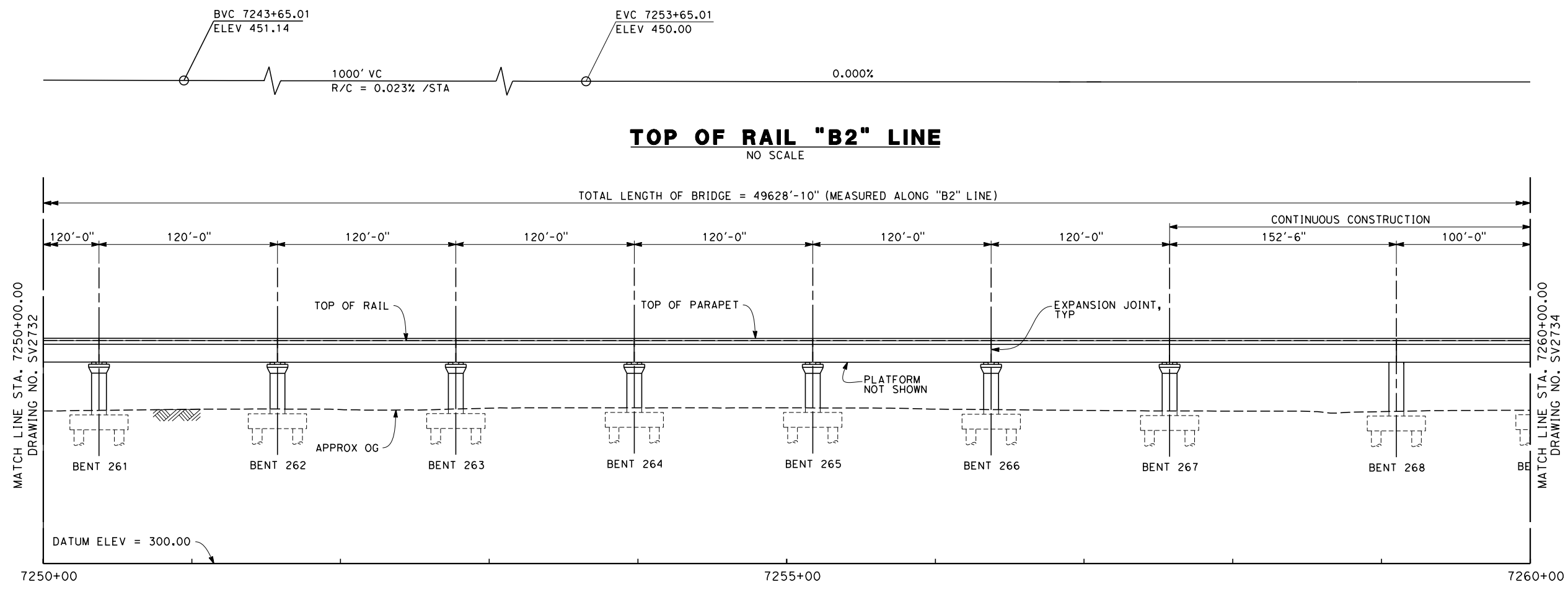
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2732

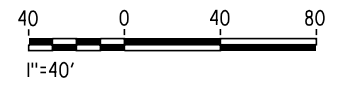
SCALE
AS SHOWN

SHEET NO.
33 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



12/20/2013 4:43:12 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2733-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2733

SCALE
AS SHOWN

SHEET NO.
34 OF 57

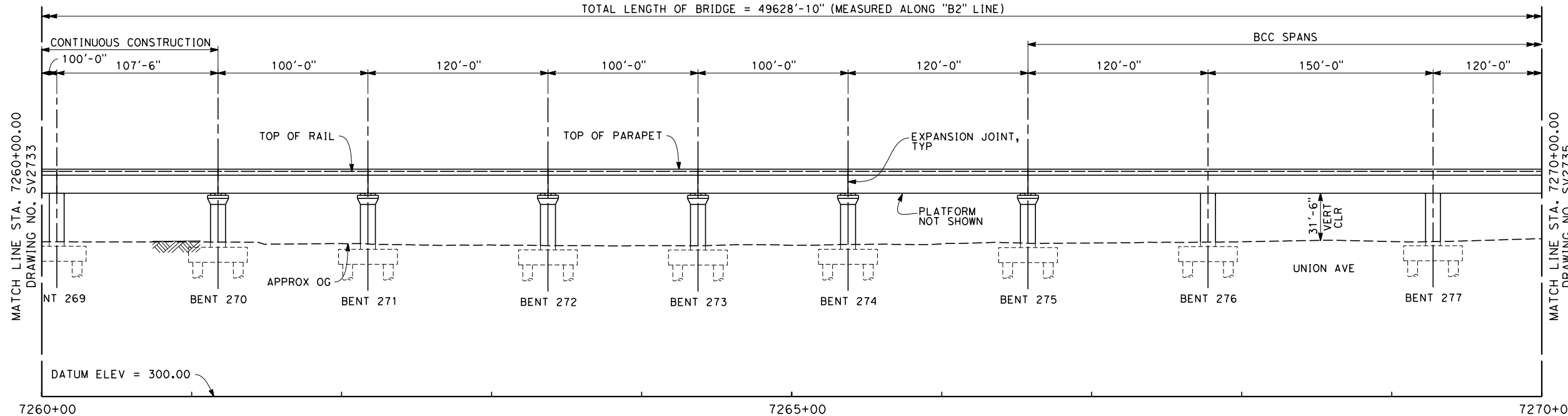
EVC 7253+65.01
ELEV 450.00

0.000 %

TOP OF RAIL "B2" LINE

NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)

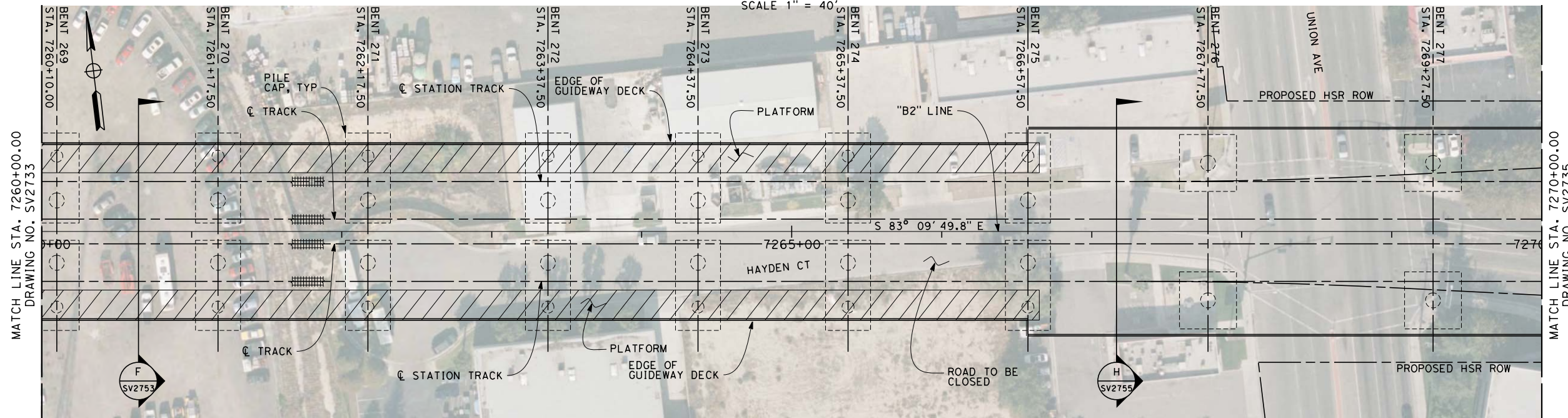


NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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ELEVATION

SCALE 1" = 40'

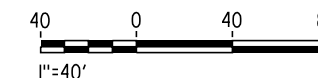


PLAN

SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2734-B2.dgn 12/20/2013 4:43:30 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY N. HUTTON
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

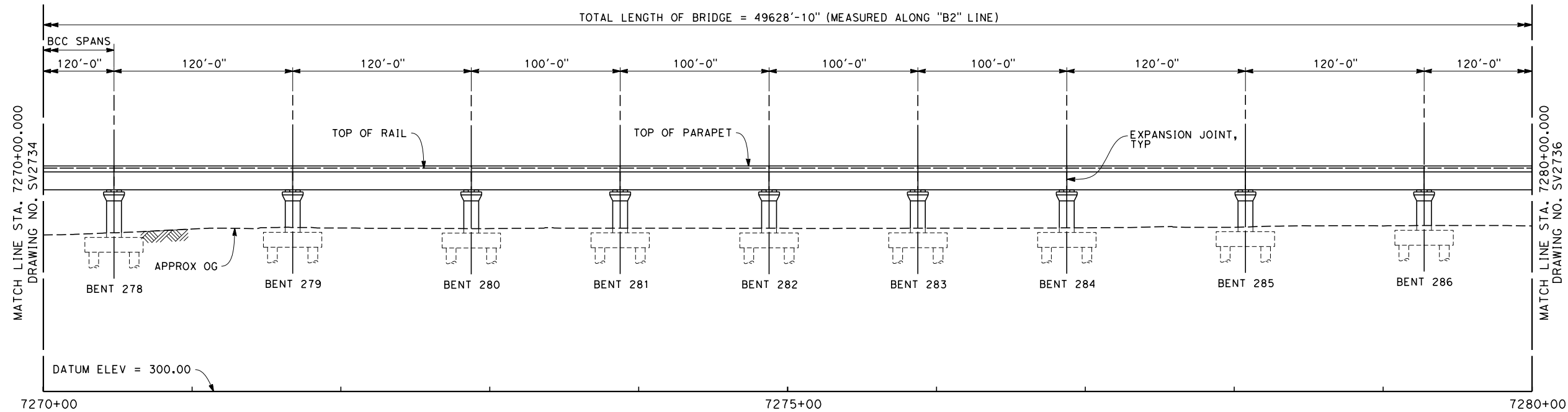
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2734
SCALE AS SHOWN
SHEET NO. 35 OF 57

EVC 7253+65.01
ELEV 450.00

0.000 %

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)

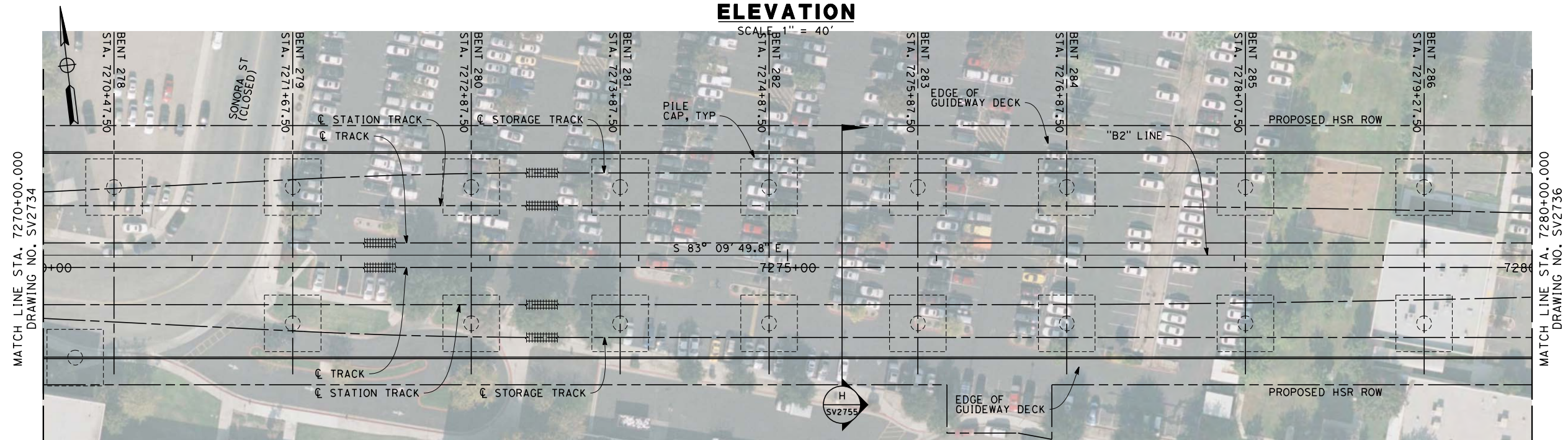


NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

ELEVATION

SCALE 1" = 40'

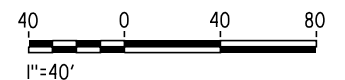


PLAN

SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2735-B2.dgn 12/20/2013 4:43:50 PM frank.palermo

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

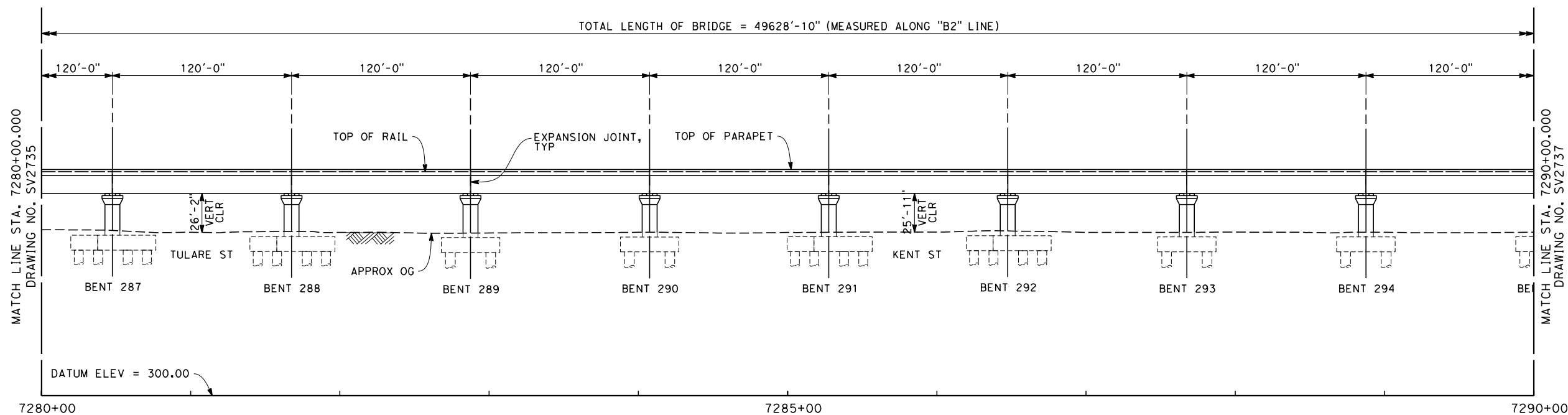
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2735
SCALE
AS SHOWN
SHEET NO.
36 OF 57

BVC 7316+71.32
ELEV 450.00

0.000 %

TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)

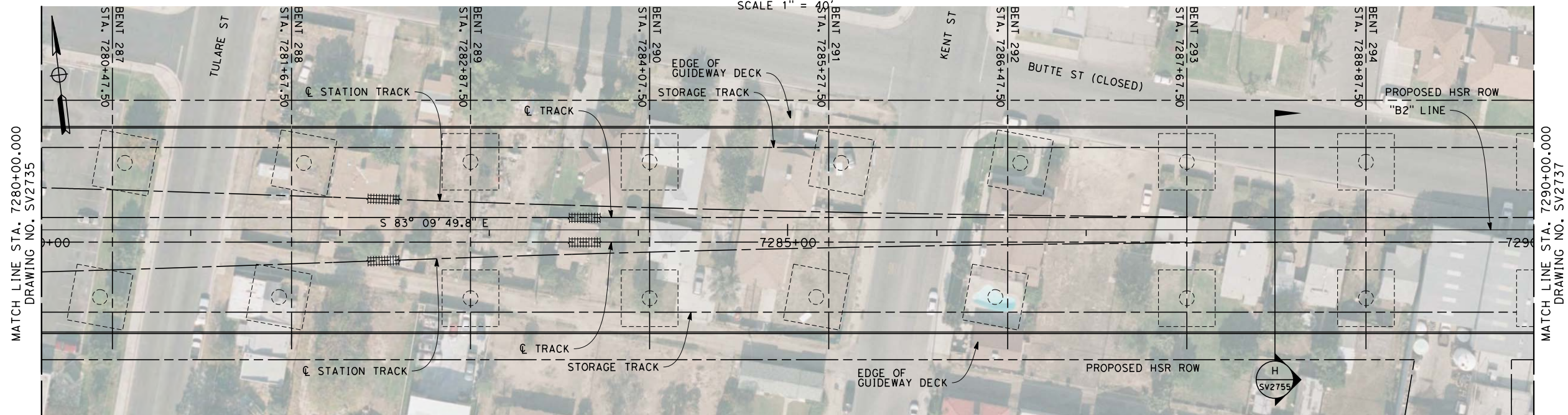


NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

ELEVATION

SCALE 1" = 40'

