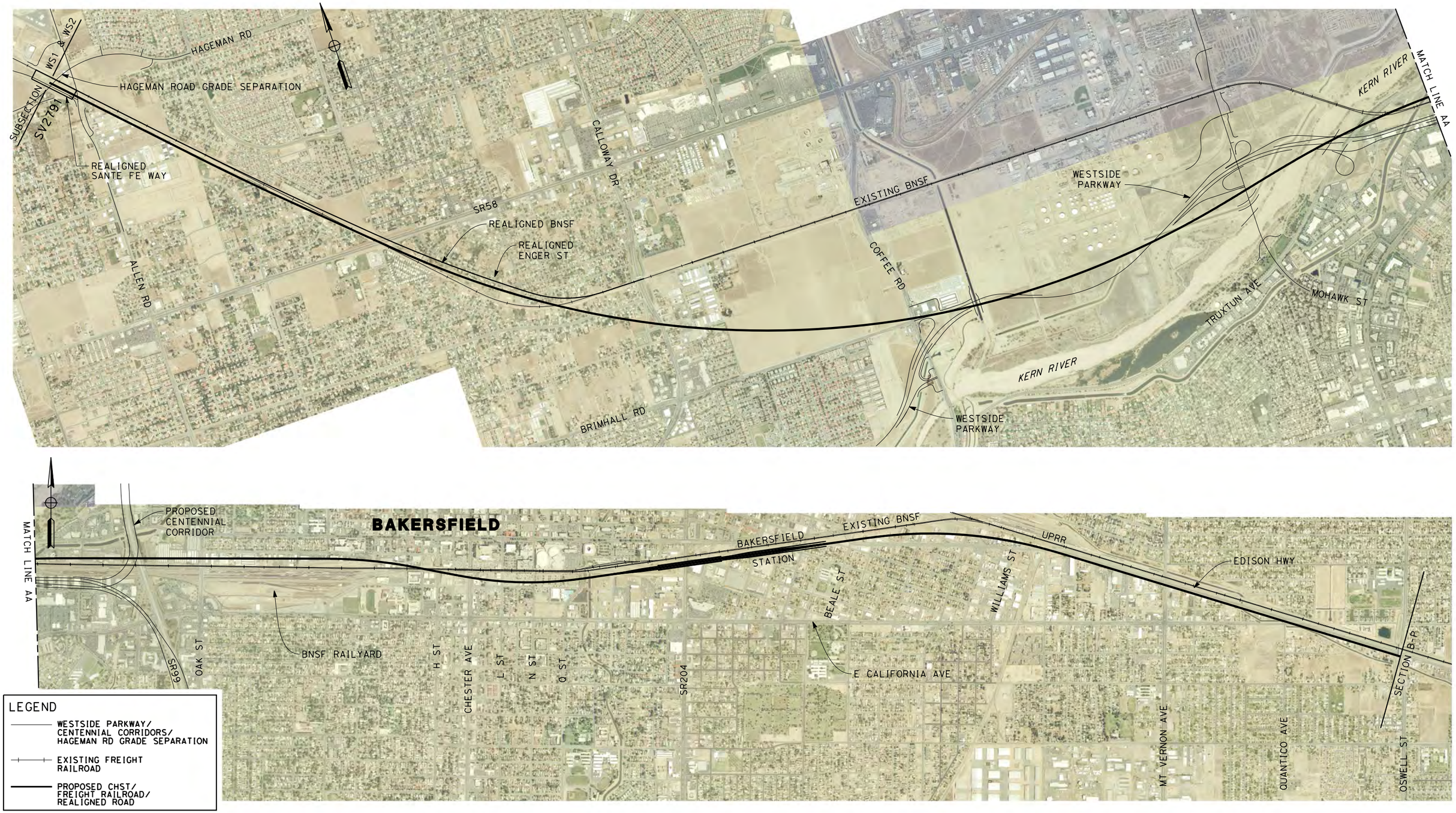


LEGEND

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

1000 0 1000 2000

1"-1000'

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

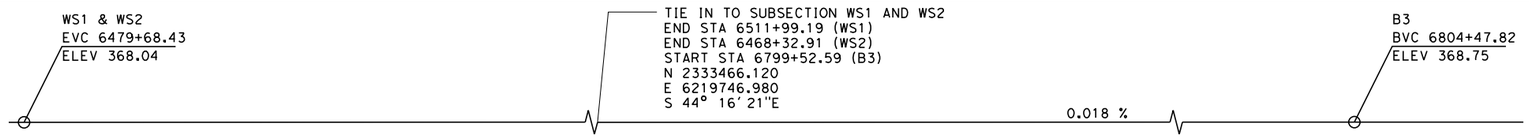
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

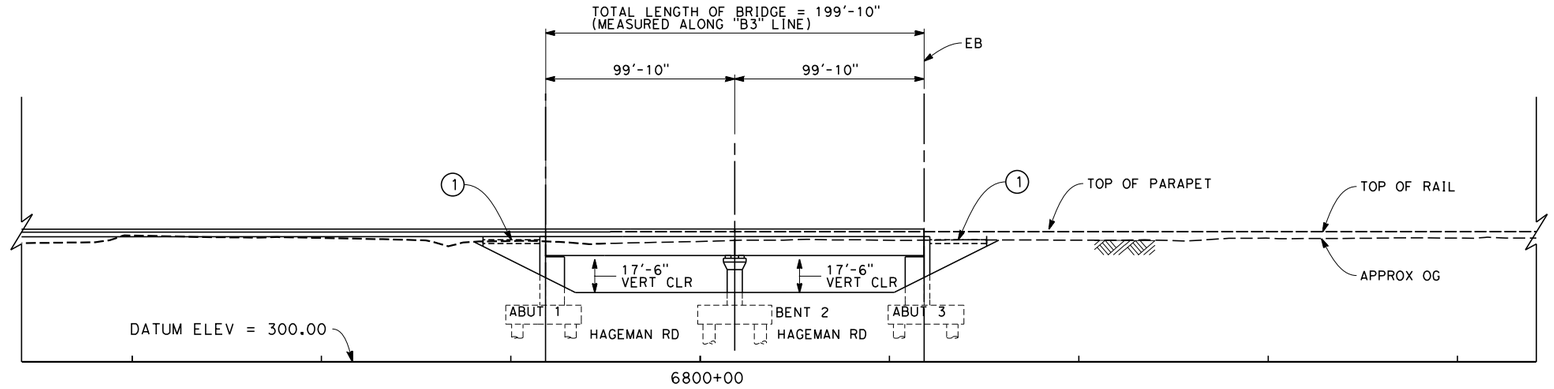
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
HAGEMAN ROAD UNDERPASS
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2790
SCALE AS SHOWN
SHEET NO. 1 OF 2



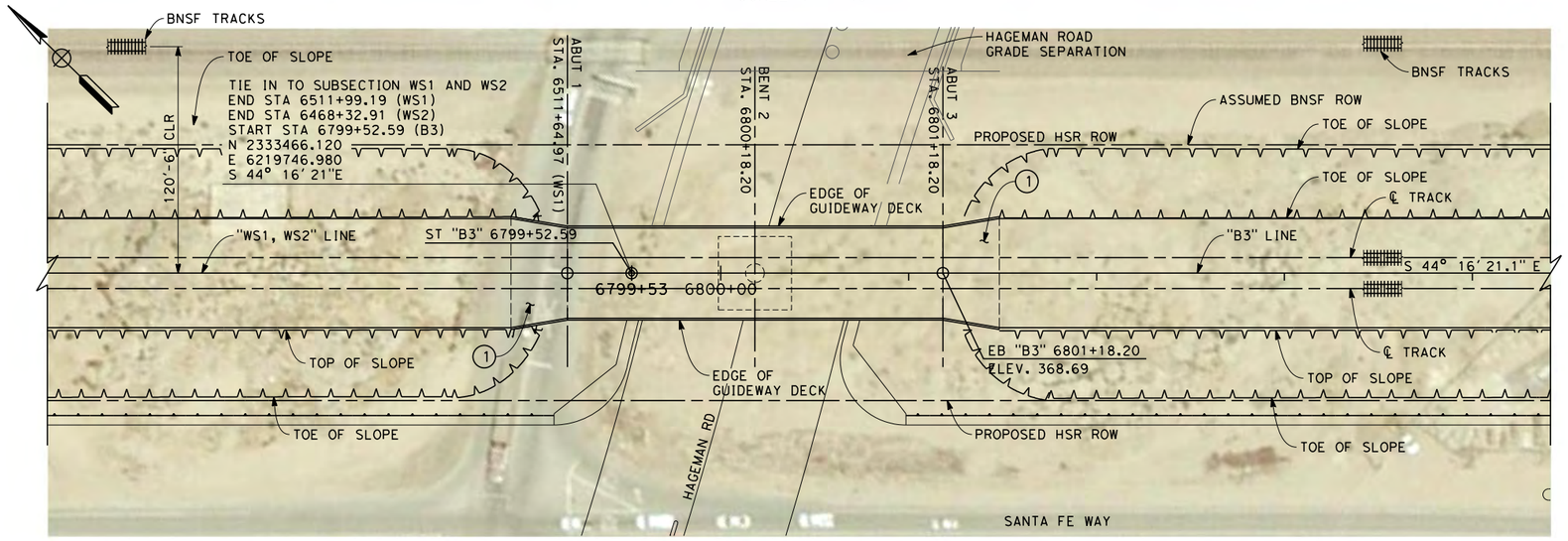
TOP OF RAIL "B3" LINE

NO SCALE



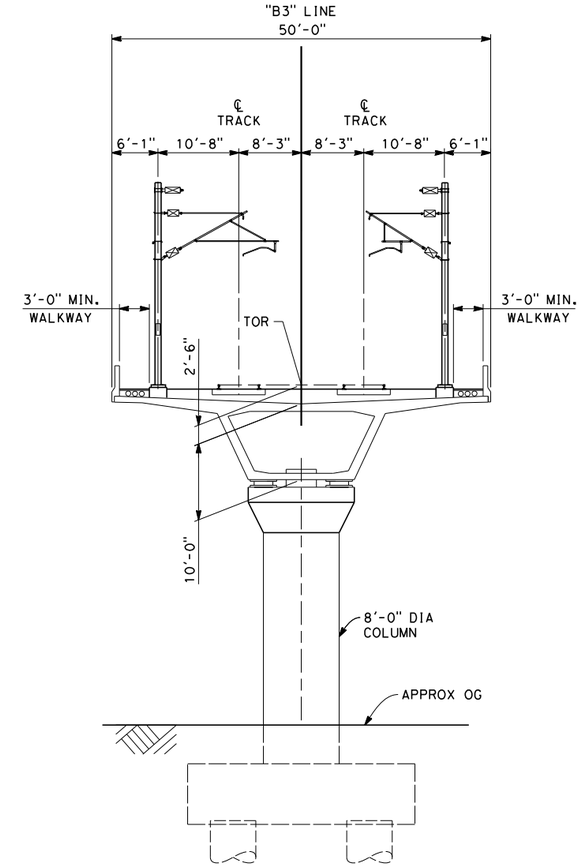
ELEVATION

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

10 0 10 20 — 1"=10'