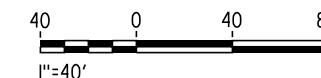


PLAN

SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY N. HUTTON
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

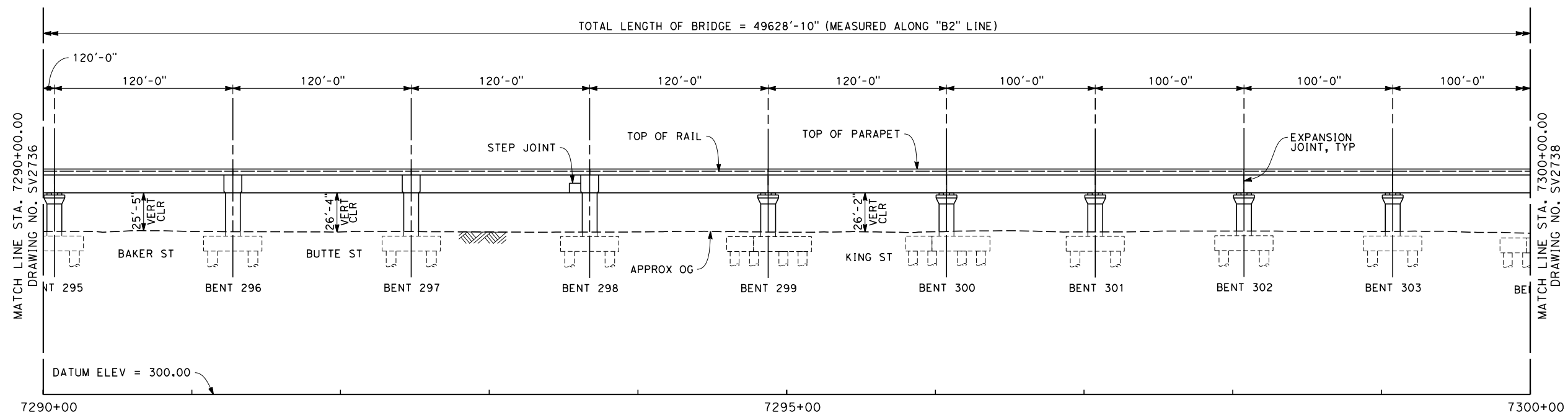
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2736
SCALE AS SHOWN
SHEET NO. 37 OF 57

BVC 7316+71.32
ELEV 450.00

0.000 %

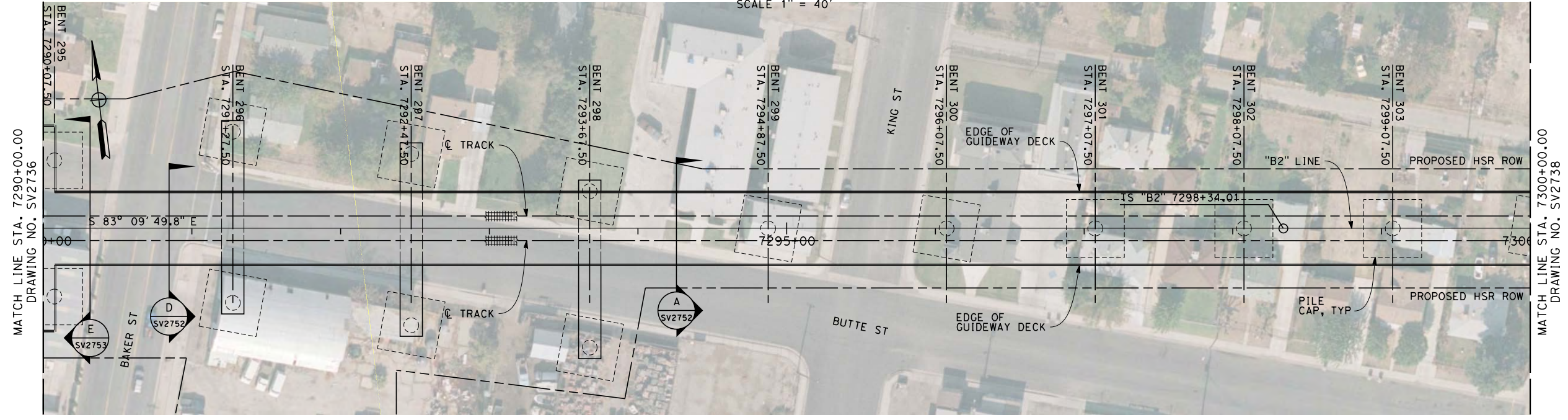
TOP OF RAIL "B2" LINE

NO SCALE



ELEVATION

SCALE 1" = 40'

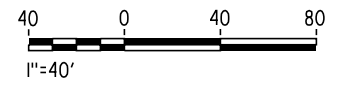


PLAN

SCALE 1" = 40'

- #### NOTES
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- #### LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2737

SCALE
AS SHOWN

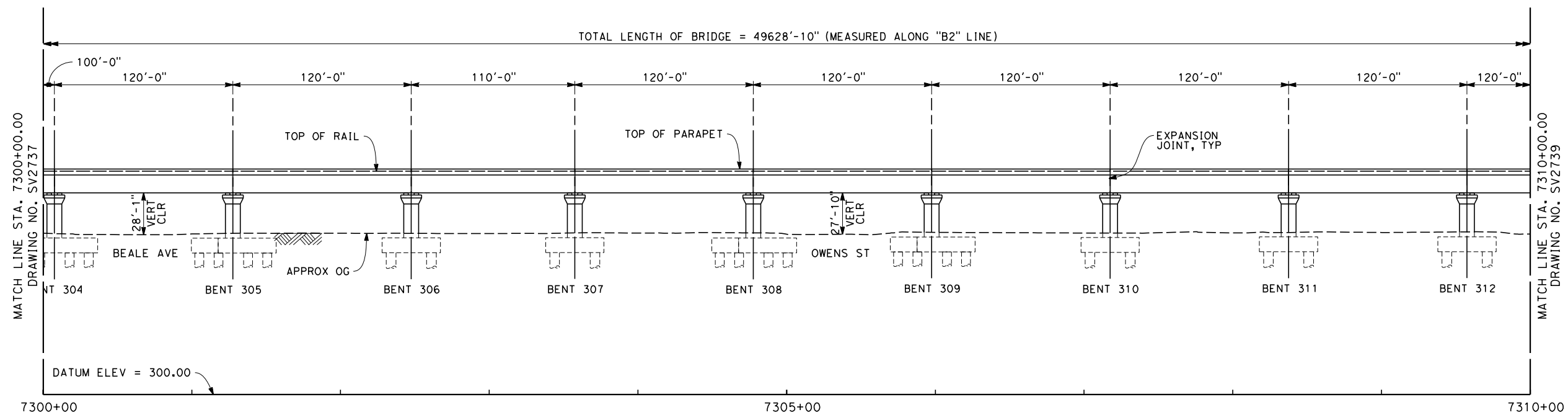
SHEET NO.
38 OF 57

c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2738-B2.dgn 12/20/2013 4:44:49 PM frank.palermo

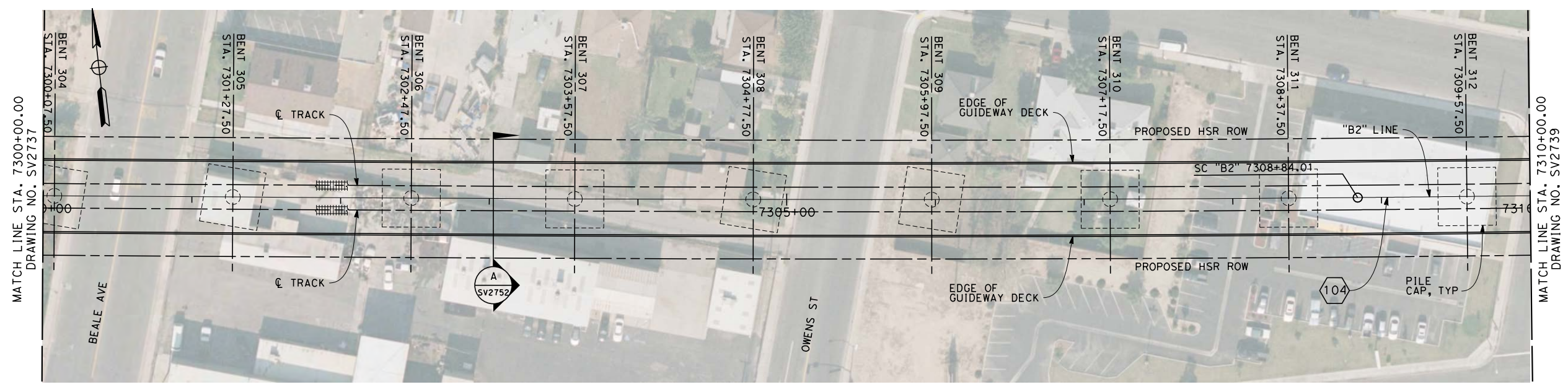
BVC 7316+71.32
ELEV 450.00

0.000 %

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

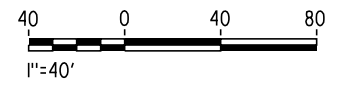
104

R = 33008.25'

Δ = 04° 48' 31.6"

T = 1386.0'

L = 2770.3'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

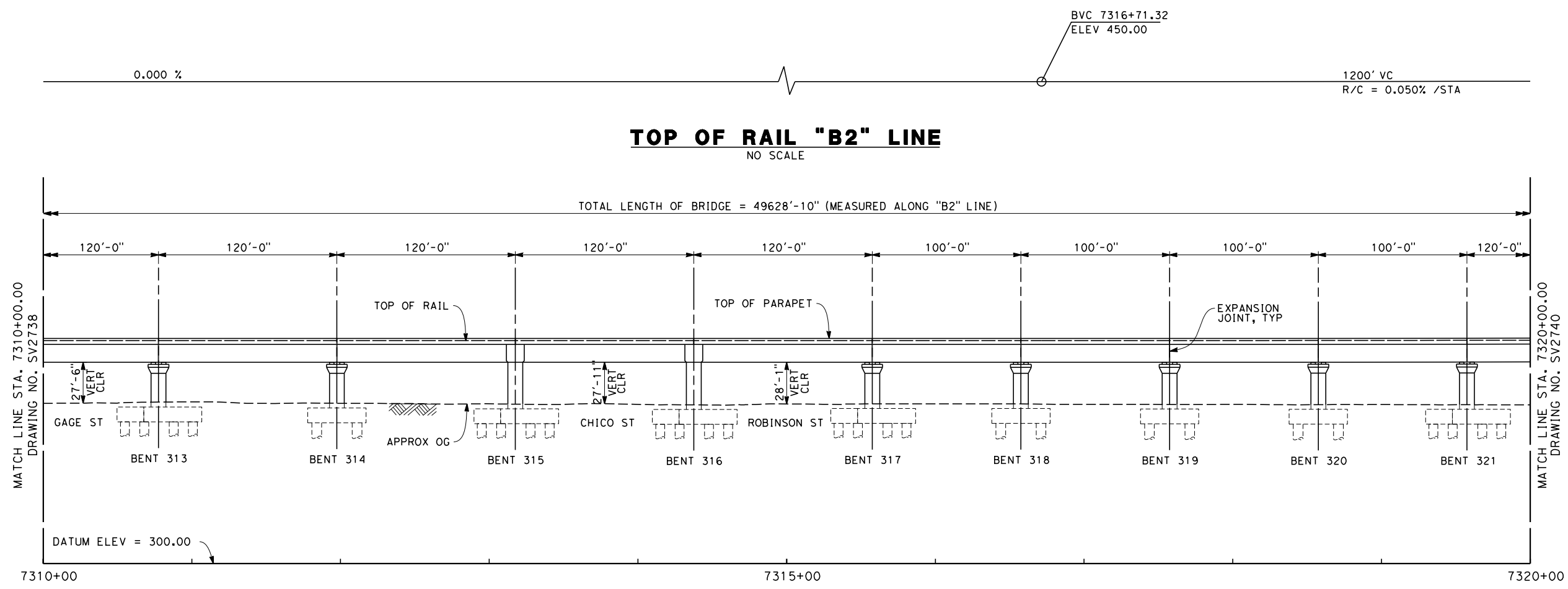
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2738

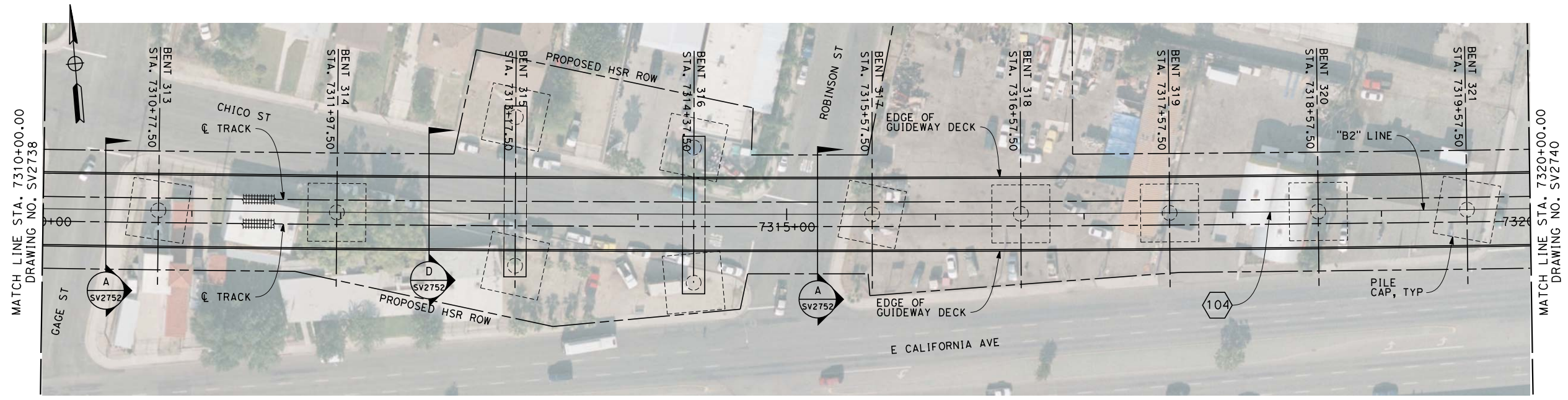
SCALE
AS SHOWN

SHEET NO.
39 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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ELEVATION
SCALE 1" = 40'



- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

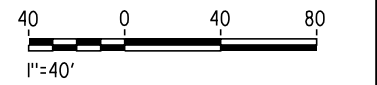
104

R = 33008.25'

Δ = 04° 48' 31.6"

T = 1386.0'

L = 2770.3'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

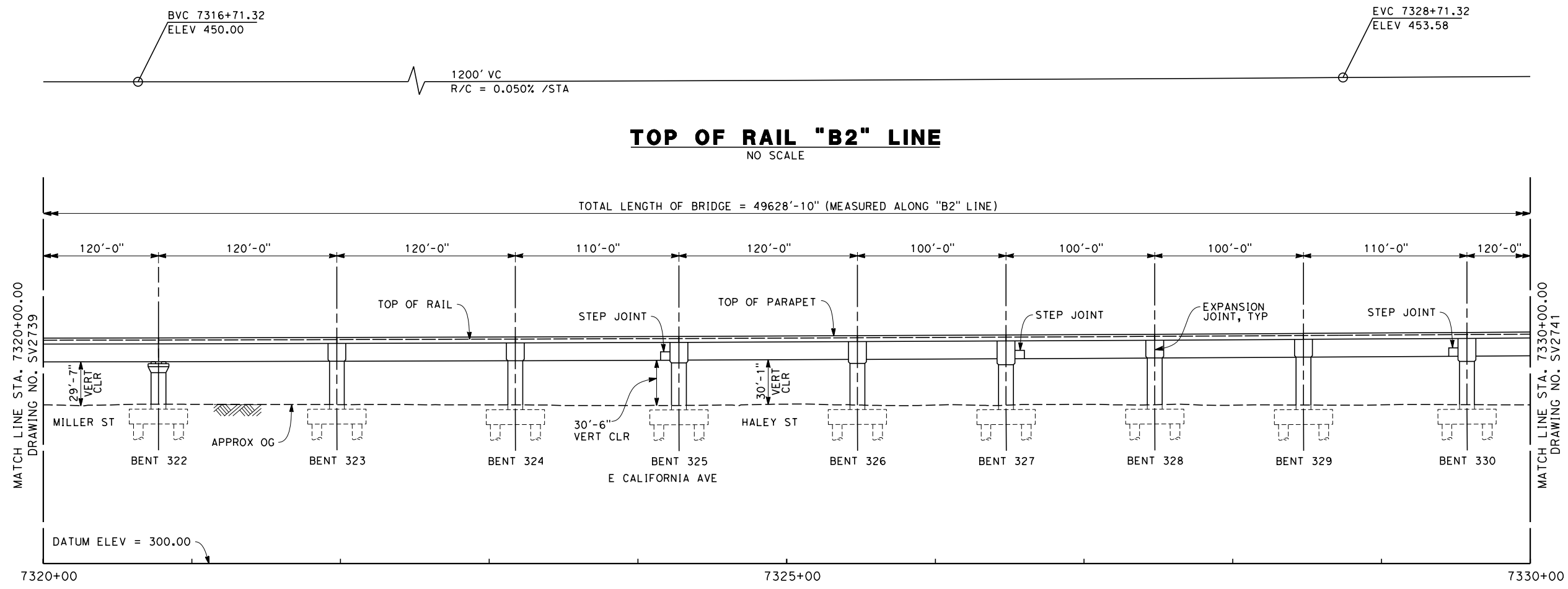
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2739

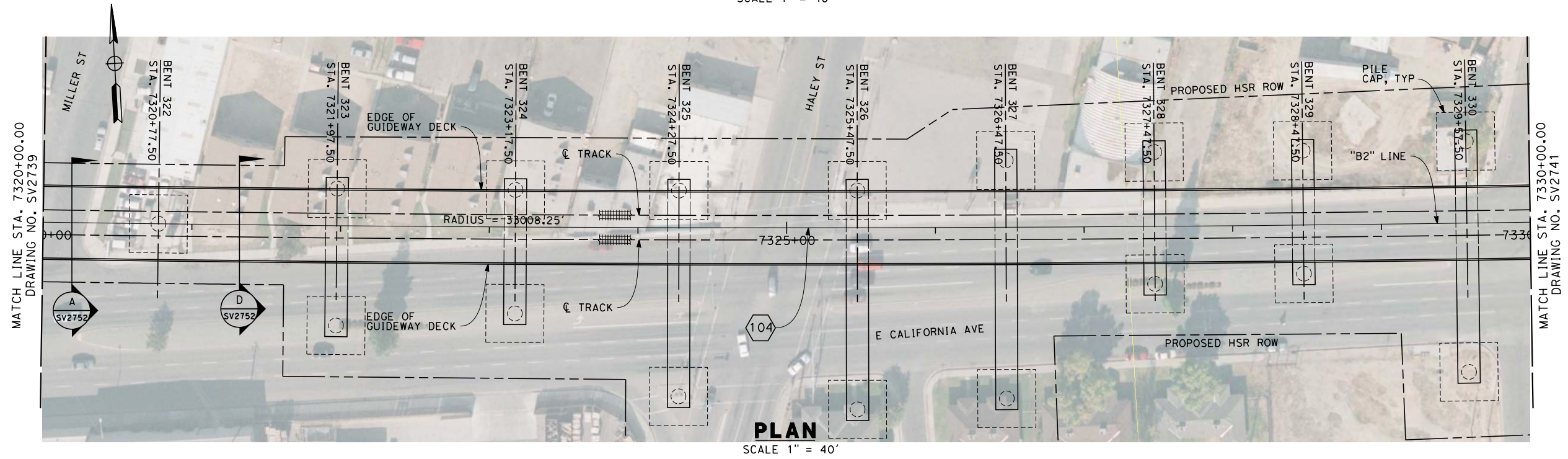
SCALE
AS SHOWN

SHEET NO.
40 OF 57

12/20/2013 4:45:39 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2740-B2.dgn



ELEVATION
SCALE 1" = 40'



- NOTES**
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
 - UTILITY LOCATIONS TO BE DETERMINED
 - ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

104

R = 33008.25'
Δ = 04° 48' 31.6"
T = 1386.0'
L = 2770.3'

Scale: 40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2740

SCALE
AS SHOWN

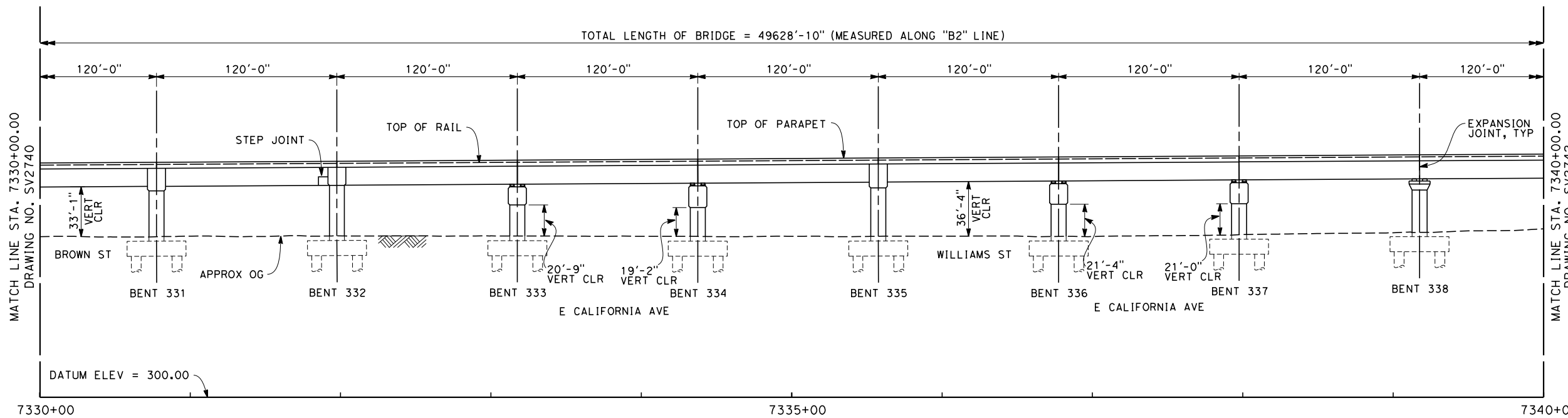
SHEET NO.
41 OF 57

EVC 7328+71.32
ELEV 453.58

0.596 %

TOP OF RAIL "B2" LINE

NO SCALE



ELEVATION

SCALE 1" = 40'

NOTES

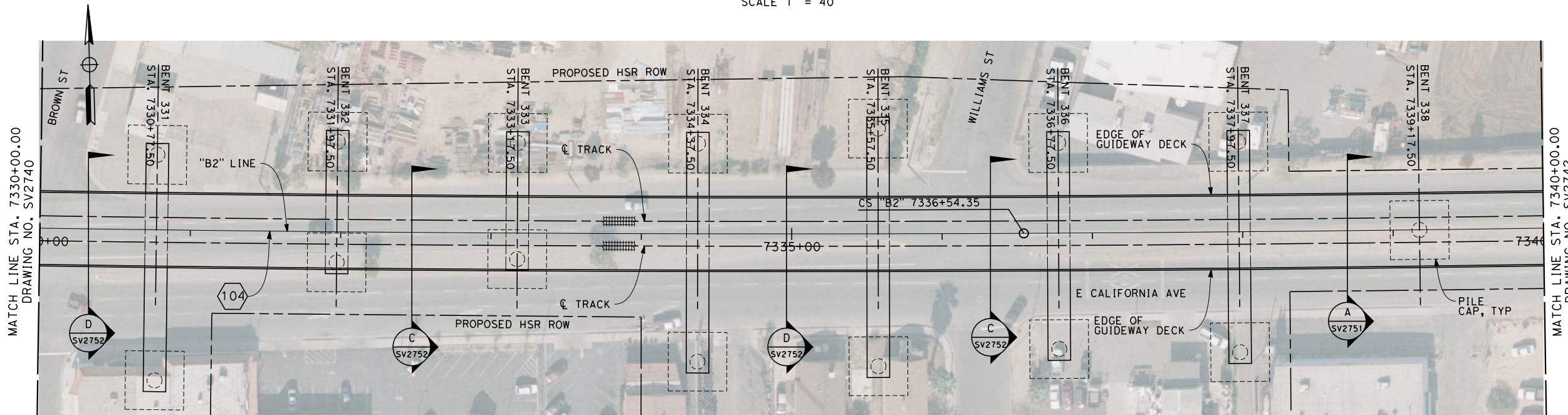
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
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LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

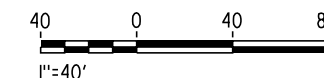
CURVE DATA

104
R = 33008.25'
Δ = 04° 48' 31.6"
T = 1386.0'
L = 2770.3'



PLAN

SCALE 1" = 40'



12/20/2013 4:46:00 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2741-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

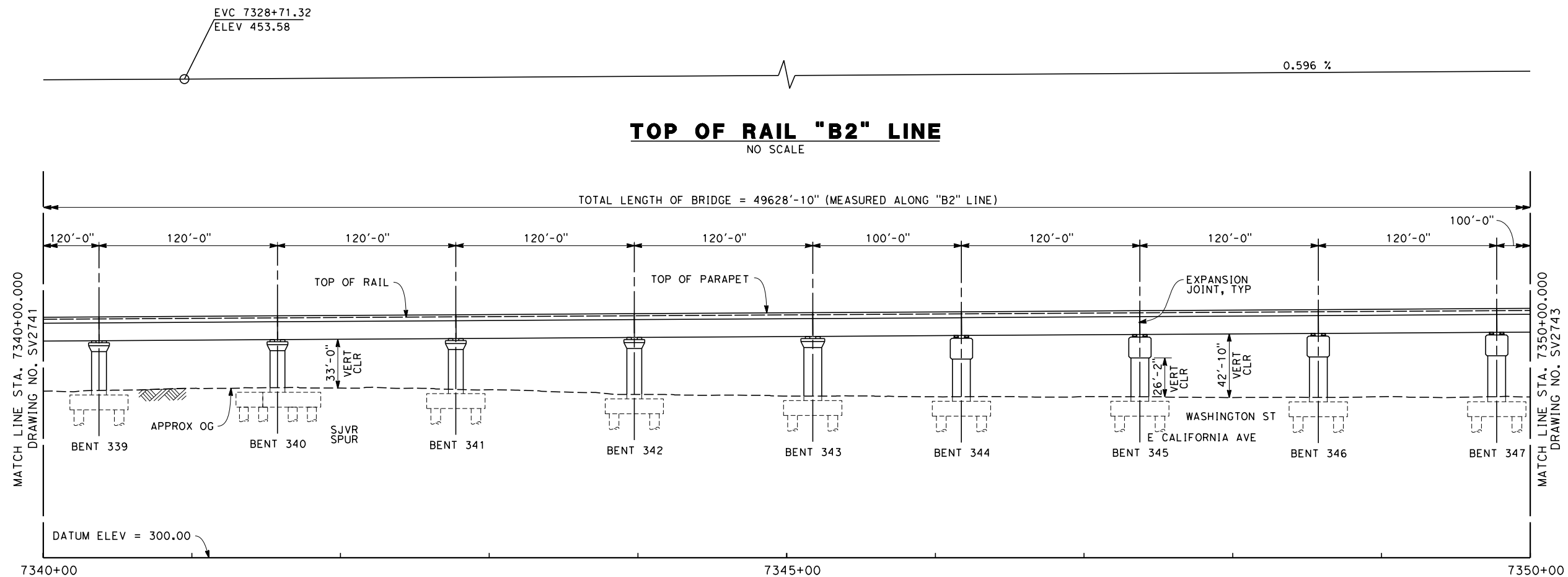
**NOT FOR
CONSTRUCTION**



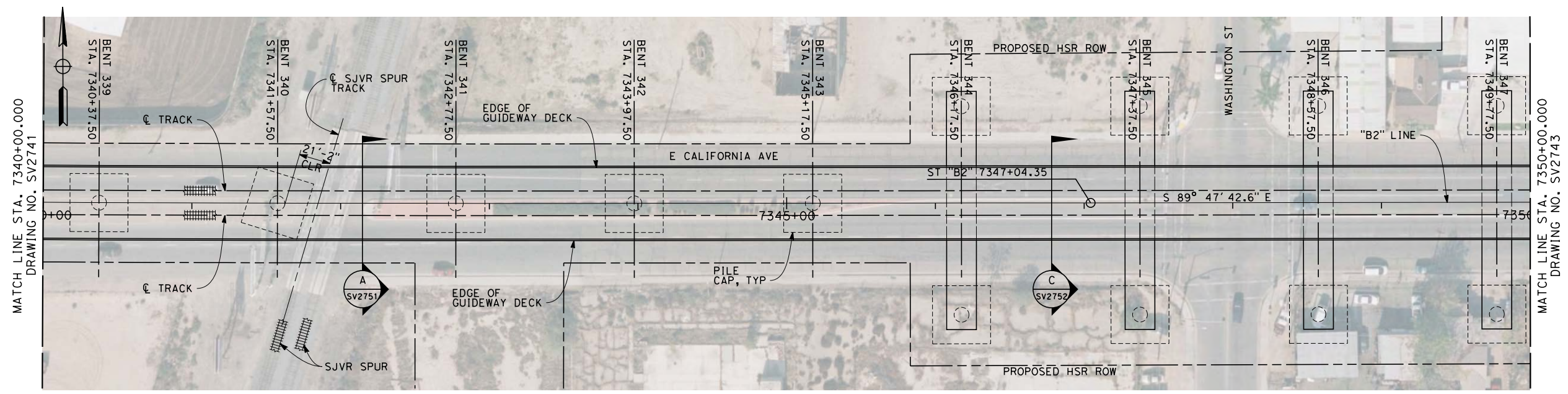
**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2741
SCALE
AS SHOWN
SHEET NO.
42 OF 57

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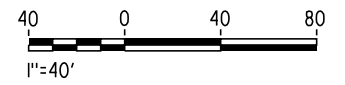


ELEVATION
SCALE 1" = 40'



- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2742

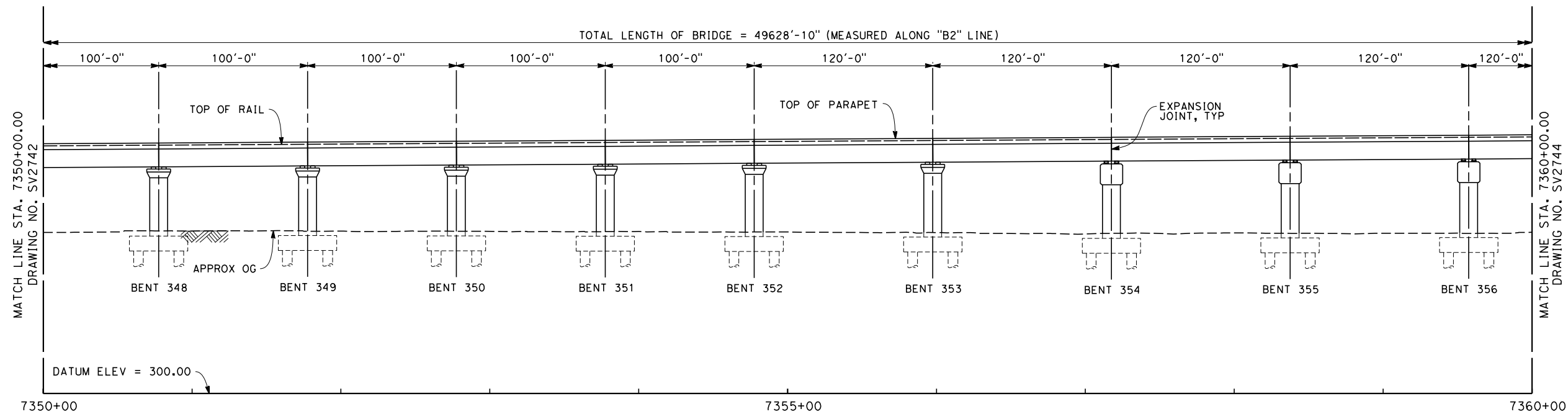
SCALE
AS SHOWN

SHEET NO.
43 OF 57

EVC 7328+71.32
ELEV 453.58

0.596 %

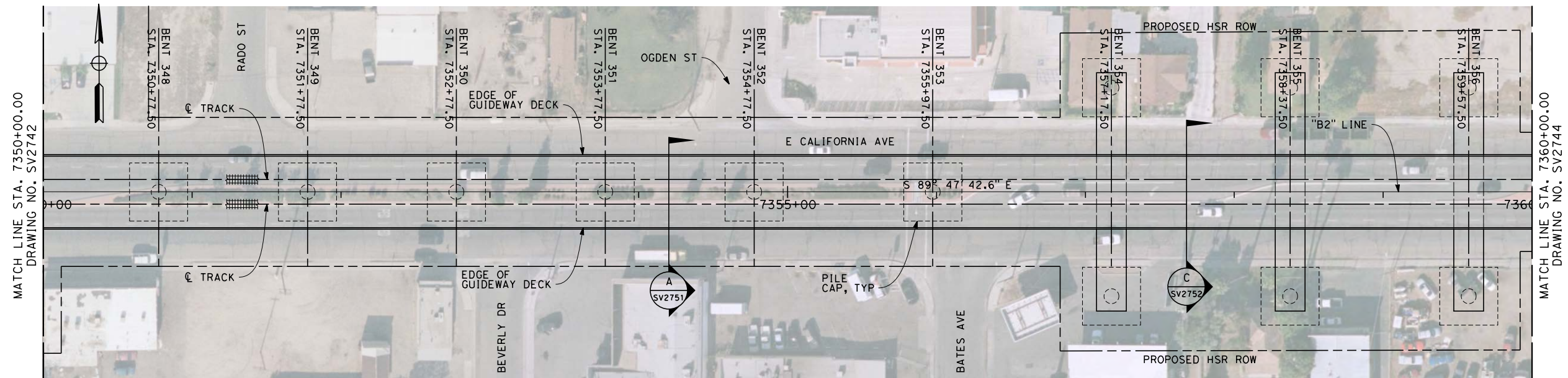
TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION
SCALE 1" = 40'