40 0 40 80 — 1"=40'

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

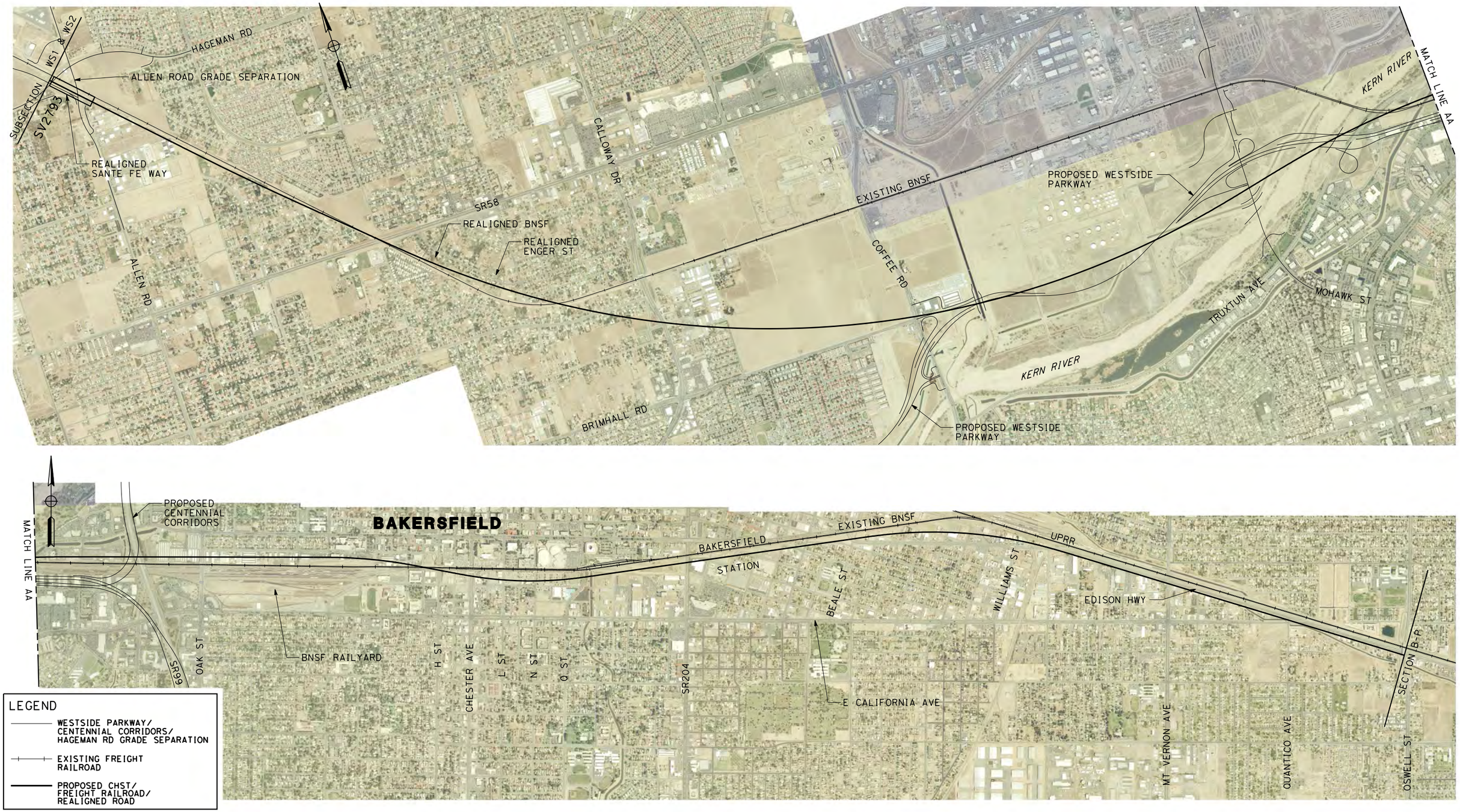
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
HAGEMAN ROAD UNDERPASS
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2791
SCALE AS SHOWN
SHEET NO. 2 OF 2



LEGEND

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

1000 0 1000 2000

1"-1000'

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

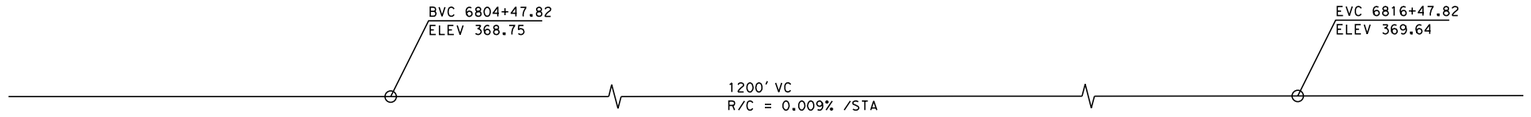
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

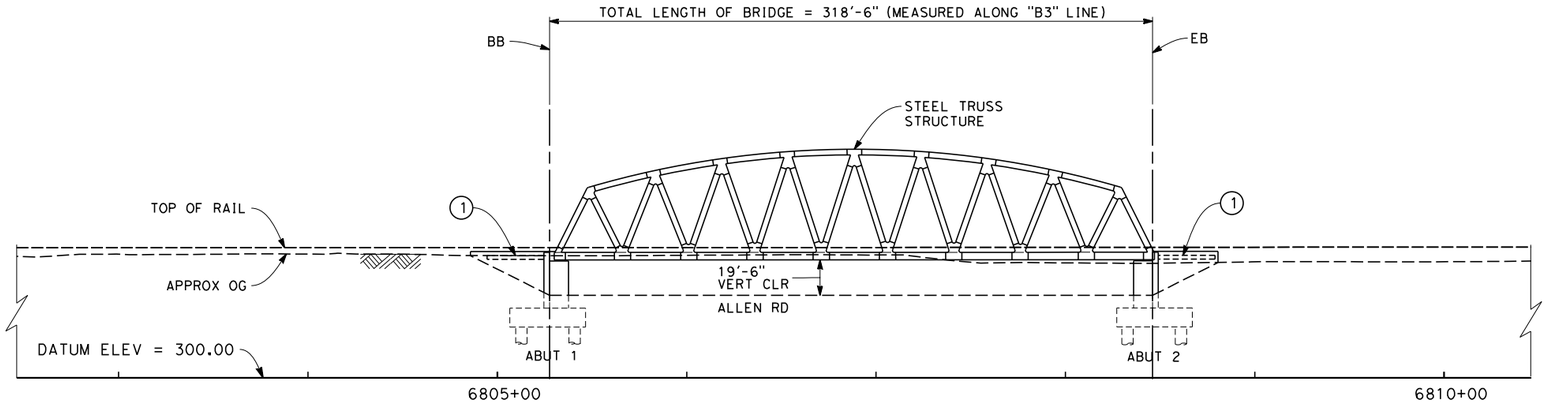
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
ALLEN ROAD UNDERPASS
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2792
SCALE AS SHOWN
SHEET NO. 1 OF 2