NOTES

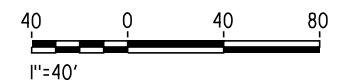
1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
SIMPLE SPANS - MSS OR FLPM
CONTINUOUS SPANS - BCC - PRECAST IN-SITU
STEEL TRUSS - INSITU, SLID OR LAUNCHED
ELEVATED SLABS - PC BEAM AND INSITU SLAB
4. UTILITY LOCATIONS TO BE DETERMINED
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PLAN
SCALE 1" = 40'

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

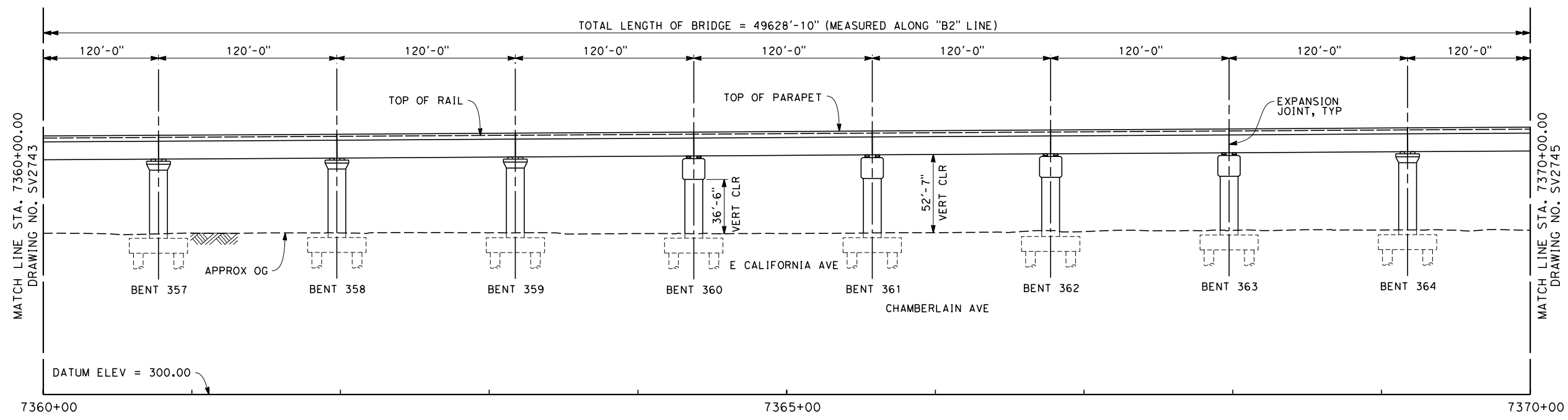
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2743
SCALE
AS SHOWN
SHEET NO.
44 OF 57

c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2744-B2.dgn 12/20/2013 4:47:03 PM

BVC 7402+74.15
ELEV 497.72

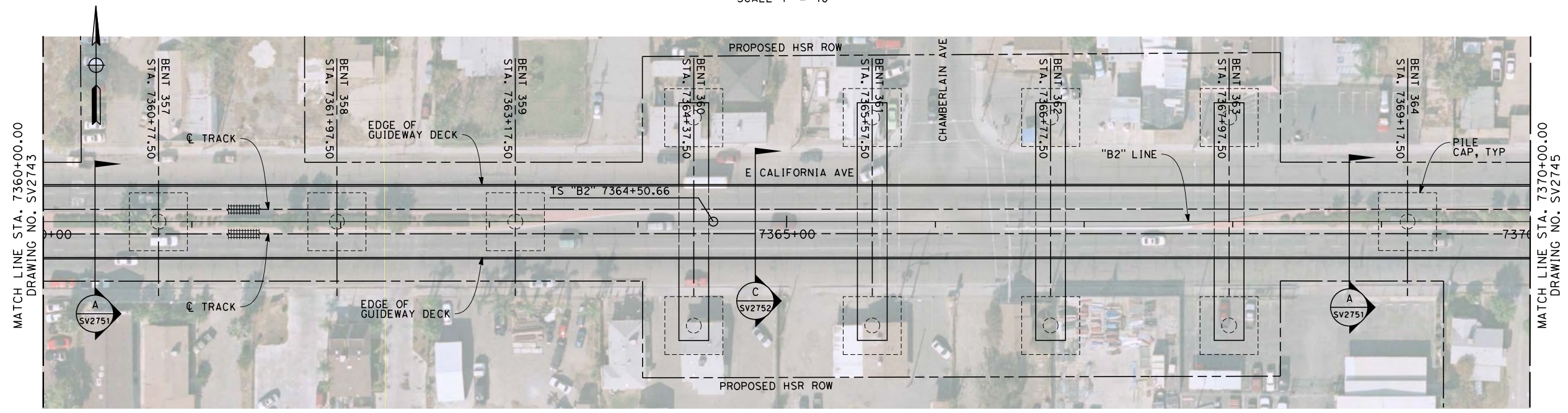
0.596 %

TOP OF RAIL "B2" LINE
NO SCALE



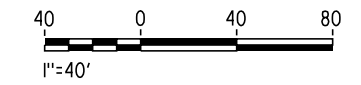
ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2744

SCALE
AS SHOWN

SHEET NO.
45 OF 57

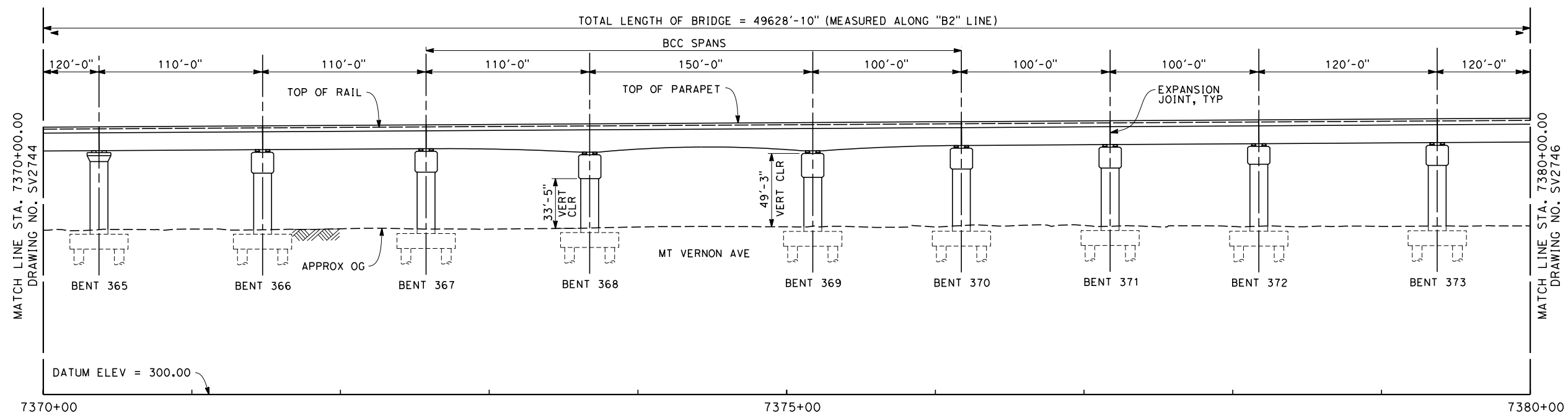
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BVC 7402+74.15
ELEV 497.72

0.596 %

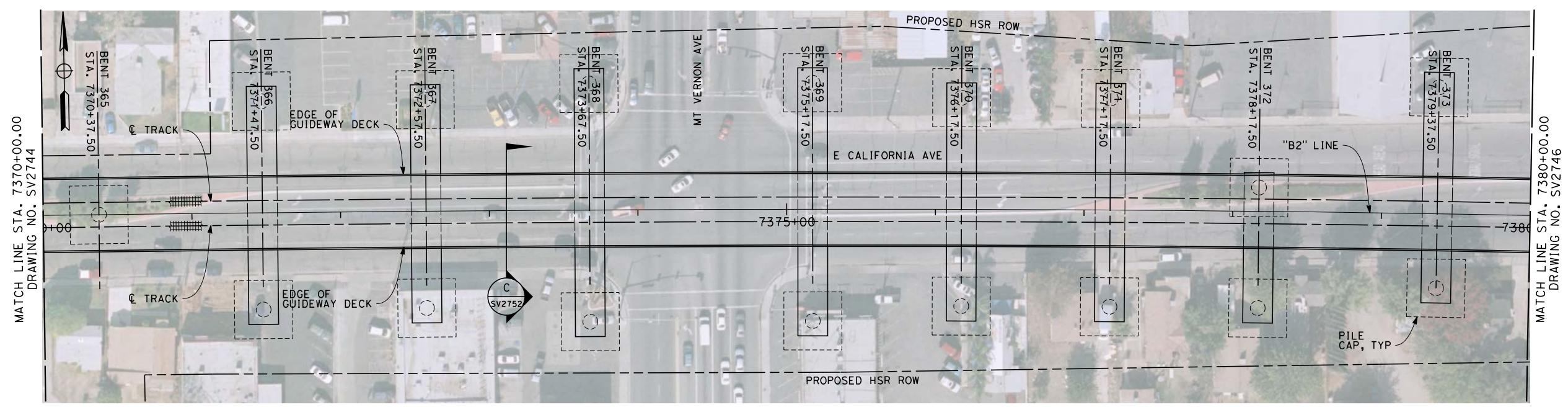
TOP OF RAIL "B2" LINE
NO SCALE

TOTAL LENGTH OF BRIDGE = 49628'-10" (MEASURED ALONG "B2" LINE)



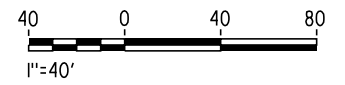
ELEVATION
SCALE 1" = 40'

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

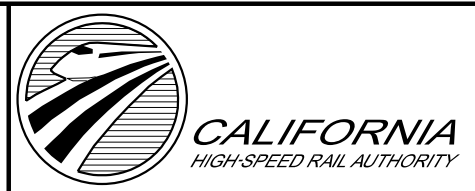


REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

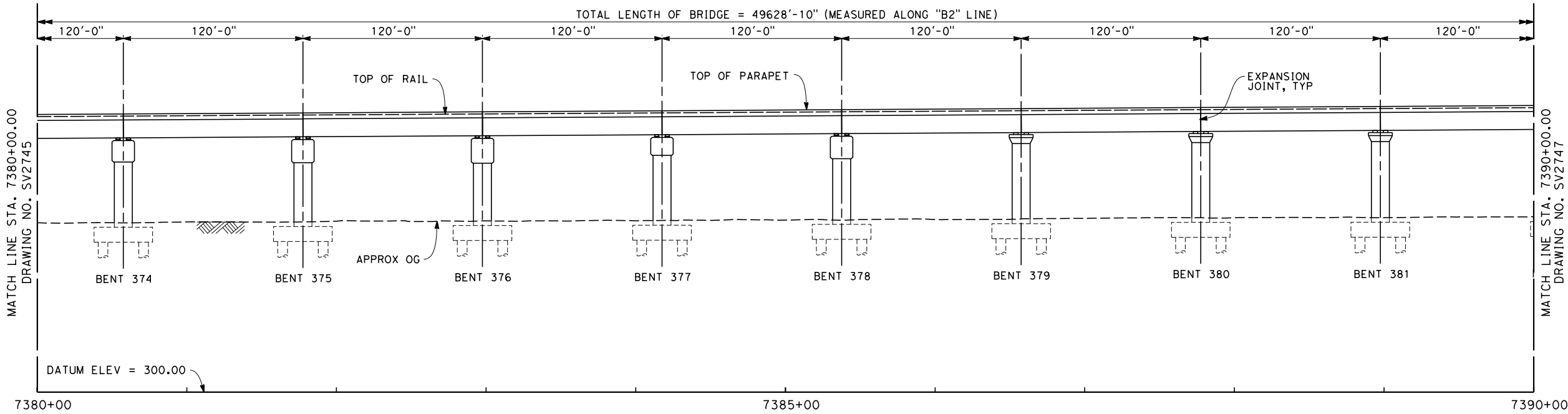
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2745
SCALE
AS SHOWN
SHEET NO.
46 OF 57

c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71887\FB-SV-2746-B2.dgn 12/20/2013 4:47:35 PM frank.palermo

BVC 7402+74.15
ELEV 497.72

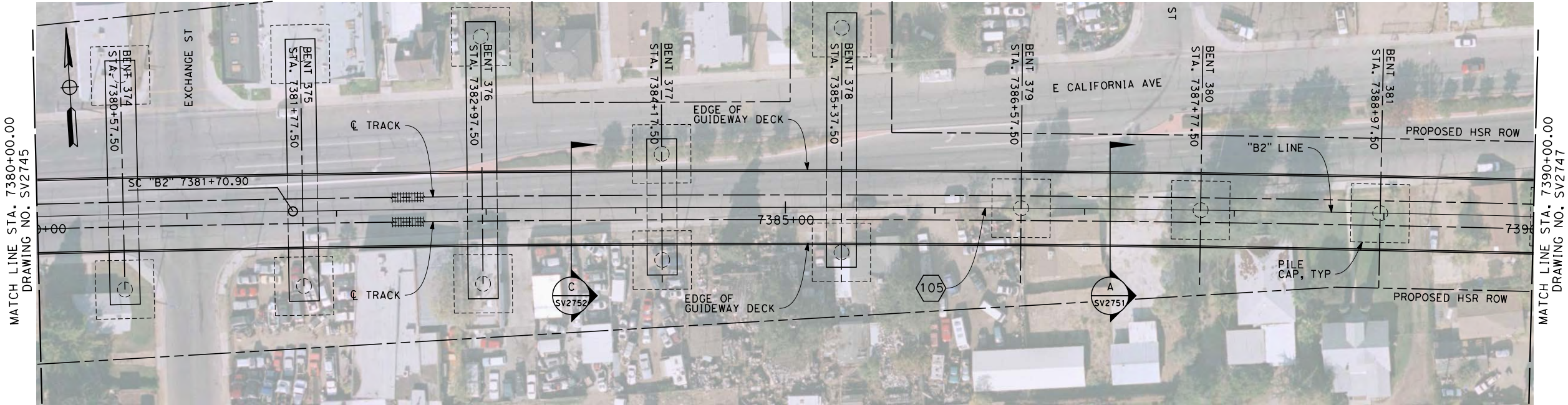
0.596 %

TOP OF RAIL "B2" LINE
NO SCALE



ELEVATION

SCALE 1" = 40'



PLAN

SCALE 1" = 40'

NOTES

1. NOT ALL PILES SHOWN
2. PILE LENGTH TO BE DETERMINED
3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

LEGEND:

- ① STRUCTURE APPROACH SLAB
- ② RETAINING WALL
- * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

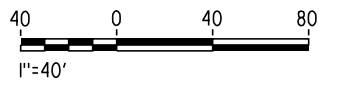
105

R = 20008.33'

Δ = 11° 44' 00.5"

T = 2055.9'

L = 4097.5'



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2746

SCALE
AS SHOWN

SHEET NO.
47 OF 57

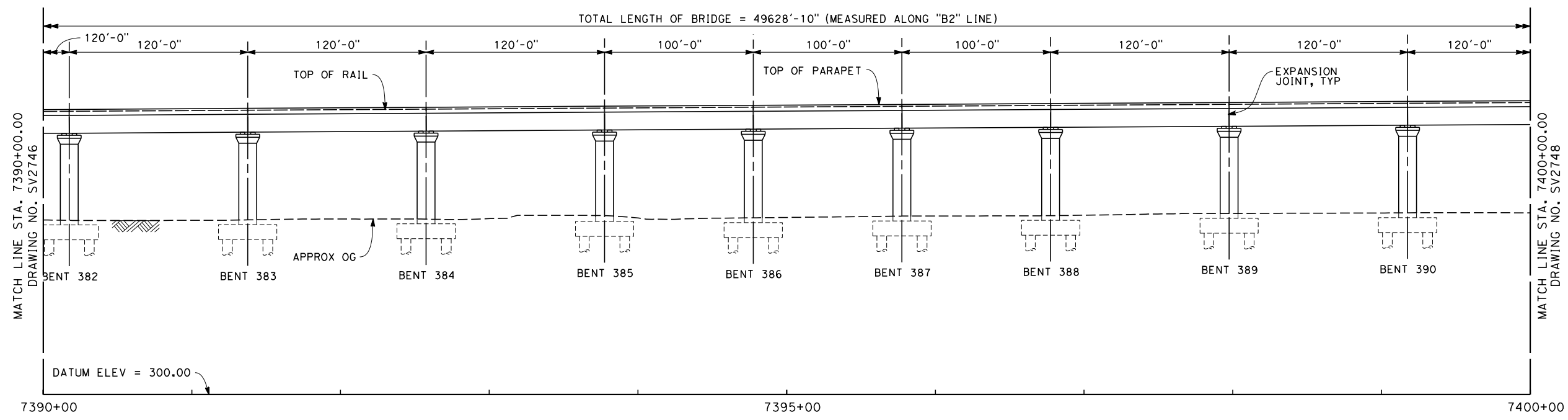
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BVC 7402+74.15
ELEV 497.72

0.596 %

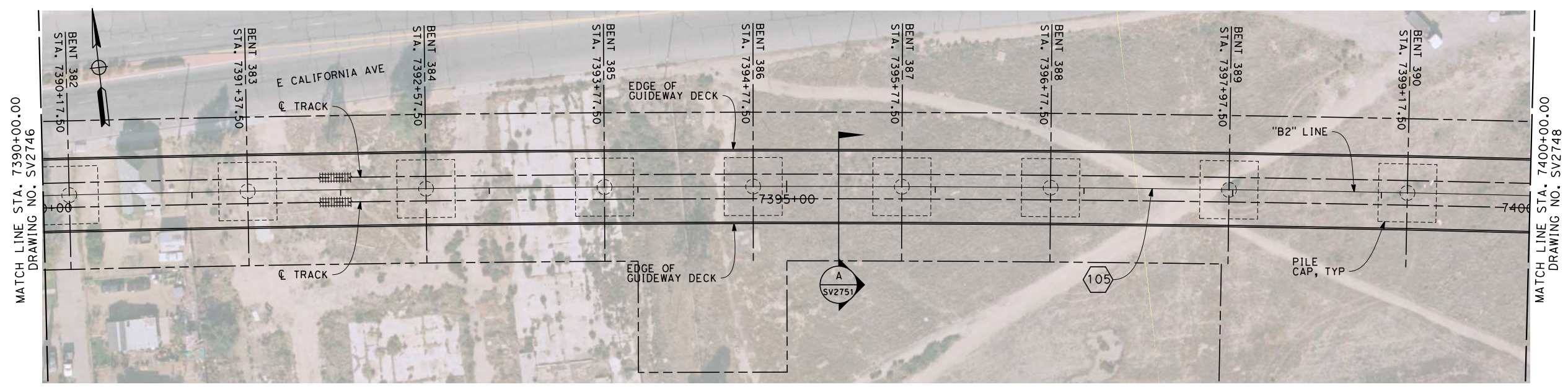
TOP OF RAIL "B2" LINE

NO SCALE



ELEVATION

SCALE 1" = 40'



PLAN

SCALE 1" = 40'

- #### NOTES
- NOT ALL PILES SHOWN
 - PILE LENGTH TO BE DETERMINED
 - SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
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- #### LEGEND:
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

105

R = 20008.33'

Δ = 11° 44' 00.5"

T = 2055.9'

L = 4097.5'

Scale: 1" = 40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT

FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION

ALIGNMENT B2

BAKERSFIELD VIADUCT

PLAN AND ELEVATION

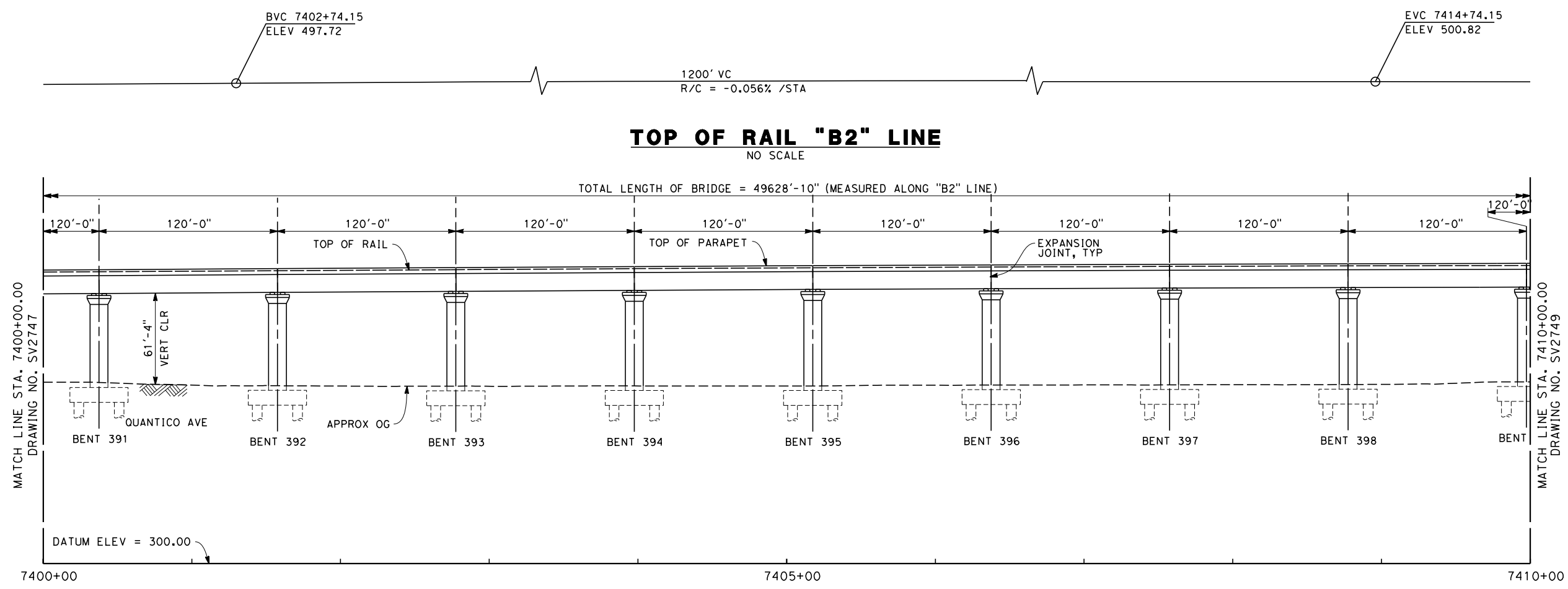
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2747

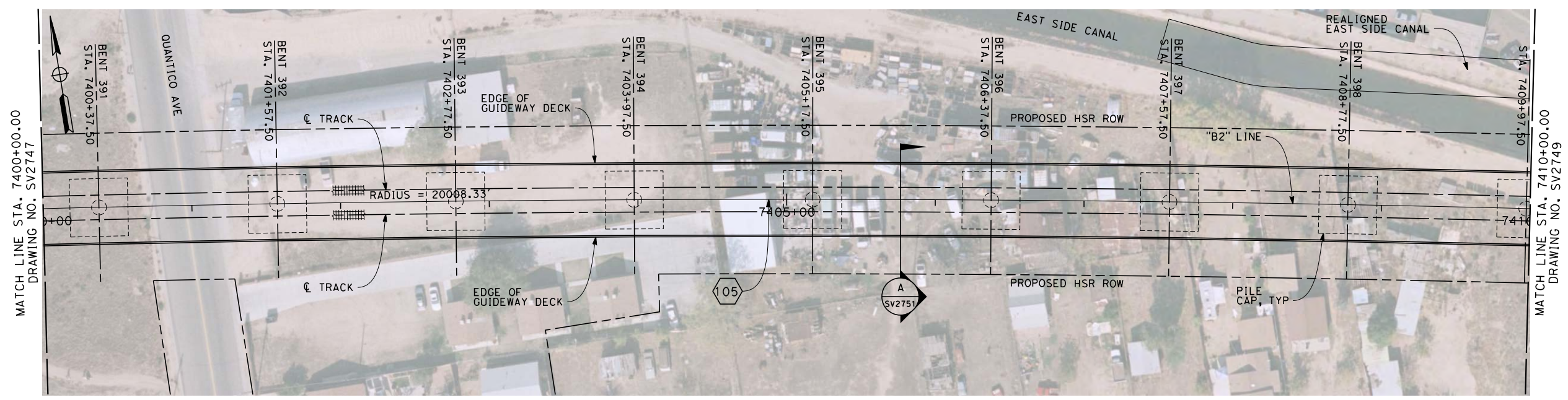
SCALE
AS SHOWN

SHEET NO.
48 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
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ELEVATION
SCALE 1" = 40'



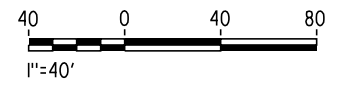
PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

105

R = 20008.33'
 $\Delta = 11^\circ 44' 00.5''$
 T = 2055.9'
 L = 4097.5'



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

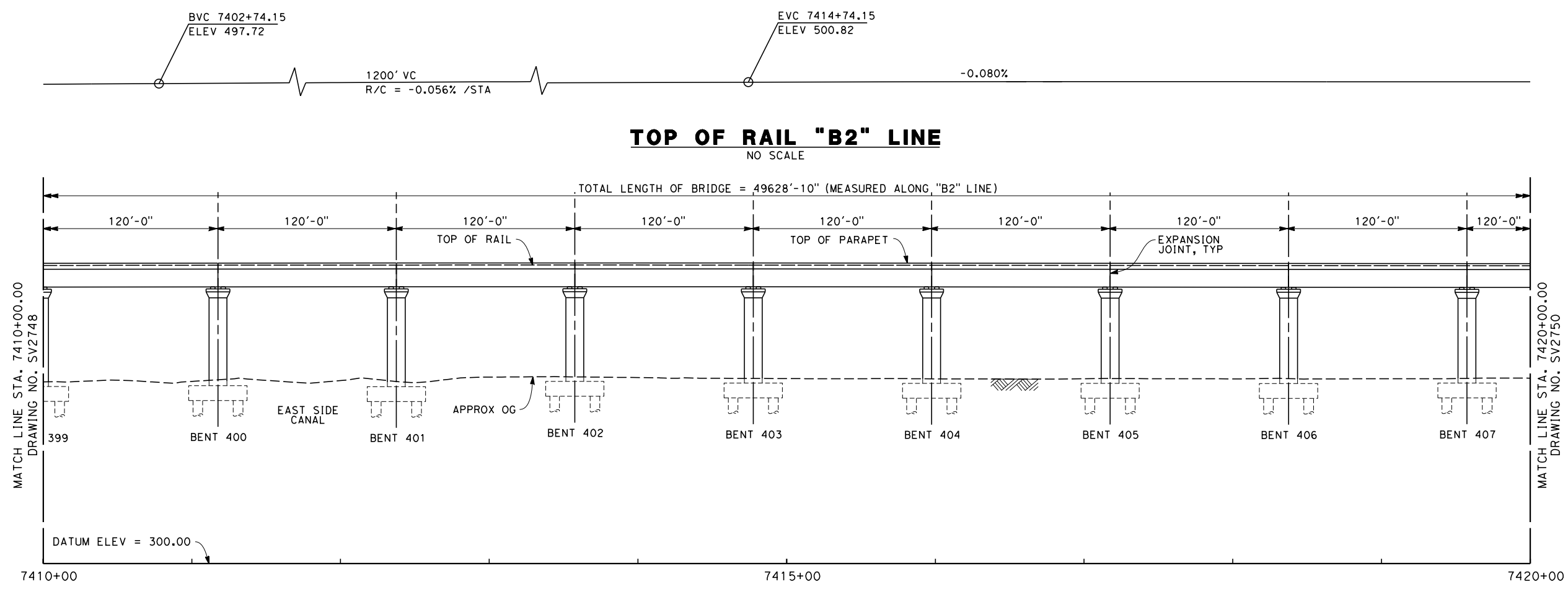
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HSR 06-0003

DRAWING NO.
SV2748

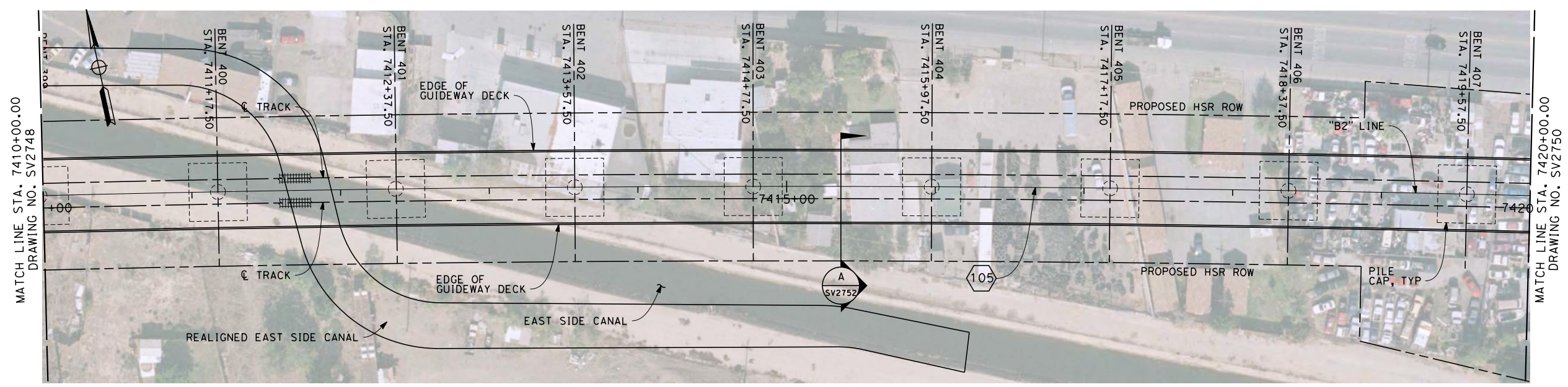
SCALE
AS SHOWN

SHEET NO.
49 OF 57

- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
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ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".