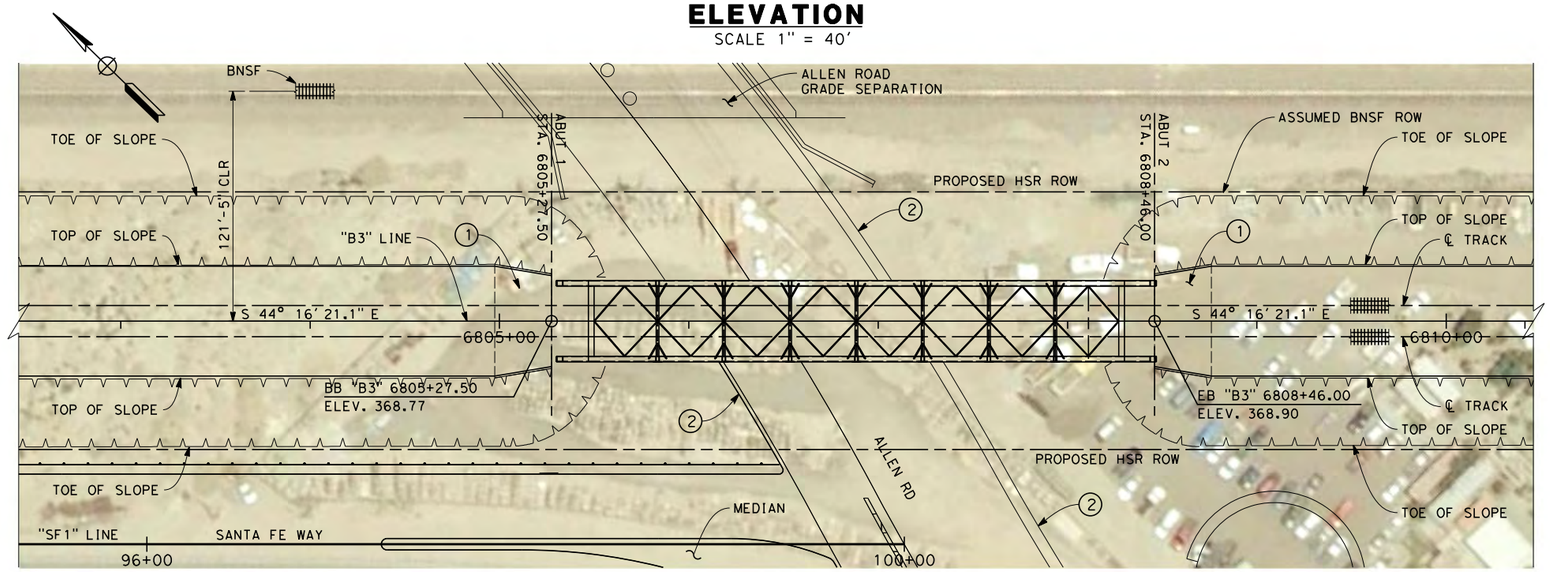
TOP OF RAIL "B3" LINE

NO SCALE



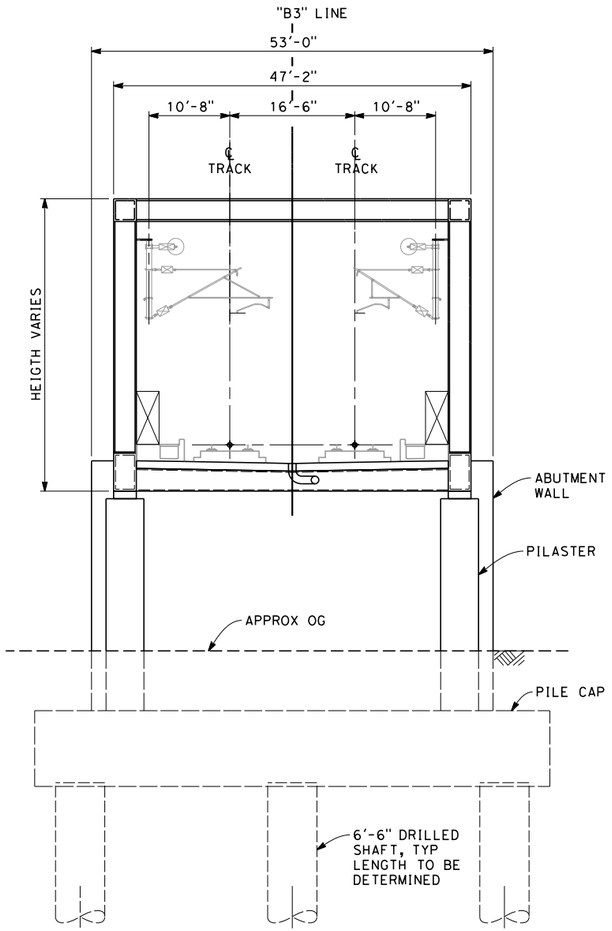
ELEVATION

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

10 0 10 20 — 1"=10'

40 0 40 80 — 1"=40'

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

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
ALLEN ROAD UNDERPASS
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2793
SCALE AS SHOWN
SHEET NO. 2 OF 2

LEGEND

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

1000 0 1000 2000

1"-1000'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

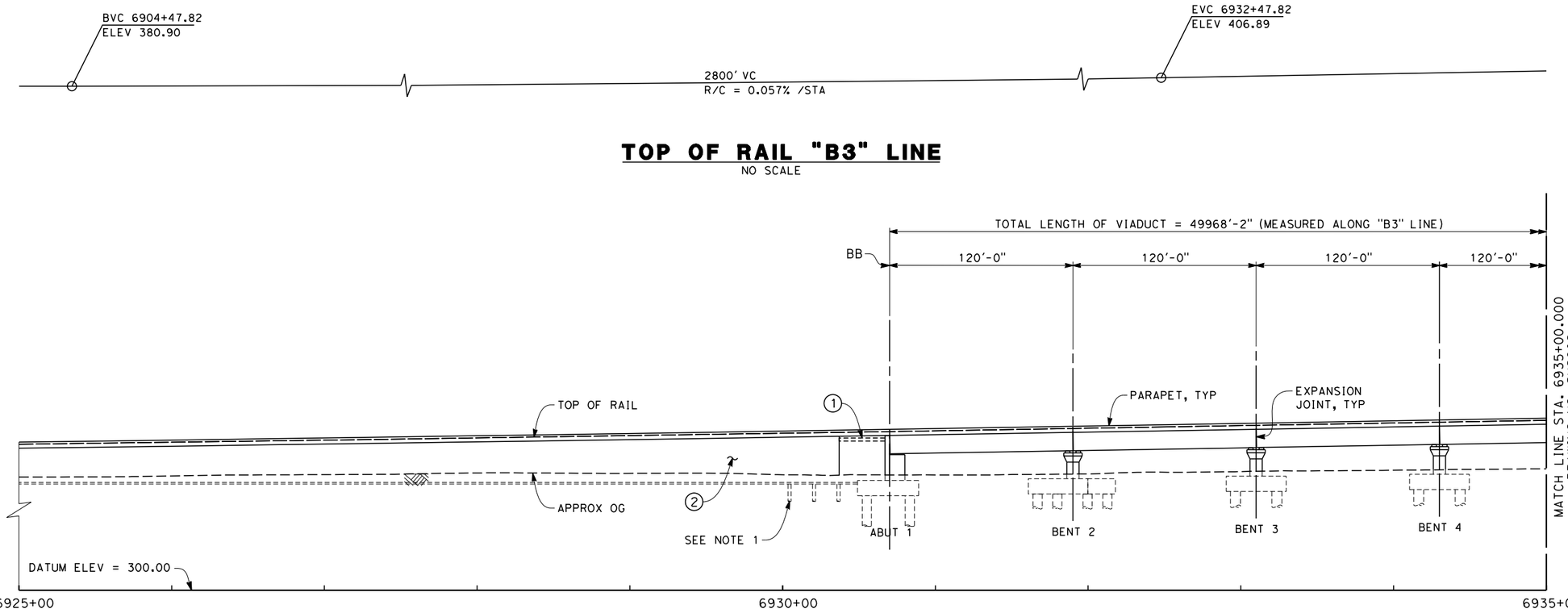
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
KEY MAP

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2800
SCALE AS SHOWN
SHEET NO. 1 OF 57

frank.palermo 12/20/2013 5:36:42 PM CAHSRP-r1.tbl PDF_half_black_200dpi.pltpwworking\hmm\external\frank.palermo01-arup.com\dms71888\VFB-SV-2800-B3.dgn

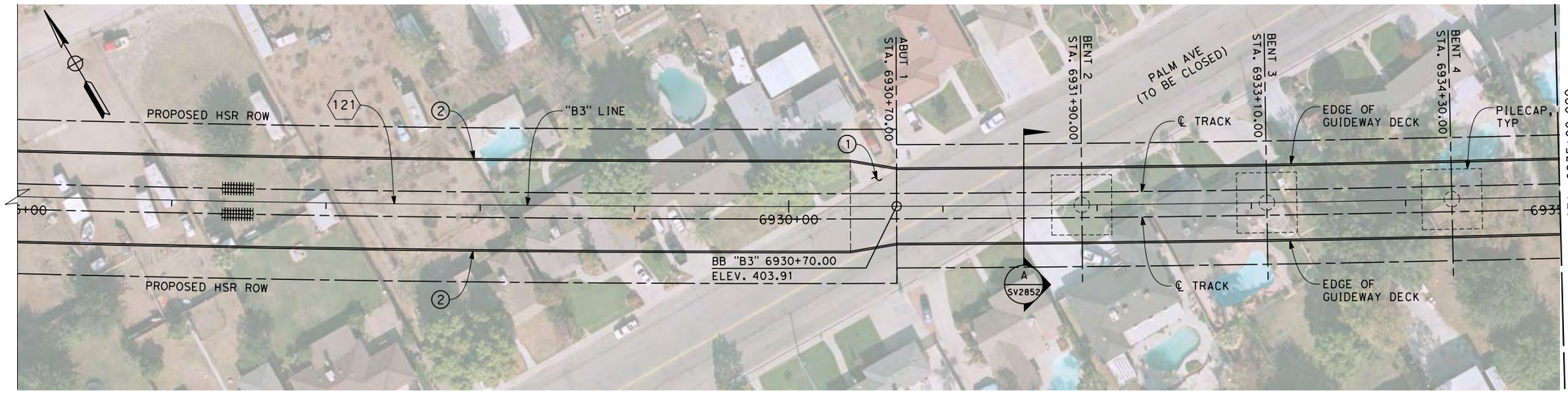


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

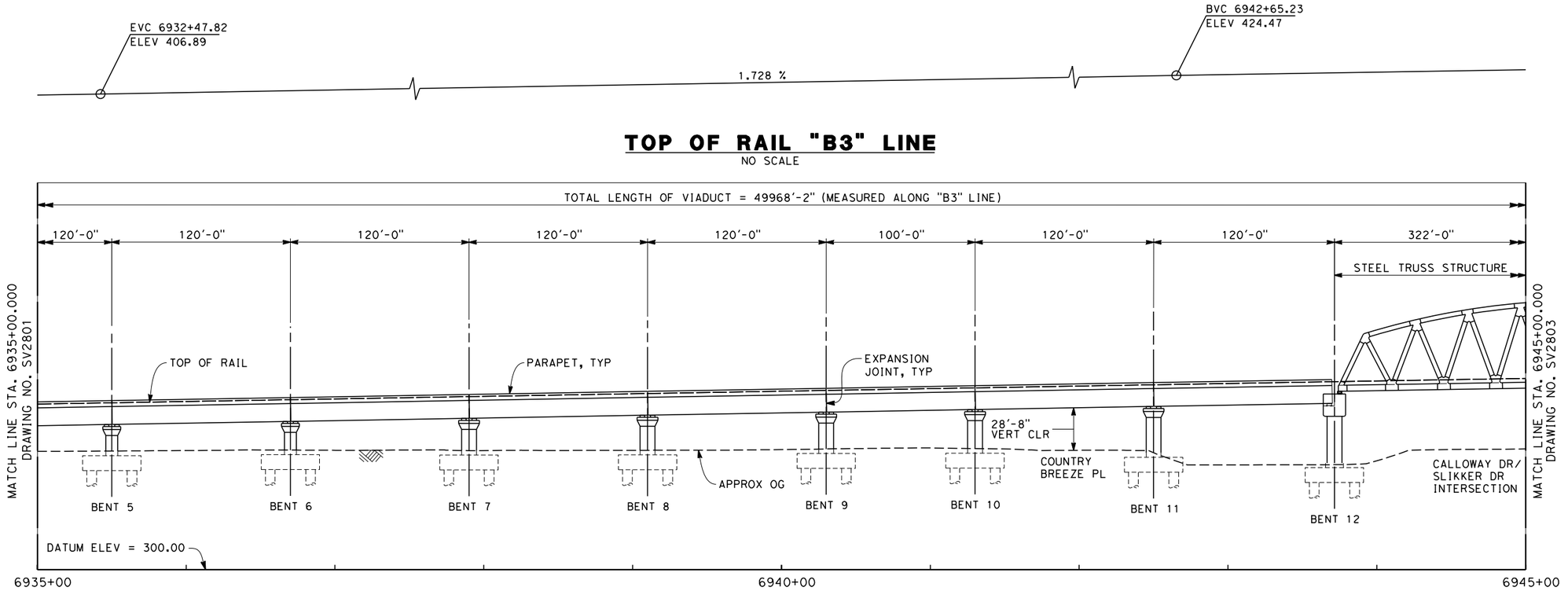
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2801
SCALE AS SHOWN
SHEET NO. 2 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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

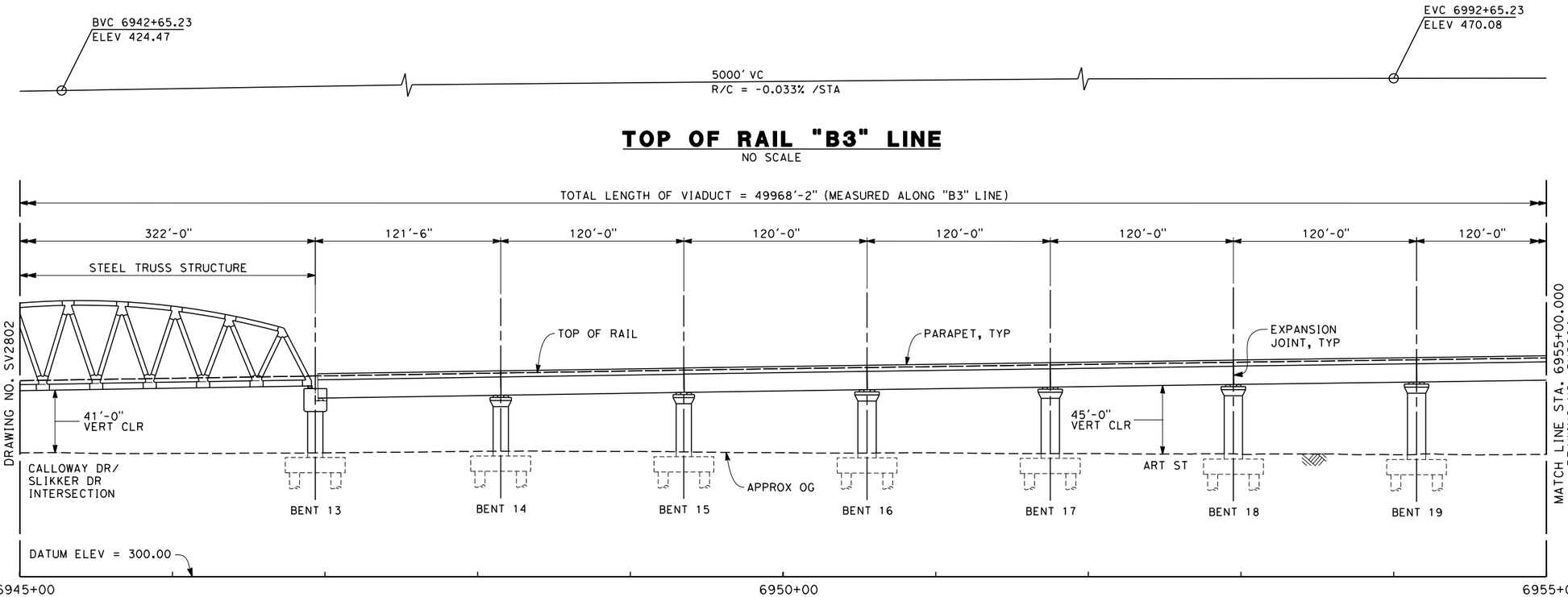
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

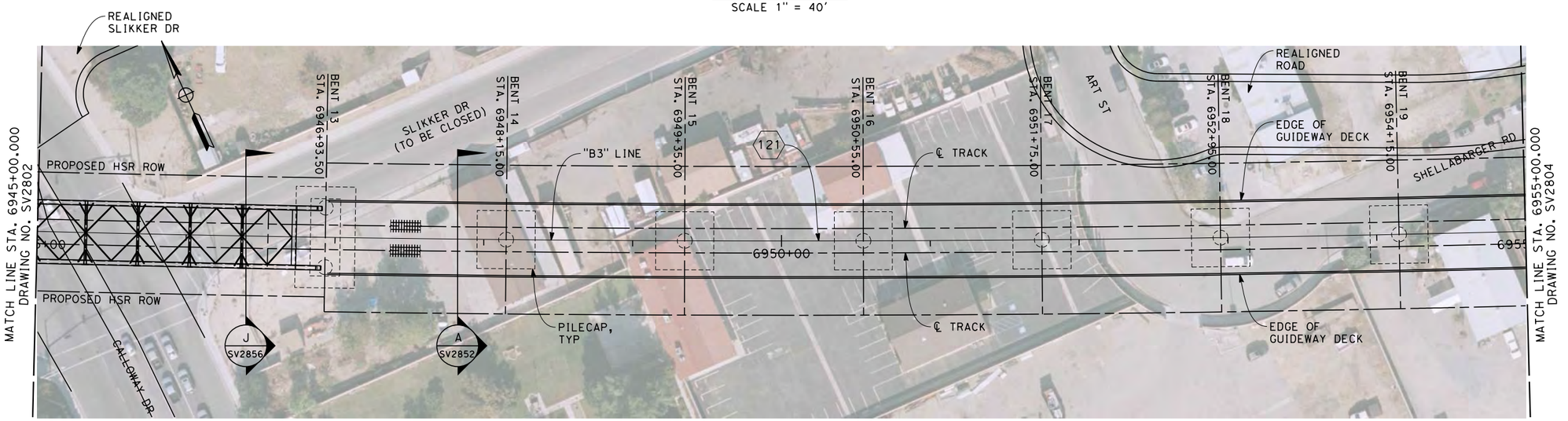
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2802
SCALE AS SHOWN
SHEET NO. 3 OF 57



TOP OF RAIL "B3" 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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

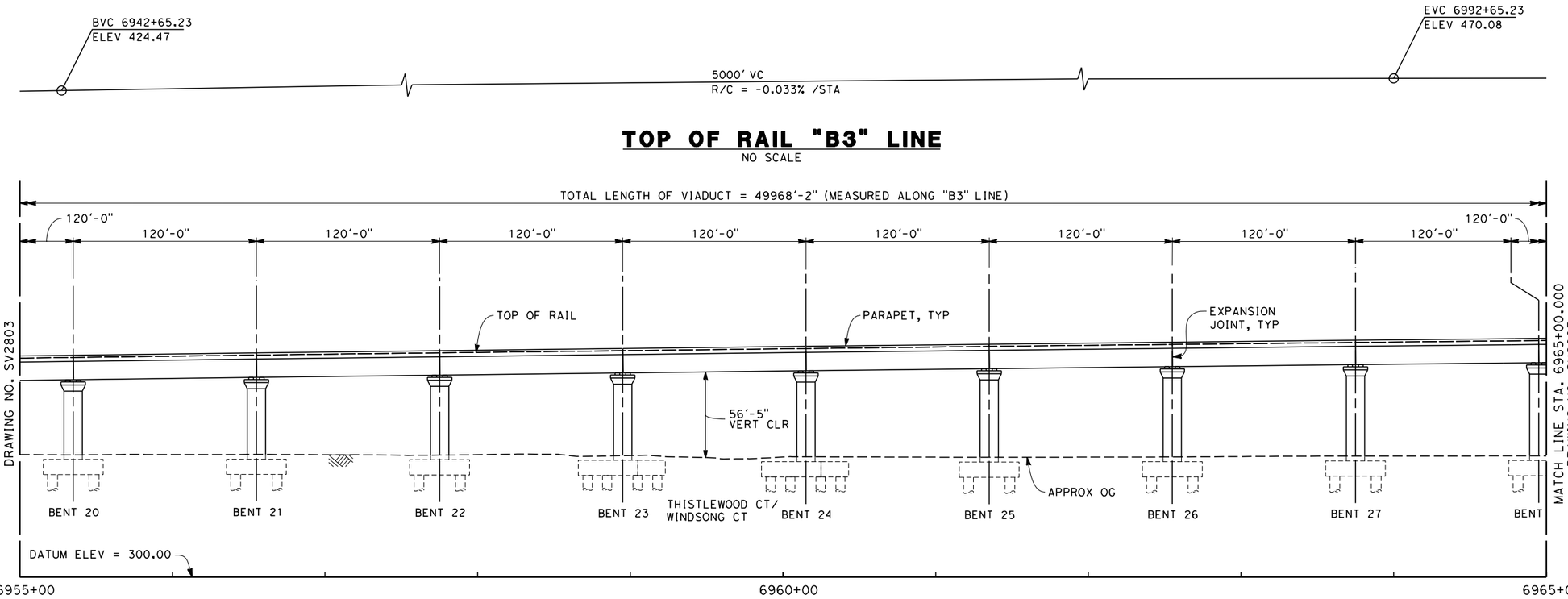
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

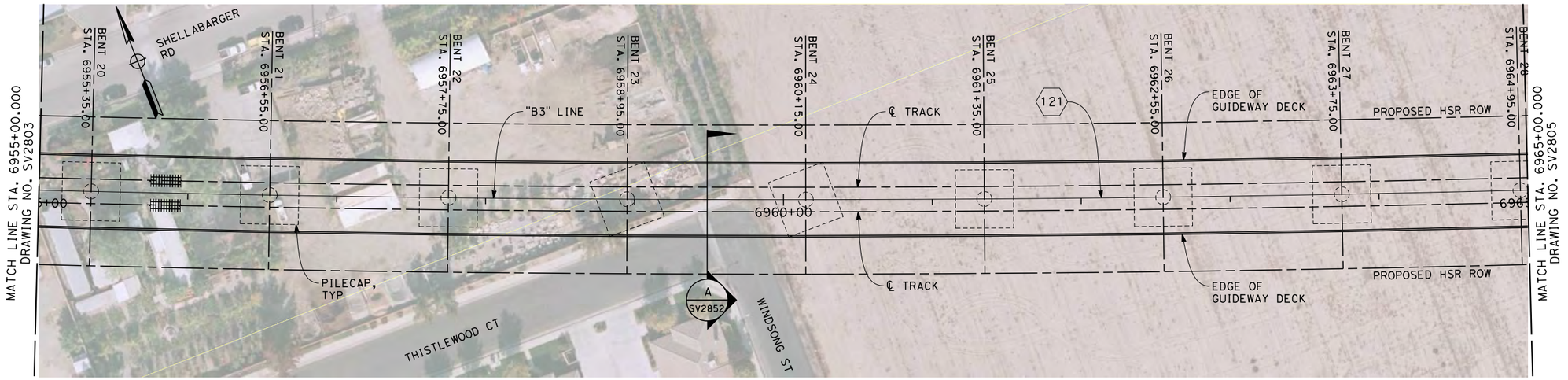
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2803
SCALE AS SHOWN
SHEET NO. 4 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.