CURVE DATA

105

R = 20008.33'

Δ = 11° 44' 00.5"

T = 2055.9'

L = 4097.5'

40 0 40 80
1"=40'

12/20/2013 4:48:33 PM c:\pwworking\hmm\external\frank.palermo01-ar.com\dms71887\FB-SV-2749-B2.dgn

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO.
HSR 06-0003

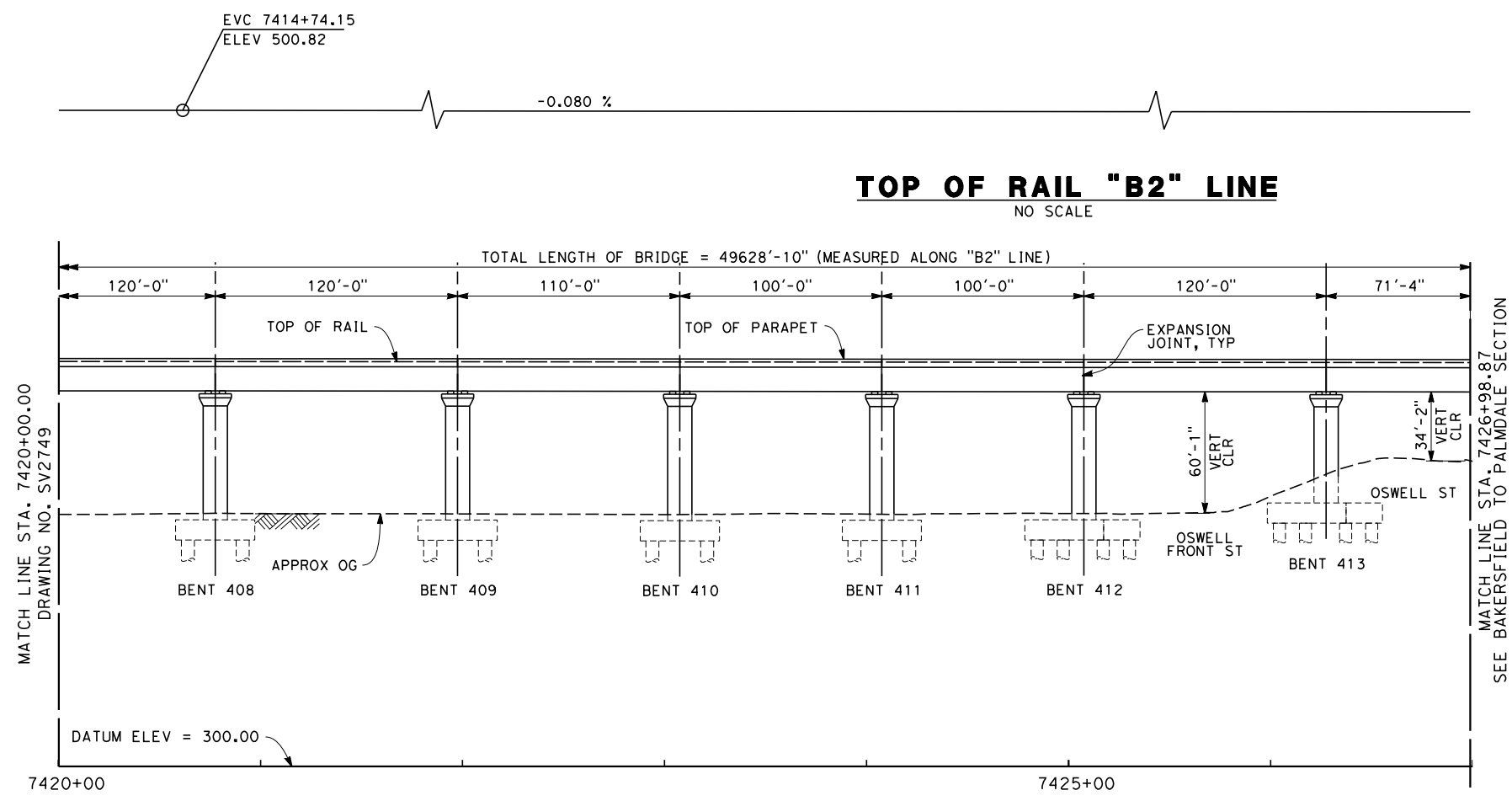
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SV2749

SCALE
AS SHOWN

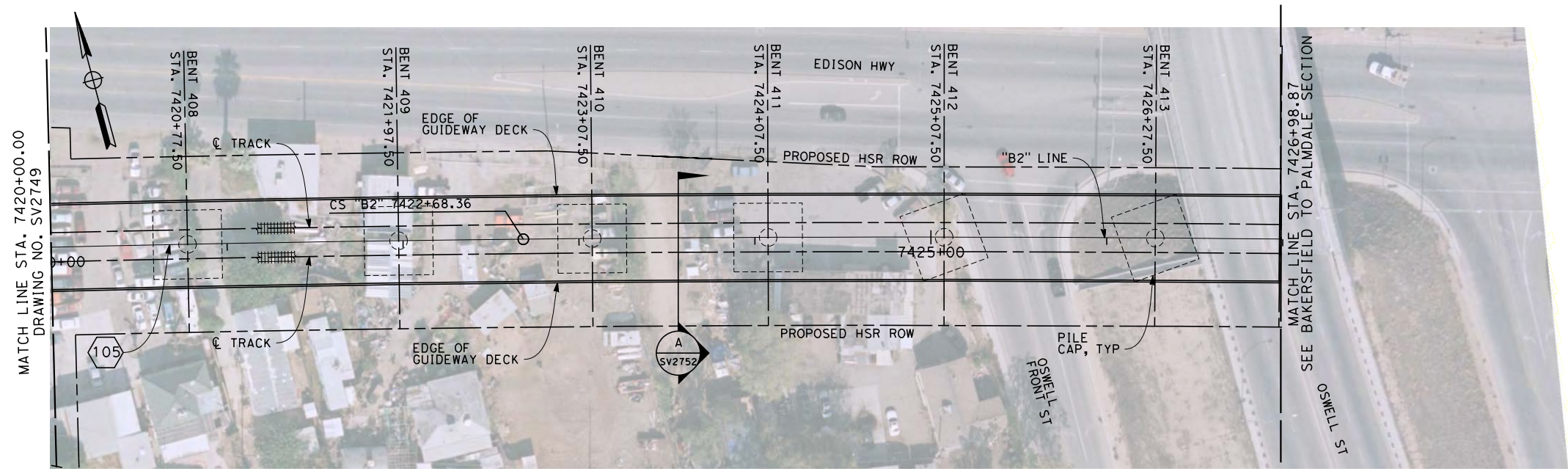
SHEET NO.
50 OF 57

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- NOTES**
1. NOT ALL PILES SHOWN
 2. PILE LENGTH TO BE DETERMINED
 3. SUPERSTRUCTURE CONSTRUCTION, UON
 - SIMPLE SPANS - MSS OR FLPM
 - CONTINUOUS SPANS - BCC - PRECAST IN-SITU
 - STEEL TRUSS - INSITU, SLID OR LAUNCHED
 - ELEVATED SLABS - PC BEAM AND INSITU SLAB
 4. UTILITY LOCATIONS TO BE DETERMINED
 5. ACCESS STAIRWAYS ARE PROVIDED AT SYSTEMS SITES (APPROX. 2.5 MILE INTERVALS). LADDER ACCESS TO VIADUCTS IS PROVIDED AT 2500 FT INTERVALS WITH ACCESS ROAD AND TURNING CIRCLE WHERE NECESSARY.

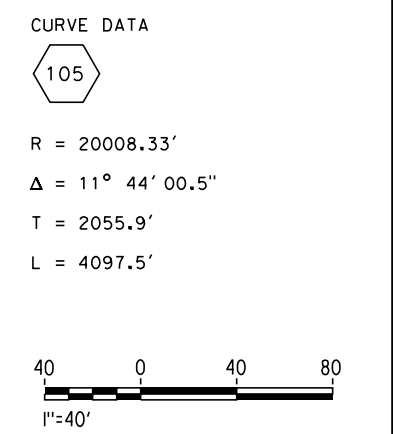


ELEVATION
SCALE 1" = 40'



PLAN
SCALE 1" = 40'

- LEGEND:**
- ① STRUCTURE APPROACH SLAB
 - ② RETAINING WALL
 - * ESTIMATED 100-YEAR FLOOD ELEVATION, SEE "FRESNO TO BAKERSFIELD CORRIDOR HYDROLOGY, HYDRAULICS AND DRAINAGE 15% DRAFT REPORT".



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER

DRAWN BY
N. HUTTON

CHECKED BY
A. ARMSTRONG

IN CHARGE
R. COFFIN

DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 PLAN AND ELEVATION

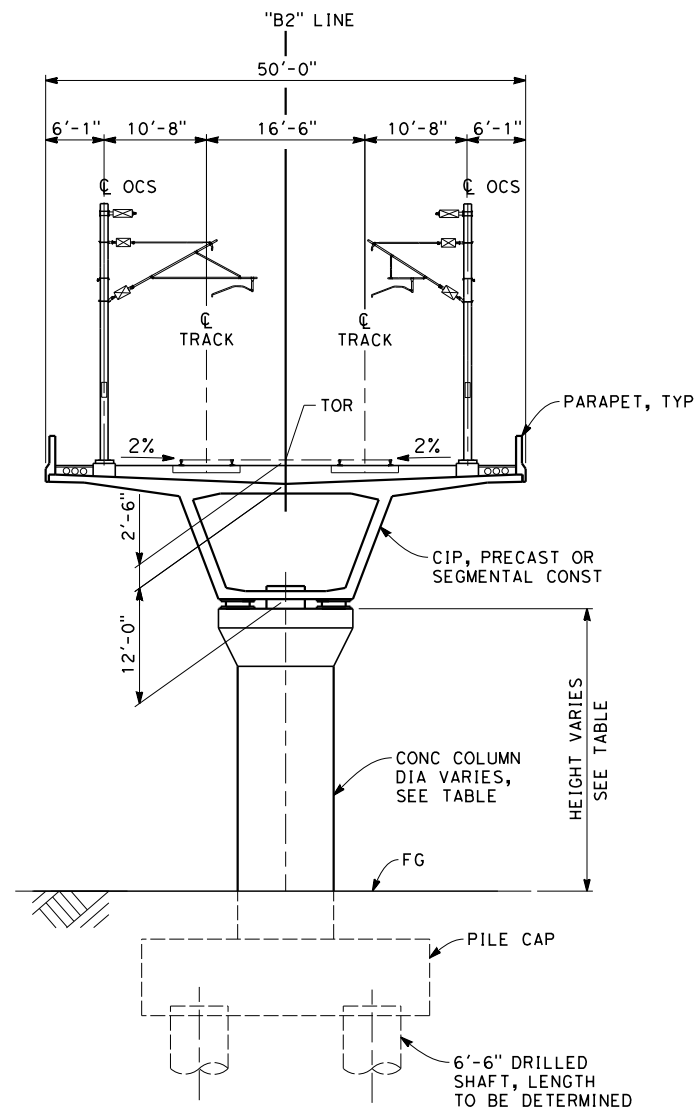
CONTRACT NO.
HSR 06-0003

DRAWING NO.
SV2750

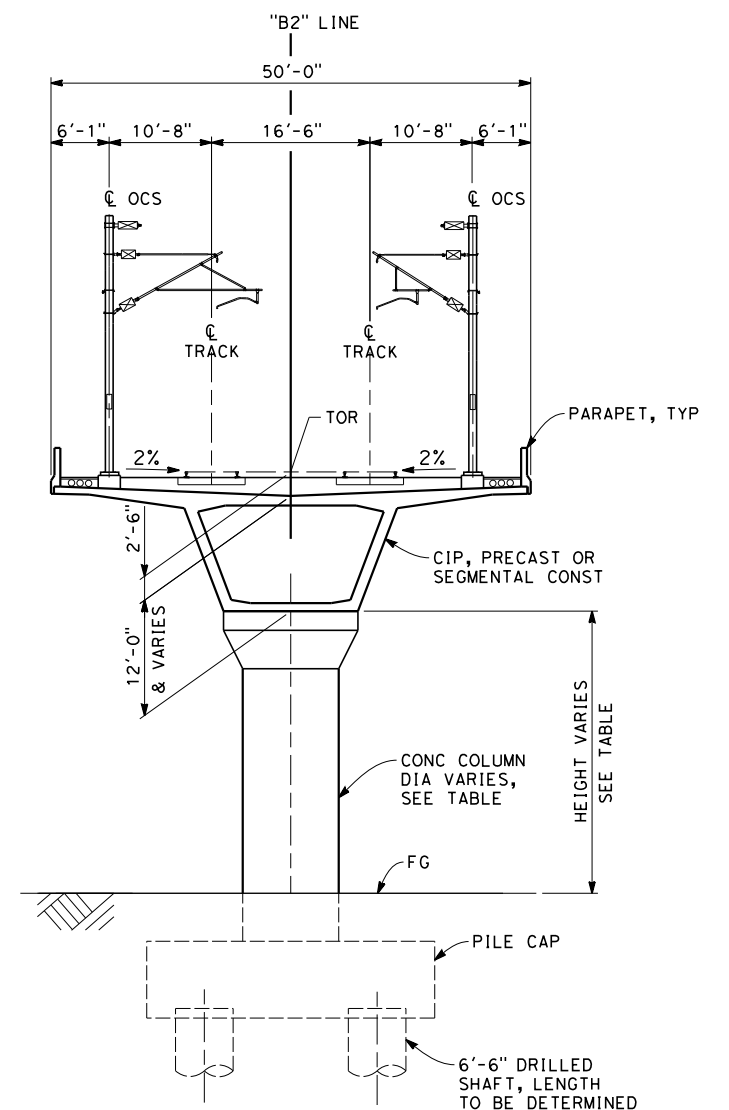
SCALE
AS SHOWN

SHEET NO.
51 OF 57

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COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION A

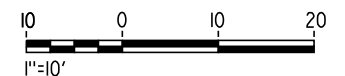
SCALE: 1"=10'

STA 6930+70.00 THROUGH 6943+71.50	STA 7149+77.50 THROUGH 7159+57.50
STA 6946+93.50 THROUGH 6998+53.50	STA 7163+77.50 THROUGH 7218+97.50
STA 7002+93.50 THROUGH 7010+13.50	STA 7293+67.50 THROUGH 7313+17.50
STA 7024+13.50 THROUGH 7054+13.50	STA 7314+37.50 THROUGH 7321+97.50
STA 7055+33.50 THROUGH 7057+73.50	STA 7337+97.50 THROUGH 7346+17.50
STA 7058+93.50 THROUGH 7077+73.50	STA 7349+77.50 THROUGH 7357+17.50
STA 7081+83.50 THROUGH 7082+83.50	STA 7359+57.50 THROUGH 7364+37.50
STA 7083+83.50 THROUGH 7095+65.00	STA 7367+97.50 THROUGH 7371+47.50
STA 7118+96.00 THROUGH 7145+57.50	STA 7385+37.50 THROUGH 7426+98.87

SECTION B

SCALE: 1"=10'

STA 6998+53.50 THROUGH 7002+93.50
STA 7077+73.50 THROUGH 7081+83.50
STA 7145+57.50 THROUGH 7149+77.50
STA 7159+57.50 THROUGH 7163+77.50
STA 7218+97.50 THROUGH 7222+77.50



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY N. HUTTON
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

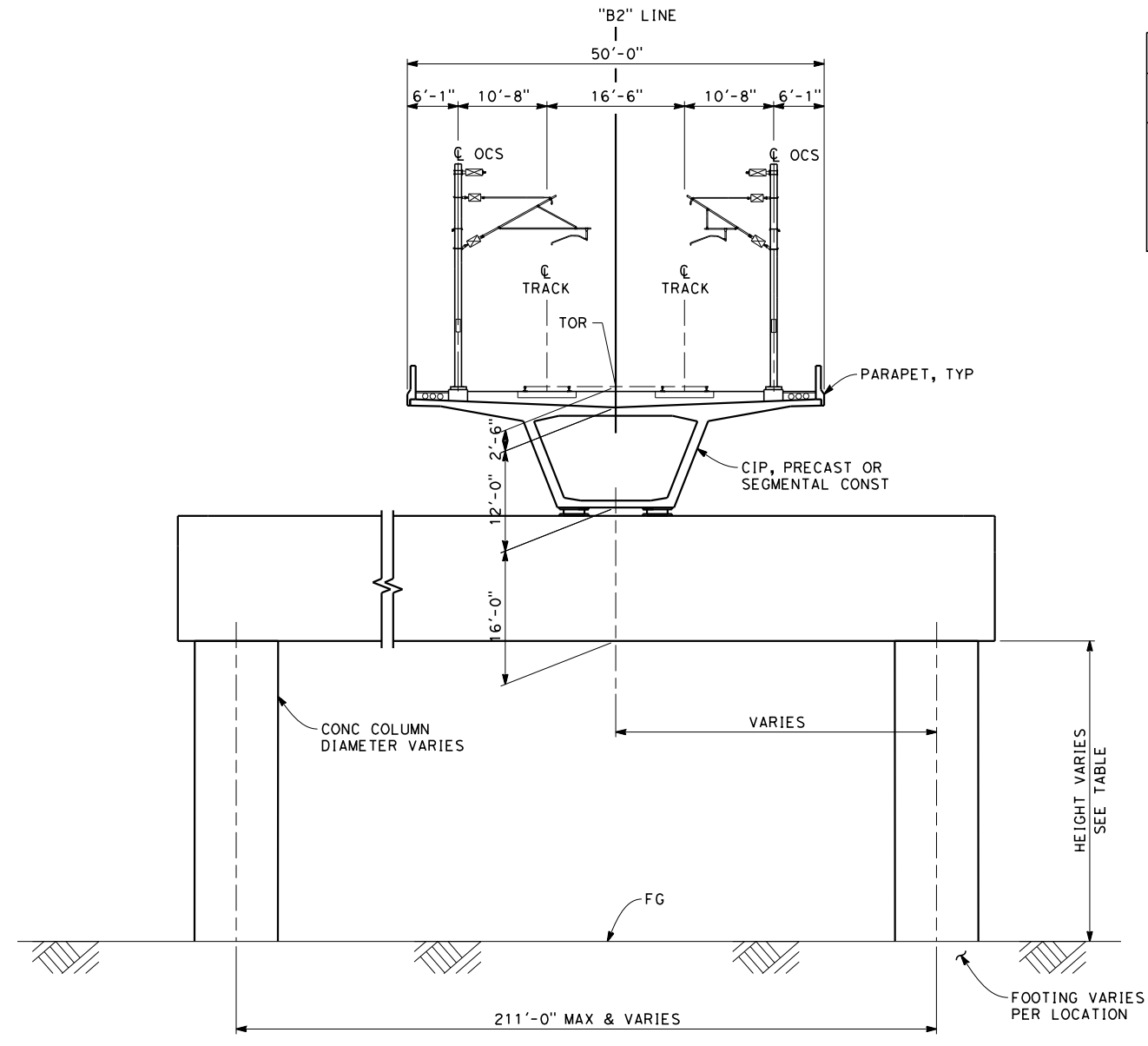
**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2751
SCALE AS SHOWN
SHEET NO. 52 OF 57

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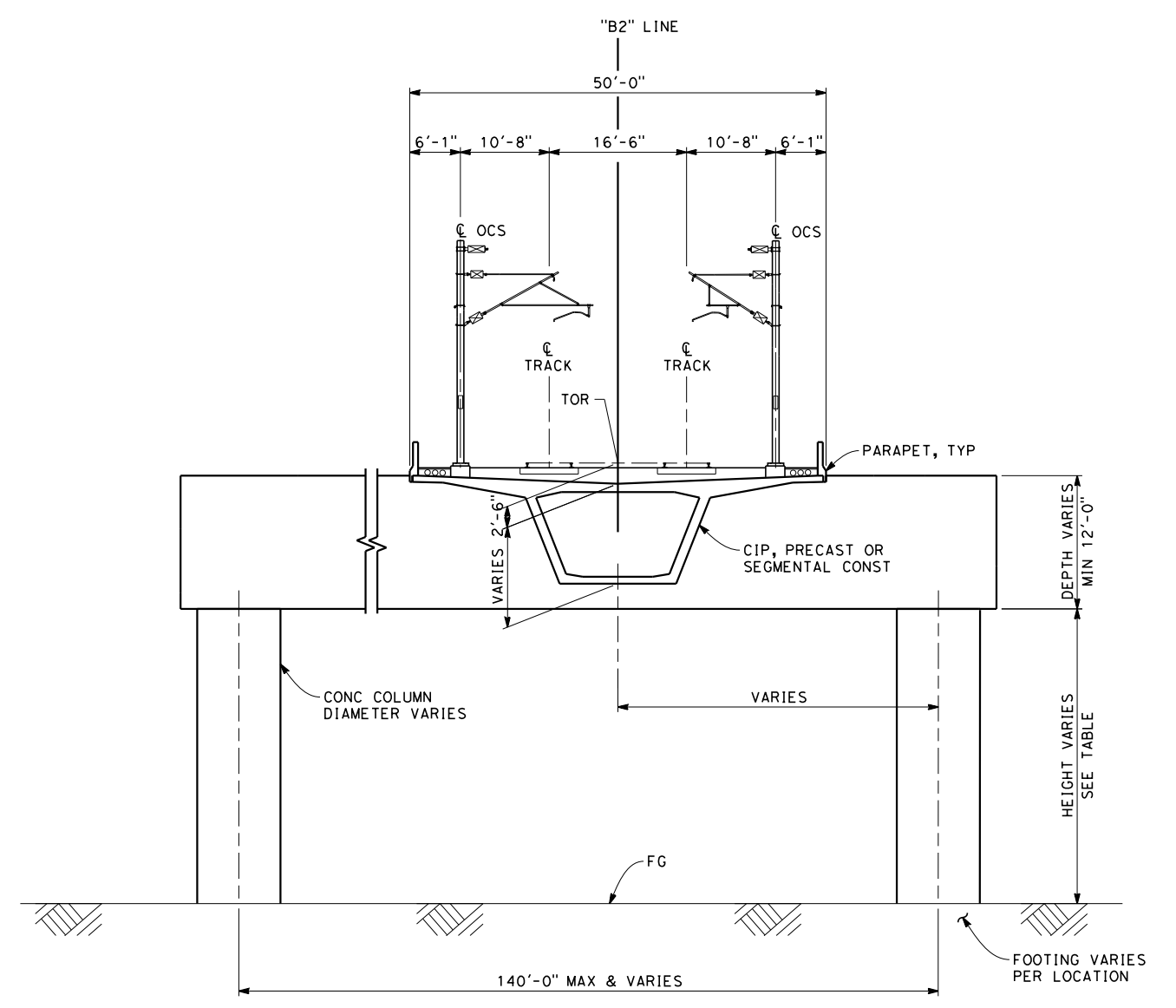


SECTION C

SCALE: 1"=10'

- STA 7010+13.50 THROUGH 7013+13.50
- STA 7017+33.50 THROUGH 7024+13.50
- STA 7054+13.50 THROUGH 7055+33.50
- STA 7057+73.50 THROUGH 7058+93.50
- STA 7082+83.50 THROUGH 7083+83.50
- STA 7333+17.50 THROUGH 7335+57.50
- STA 7336+77.50 THROUGH 7337+97.50
- STA 7346+17.50 THROUGH 7349+77.50
- STA 7357+17.50 THROUGH 7359+57.50
- STA 7364+37.50 THROUGH 7367+97.50
- STA 7371+47.50 THROUGH 7385+37.50

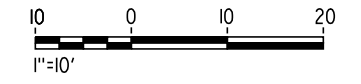
COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION D

SCALE: 1"=10'

- STA 7013+13.50 THROUGH 7017+33.50
- STA 7222+77.50 THROUGH 7231+07.50
- STA 7290+07.50 THROUGH 7293+67.50
- STA 7313+17.50 THROUGH 7314+37.50
- STA 7321+97.50 THROUGH 7333+17.50
- STA 7335+57.50 THROUGH 7336+77.50



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

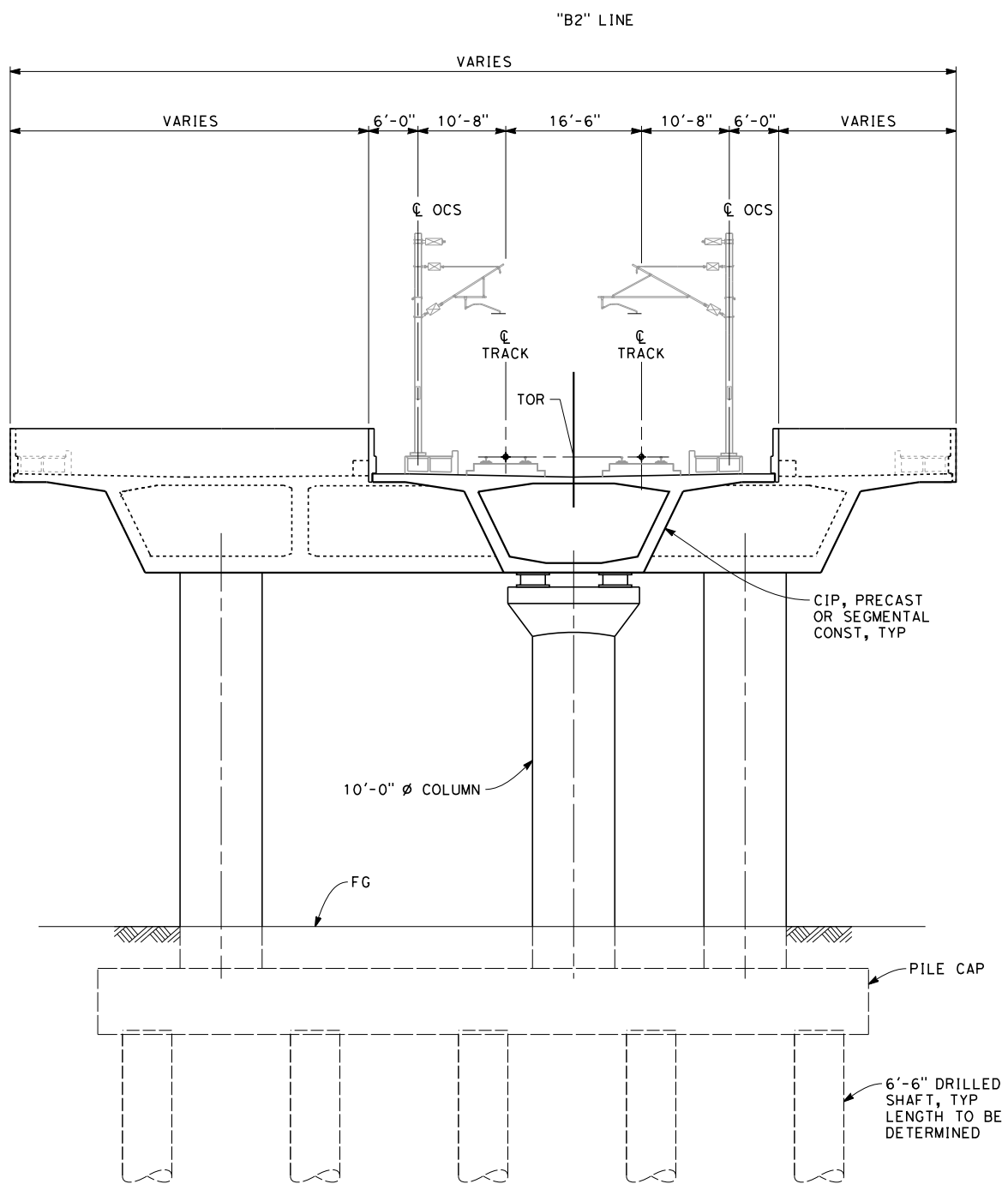
**RECORD SET 15%
DESIGN SUBMISSION**

**NOT FOR
CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

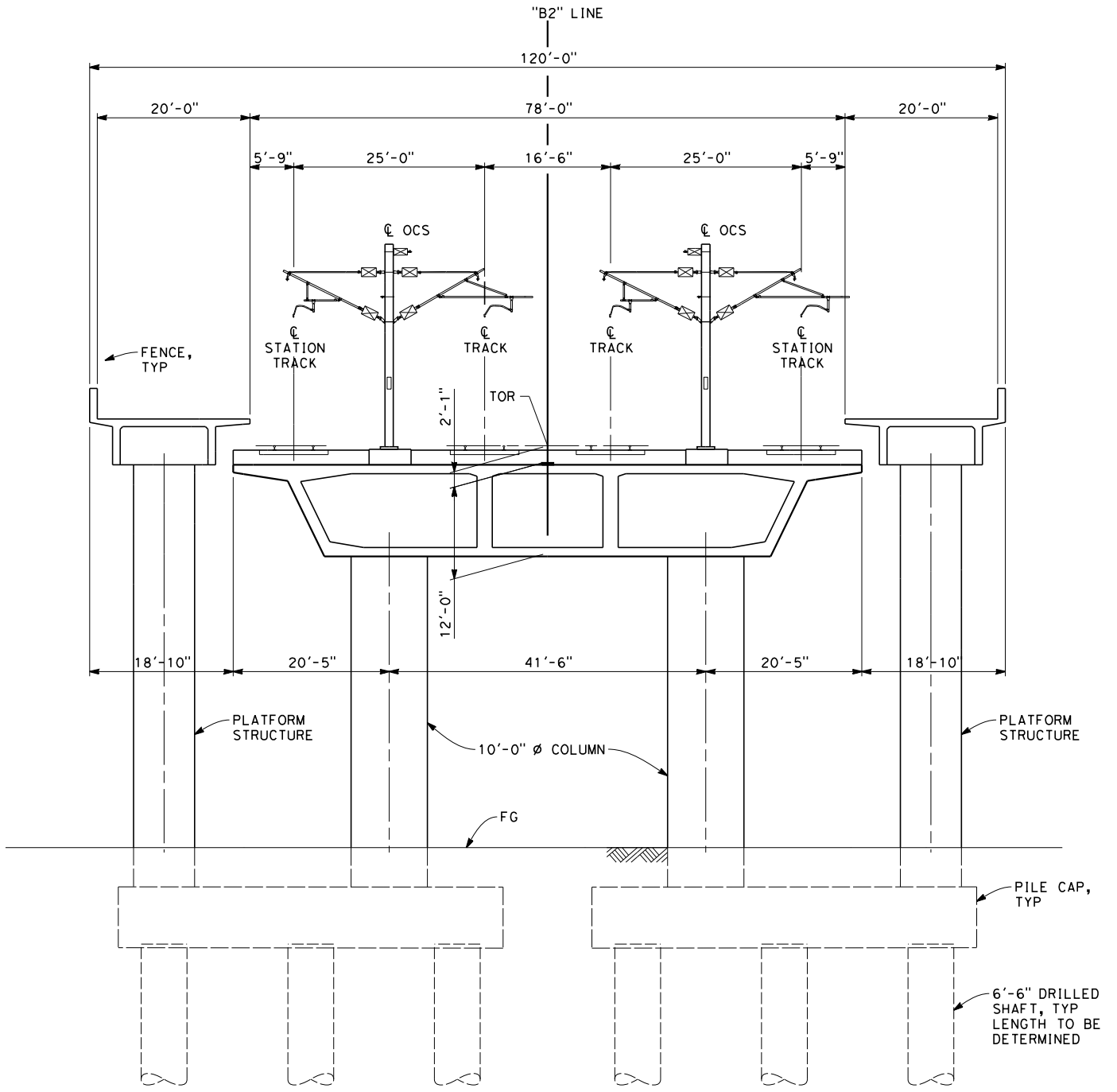
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2752
SCALE
AS SHOWN
SHEET NO.
53 OF 57



SECTION E

SCALE: 1"=10'

STA 7231+07.50 (BENT 245)
 STA 7290+07.50 (BENT 295)



SECTION F

SCALE: 1"=10'

STA 7251+57.50 THROUGH 7266+57.50



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
 M. FISHER
 DRAWN BY
 N. HUTTON
 CHECKED BY
 A. ARMSTRONG
 IN CHARGE
 R. COFFIN
 DATE
 12/31/13