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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

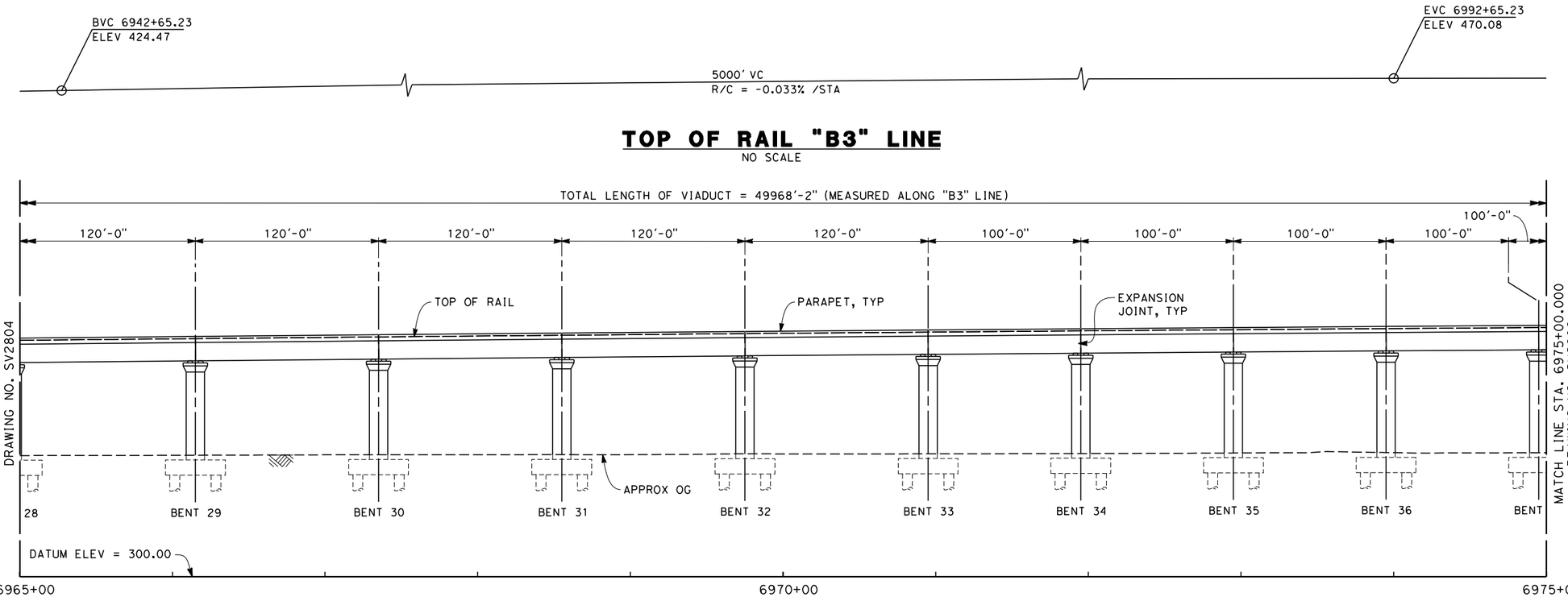
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2804
SCALE AS SHOWN
SHEET NO. 5 OF 57

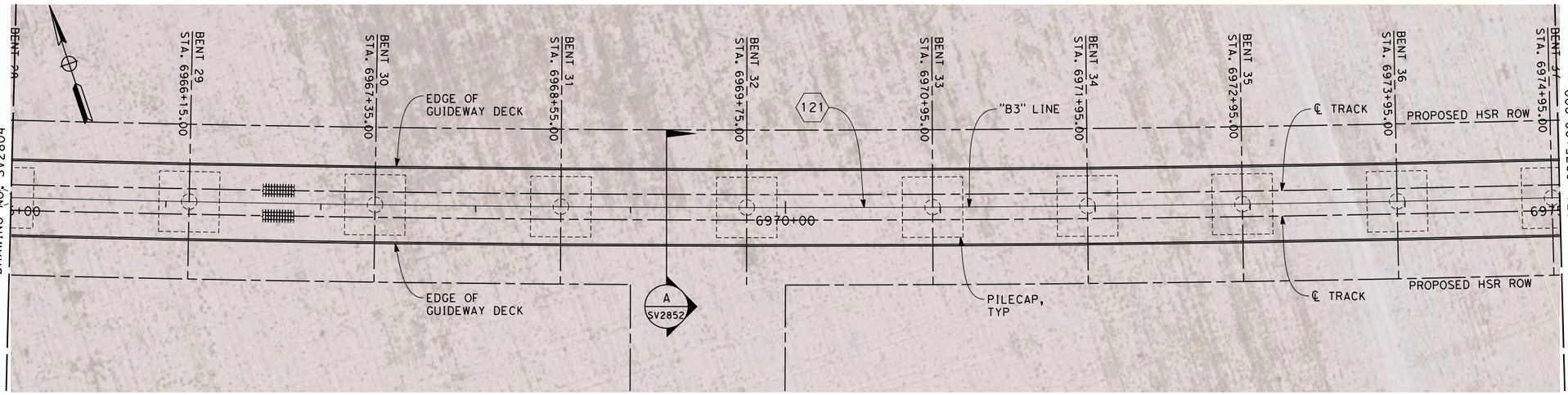


TOP OF RAIL "B3" LINE

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

121

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

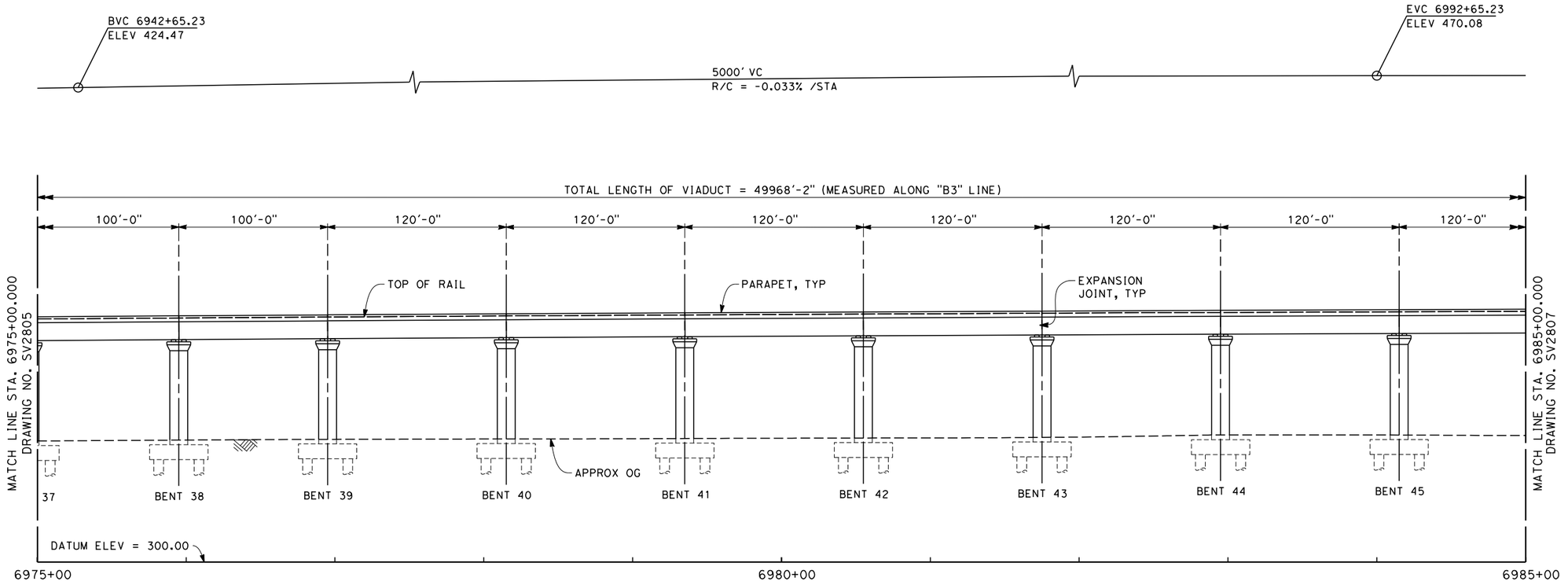
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

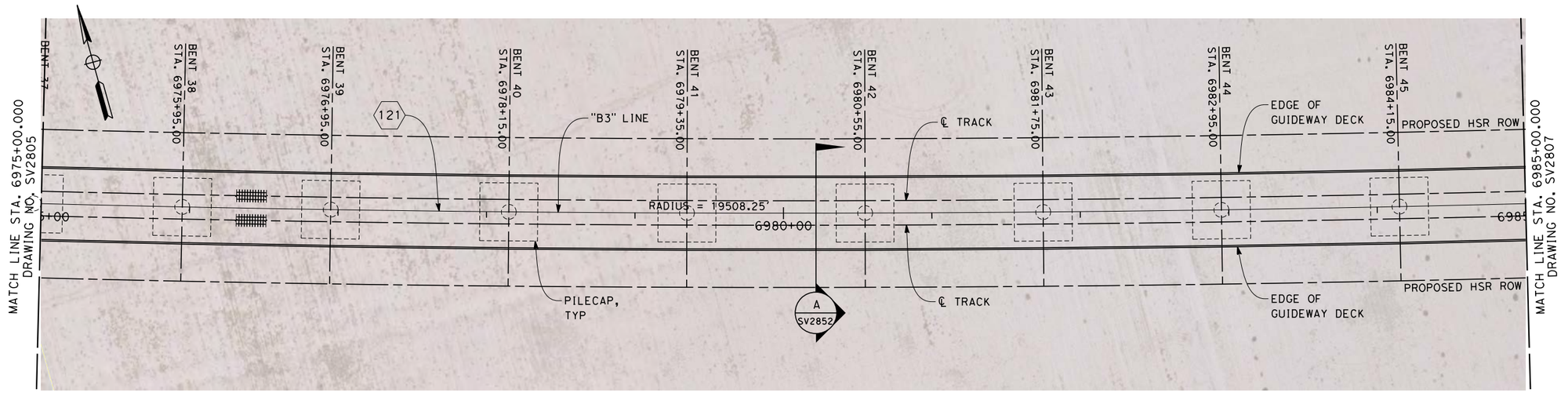
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2805
SCALE AS SHOWN
SHEET NO. 6 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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

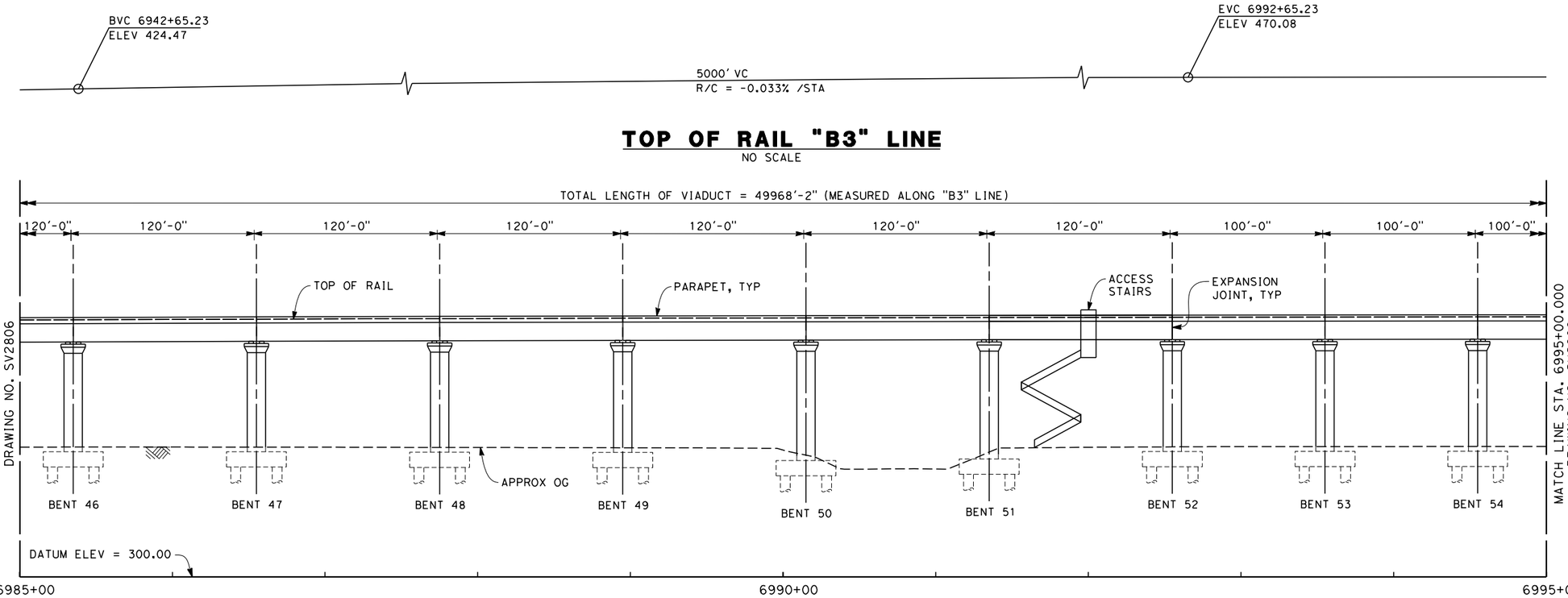
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2806
SCALE AS SHOWN
SHEET NO. 7 OF 57

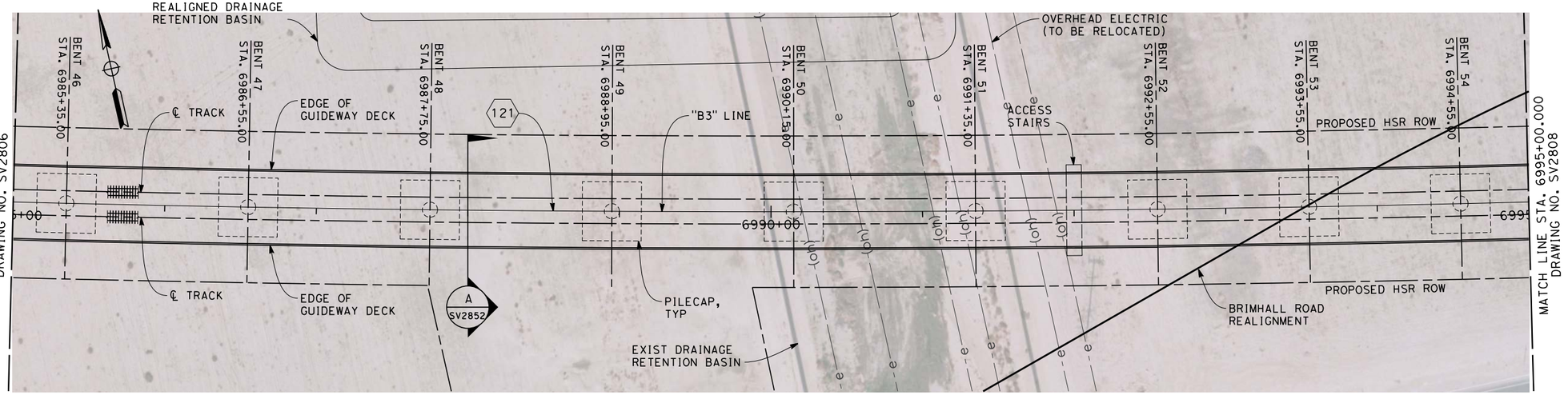


TOP OF RAIL "B3" LINE

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

121

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

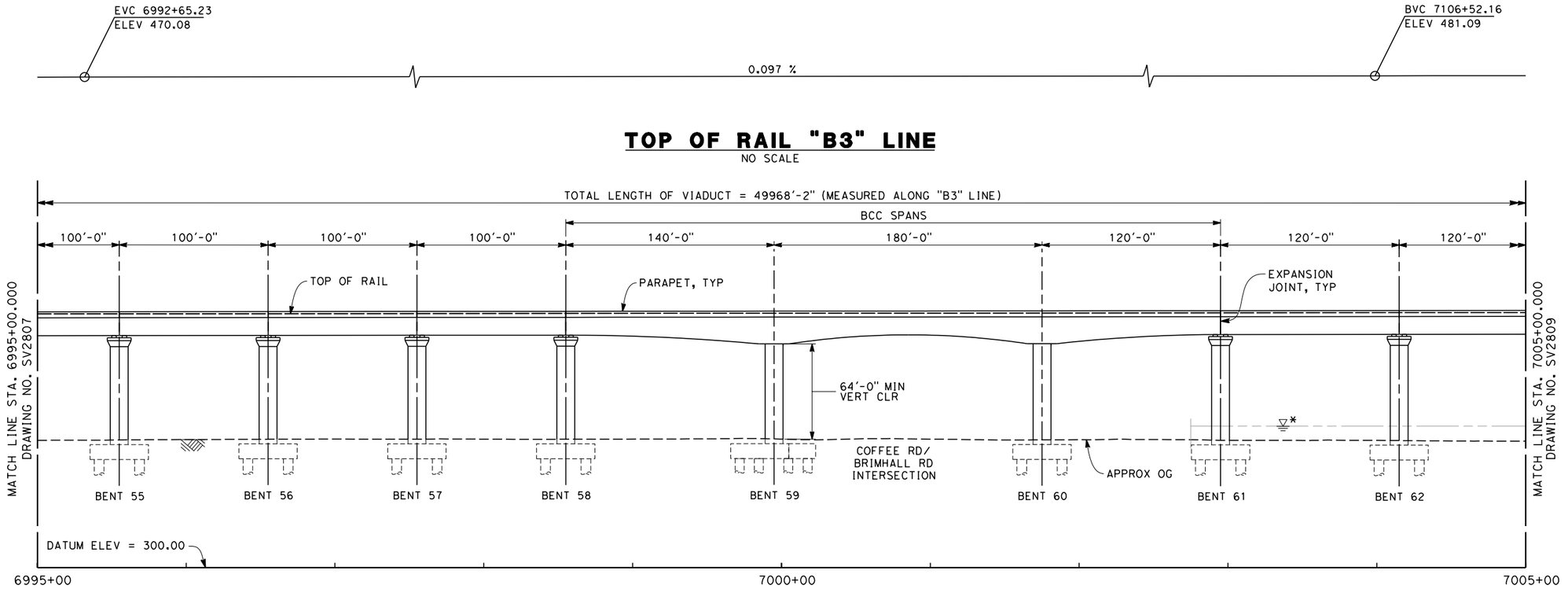
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2807
SCALE AS SHOWN
SHEET NO. 8 OF 57