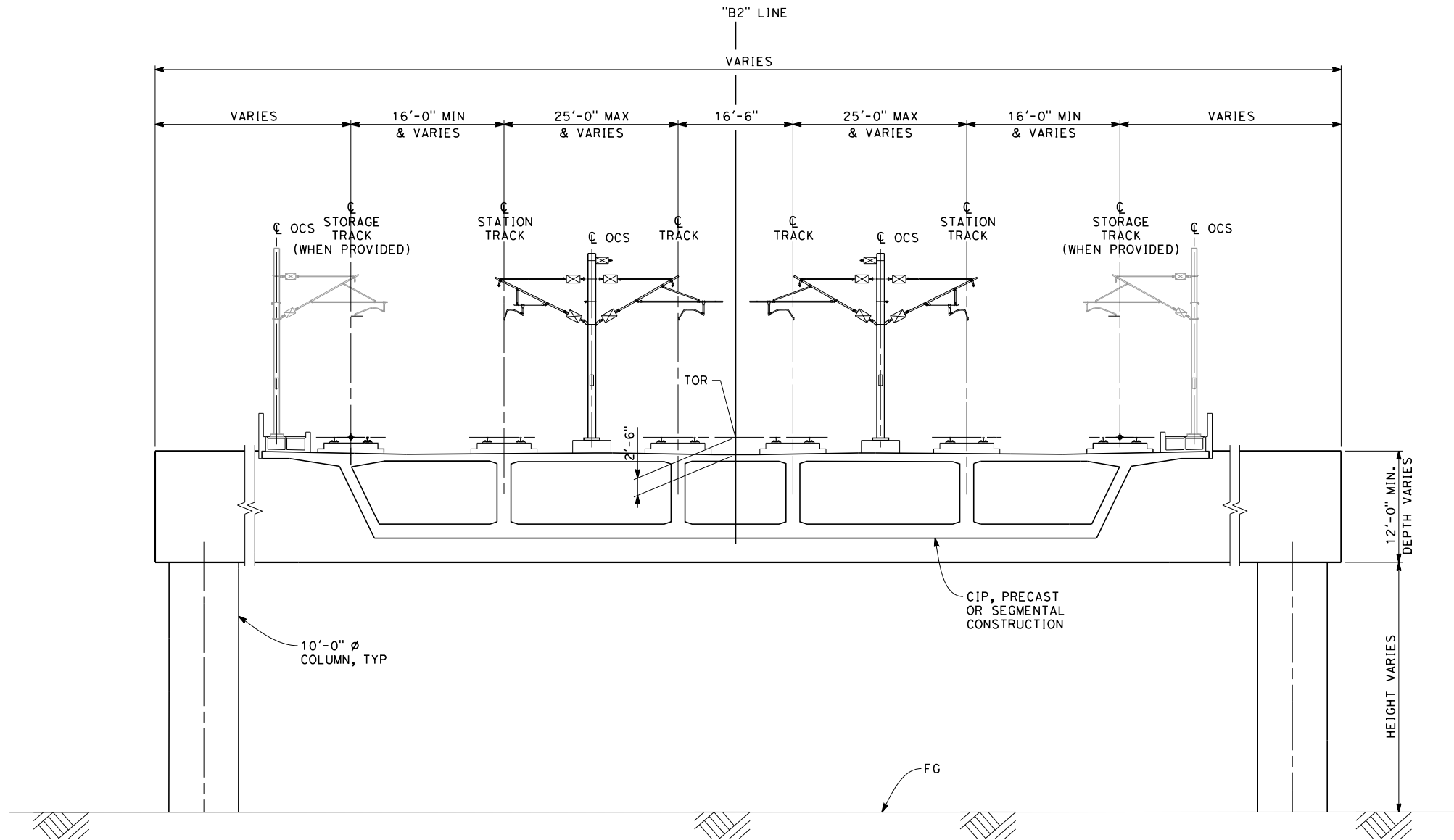
**RECORD SET 15%
 DESIGN SUBMISSION**

**NOT FOR
 CONSTRUCTION**



CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 TYPICAL SECTIONS

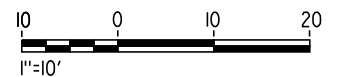
CONTRACT NO.
 HSR 06-0003
 DRAWING NO.
 SV2753
 SCALE
 AS SHOWN
 SHEET NO.
 54 OF 57



SECTION G

SCALE: 1"=10'

STA 7231+07.50 THROUGH 7235+67.50



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REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
DRAWN BY
N. HUTTON
CHECKED BY
A. ARMSTRONG
IN CHARGE
R. COFFIN
DATE
12/31/13

**RECORD SET 15%
DESIGN SUBMISSION**

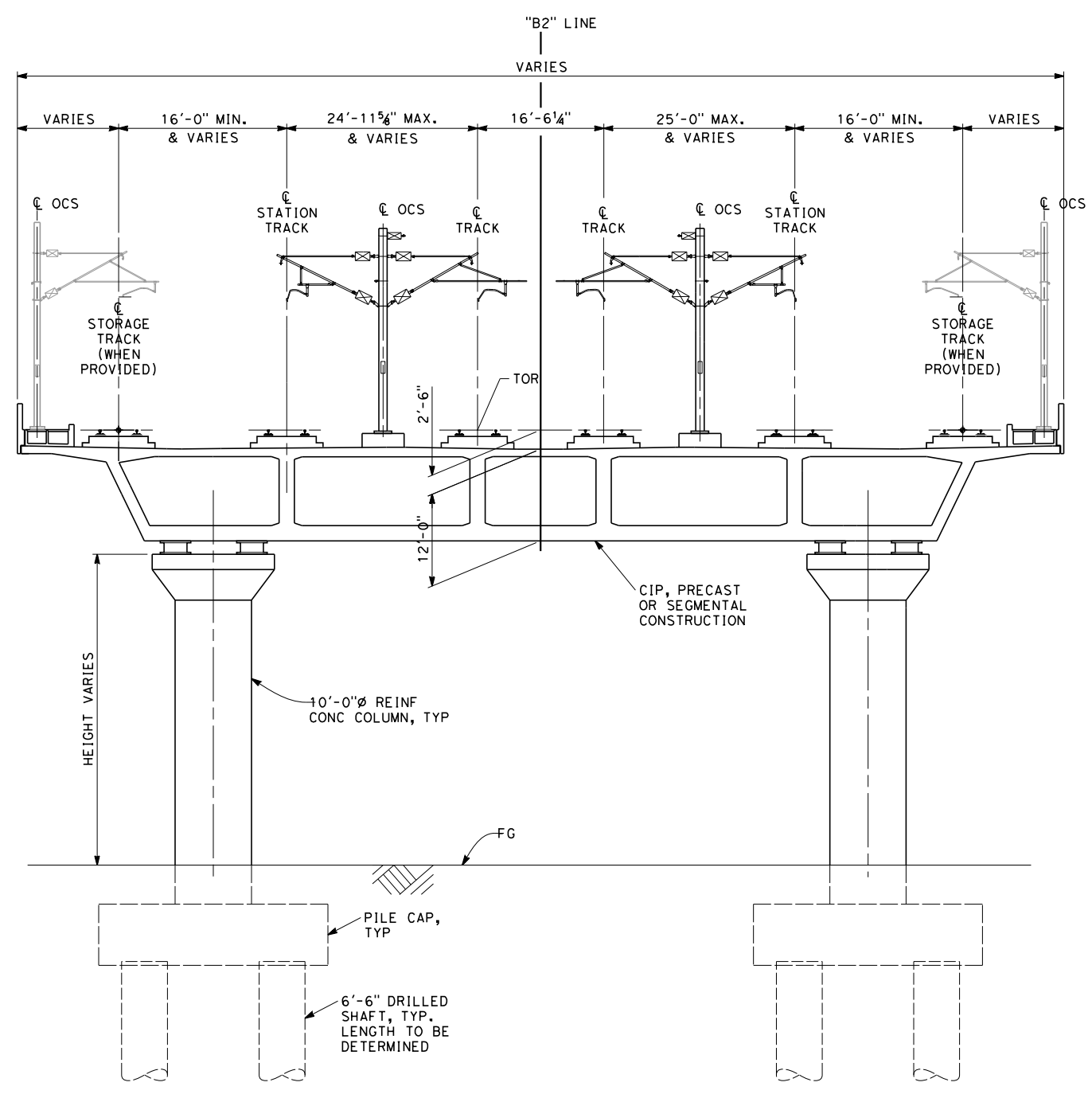
**NOT FOR
CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD**
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B2
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

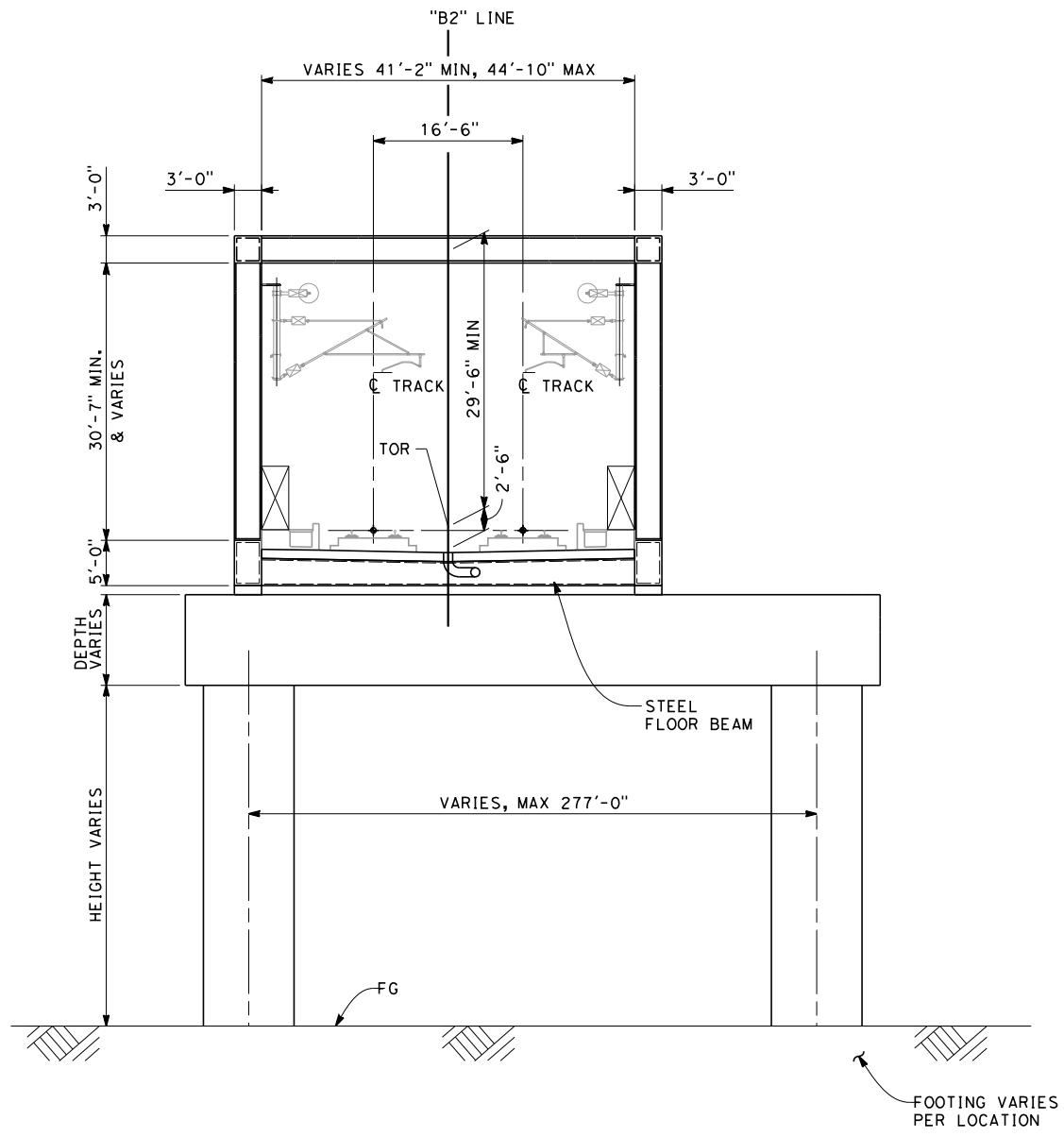
CONTRACT NO.
HSR 06-0003
DRAWING NO.
SV2754
SCALE
AS SHOWN
SHEET NO.
55 OF 57

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SECTION H
SCALE: 1"=10'

STA 7235+67.50 THROUGH 7251+57.50
 STA 7266+57.50 THROUGH 7290+07.50



SECTION I
SCALE: 1"=10'

STA 6943+71.50 THROUGH 6946+93.50
 STA 7095+65.00 THROUGH 7118+96.00



REV	DATE	BY	CHK	APP	DESCRIPTION

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

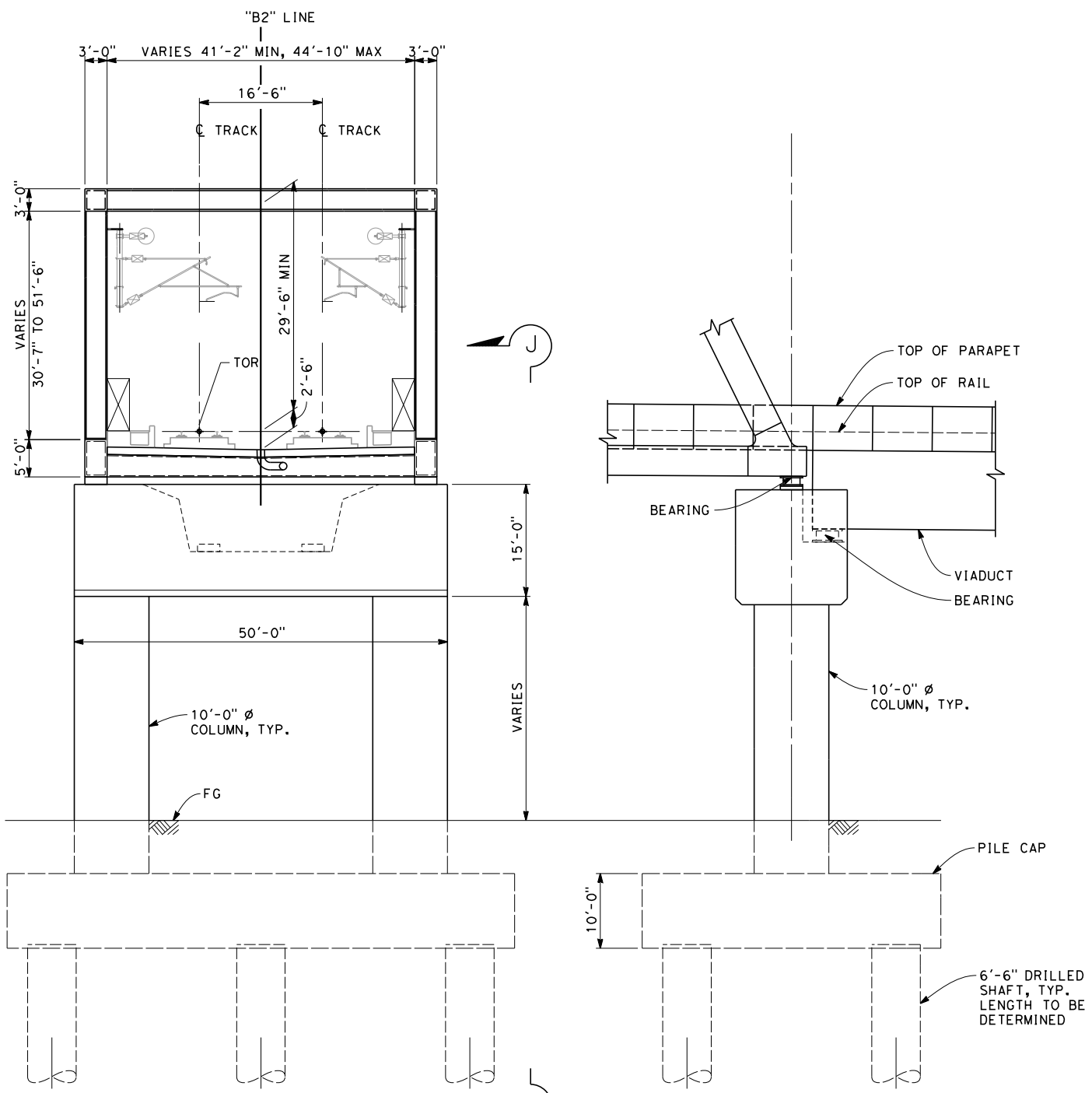
**RECORD SET 15%
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CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2755
 SCALE
AS SHOWN
 SHEET NO.
56 OF 57

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STA 6943+71.50 (BENT 12)
 STA 7095+65.00 (BENT 141)
 STA 7118+96.00 (BENT 149)



REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY
M. FISHER
 DRAWN BY
N. HUTTON
 CHECKED BY
A. ARMSTRONG
 IN CHARGE
R. COFFIN
 DATE
12/31/13

**RECORD SET 15%
 DESIGN SUBMISSION**
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 CONSTRUCTION**



**CALIFORNIA HIGH-SPEED TRAIN PROJECT
 FRESNO TO BAKERSFIELD**
 BAKERSFIELD URBAN SUBSECTION
 ALIGNMENT B2
 BAKERSFIELD VIADUCT
 TYPICAL SECTIONS

CONTRACT NO.
HSR 06-0003
 DRAWING NO.
SV2756
 SCALE
AS SHOWN
 SHEET NO.
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