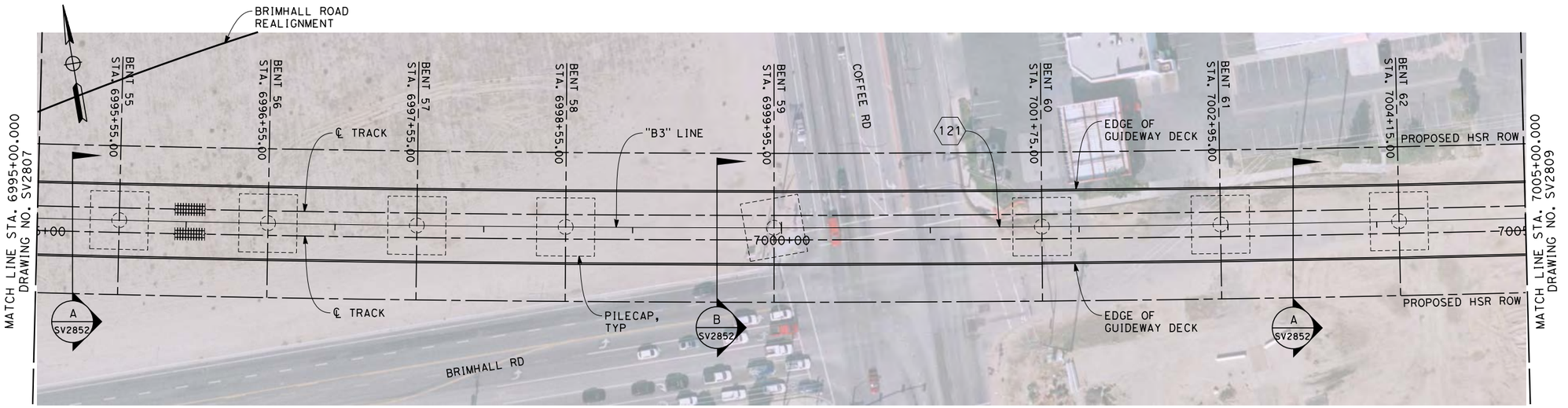


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

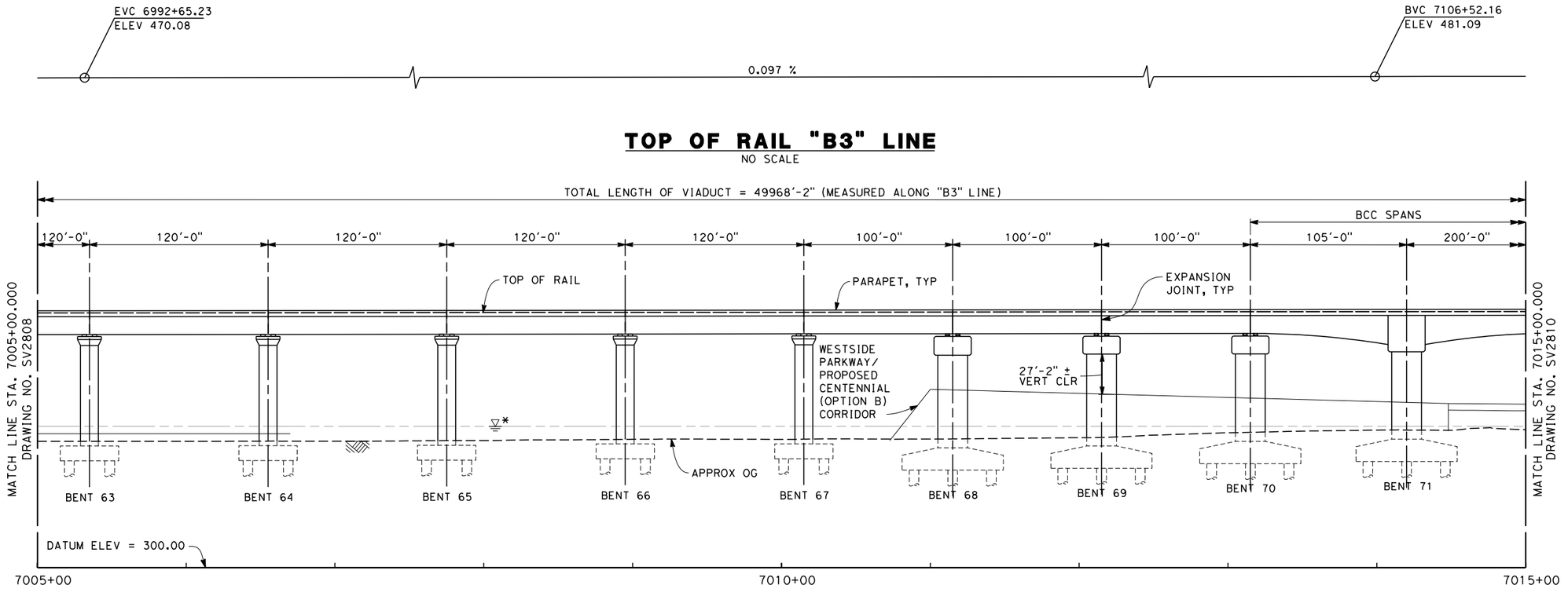
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2808
SCALE AS SHOWN
SHEET NO. 9 OF 58

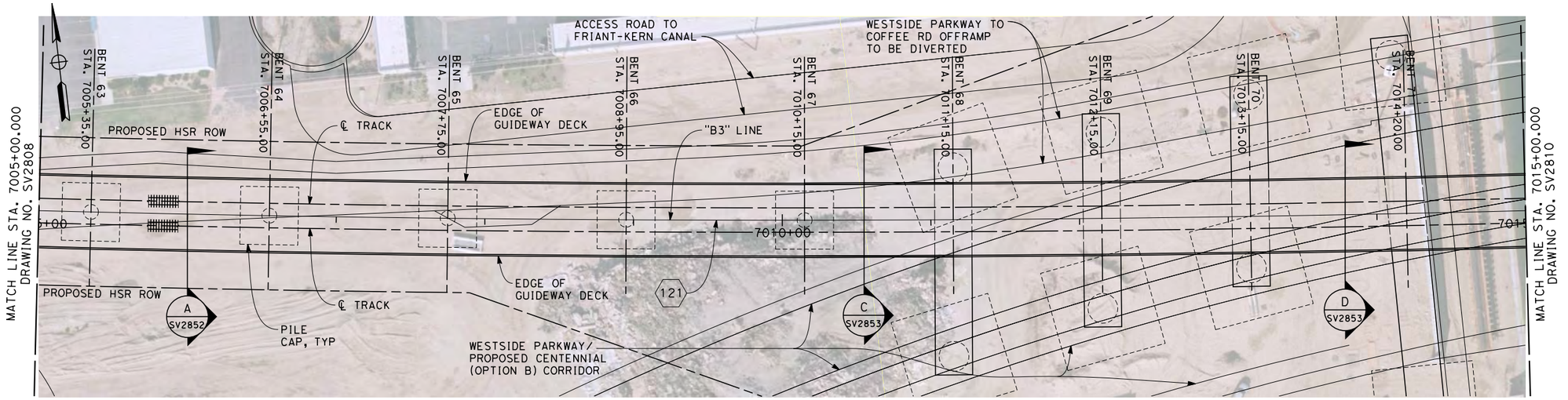


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

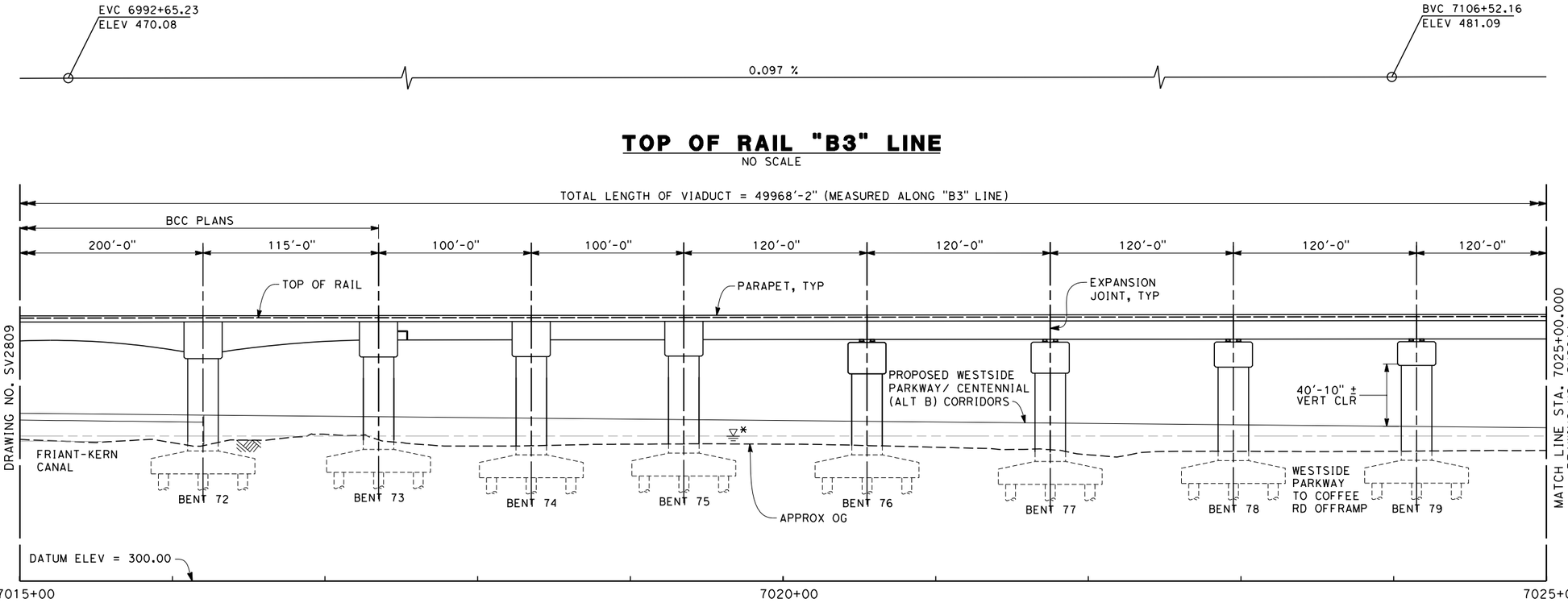
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2809
SCALE AS SHOWN
SHEET NO. 10 OF 57

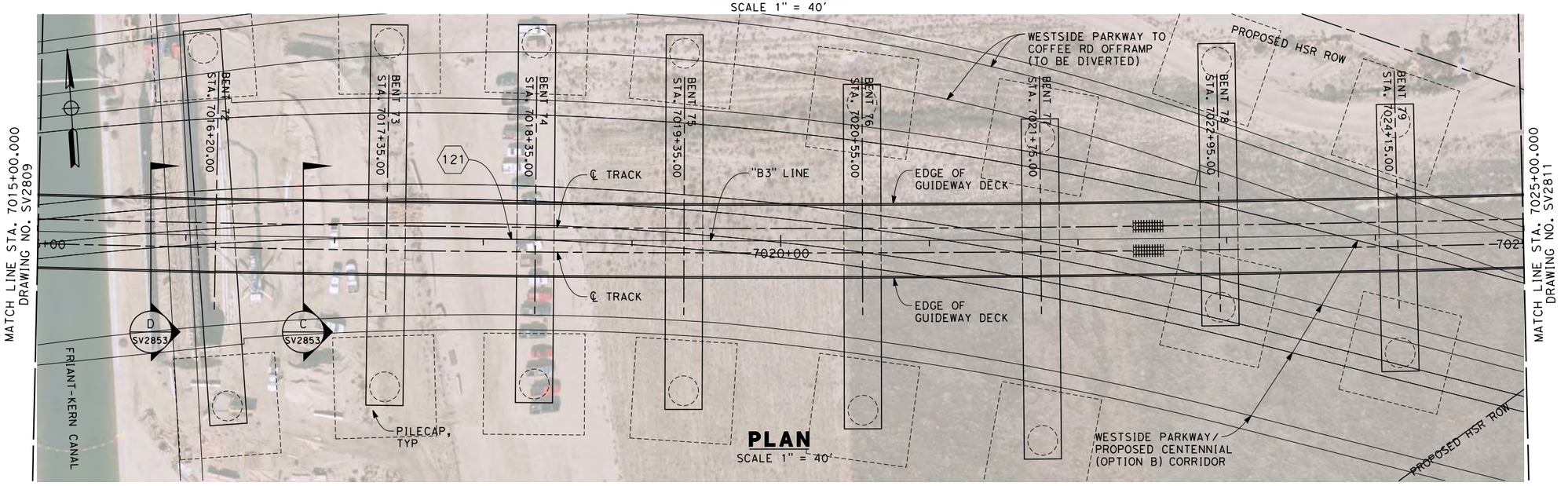


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

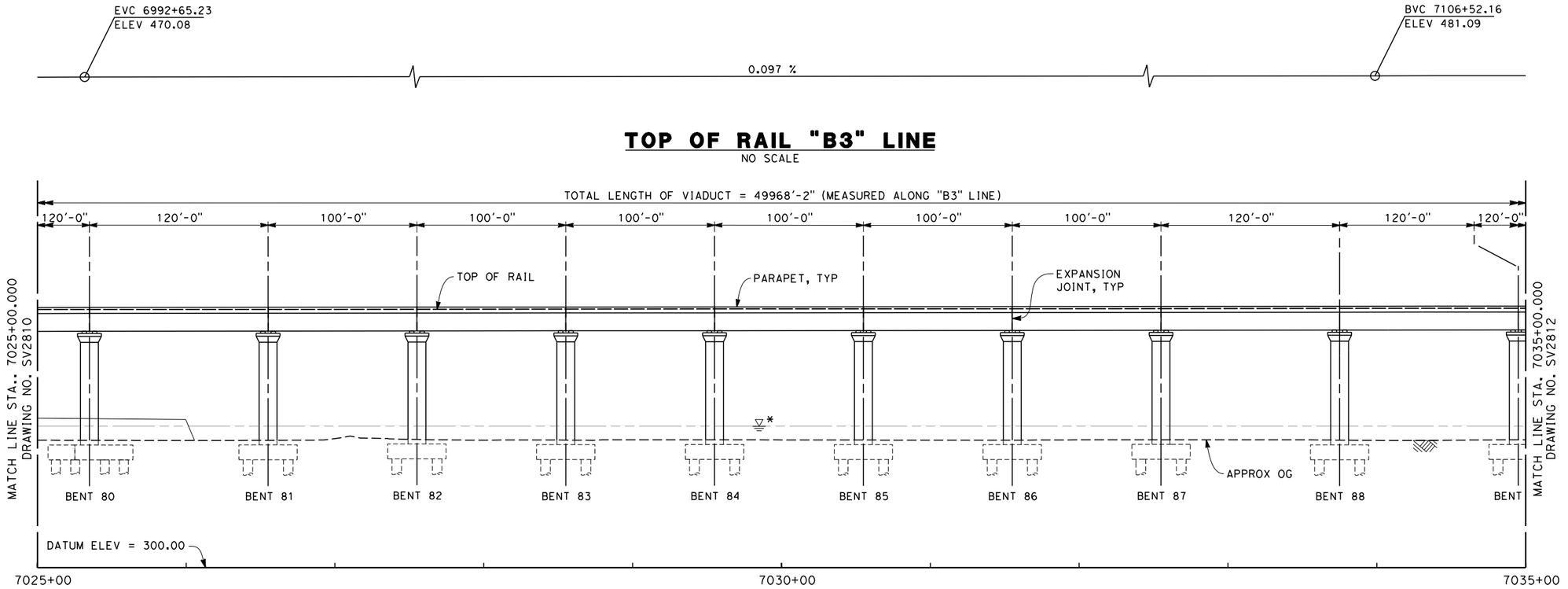
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2810
SCALE AS SHOWN
SHEET NO. 11 OF 57

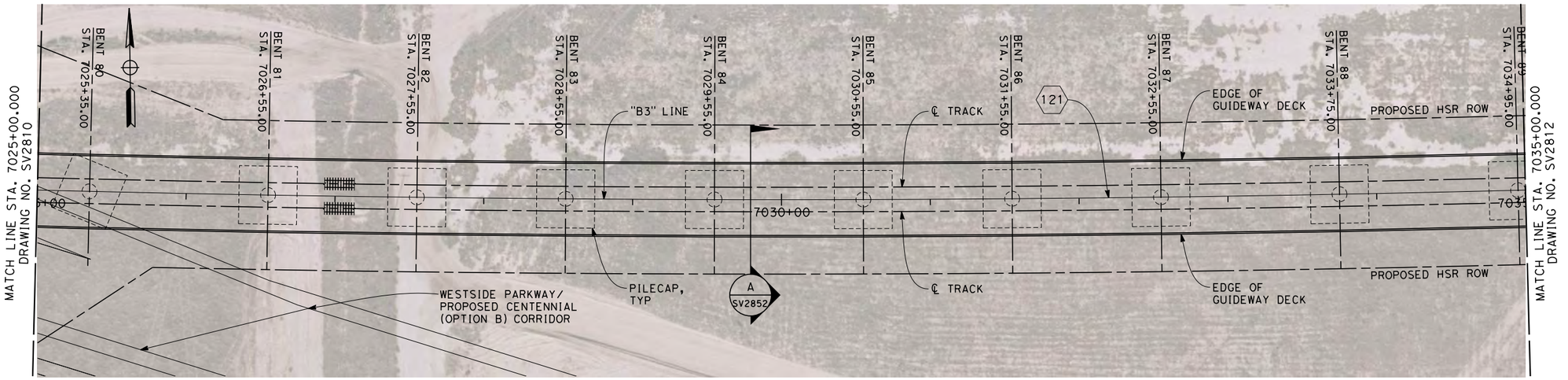


TOP OF RAIL "B3" LINE

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

⟨121⟩

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 D. ORIZA
CHECKED BY A.ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

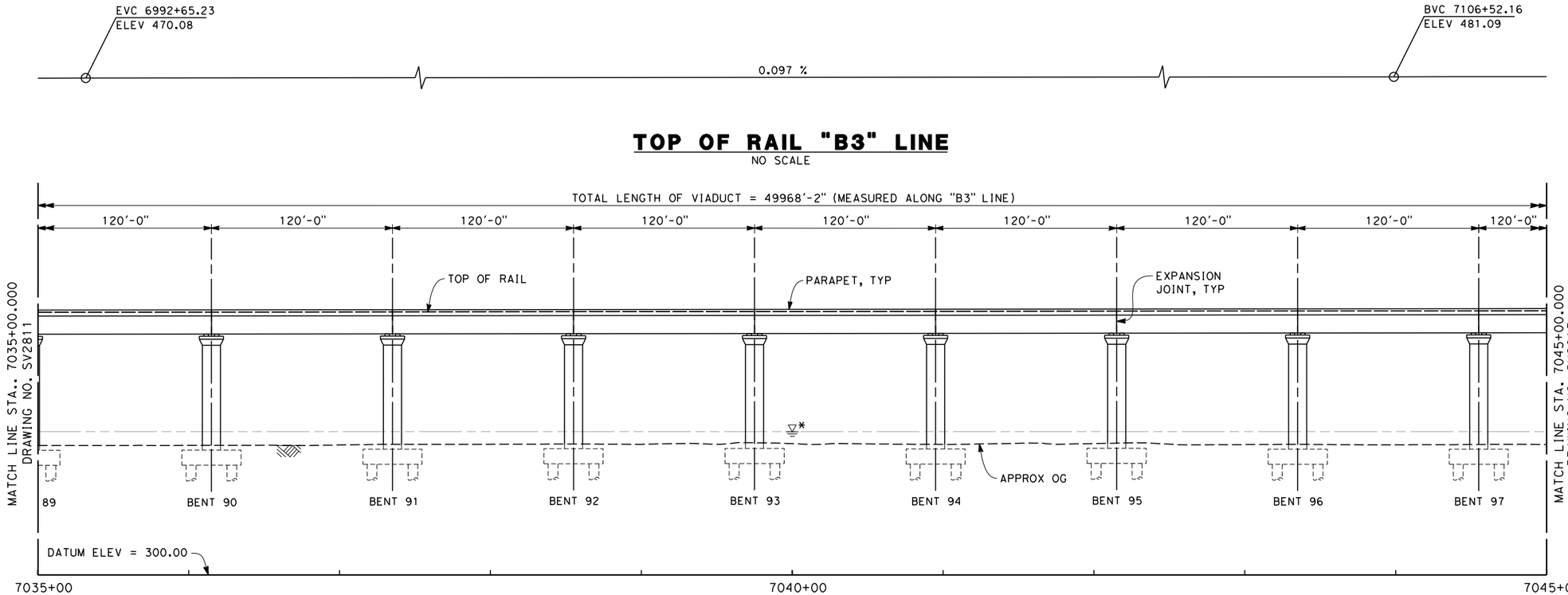
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2811
SCALE AS SHOWN
SHEET NO. 12 OF 57

frank.palermo 12/20/2013 5:41:13 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2811-B3.dgn

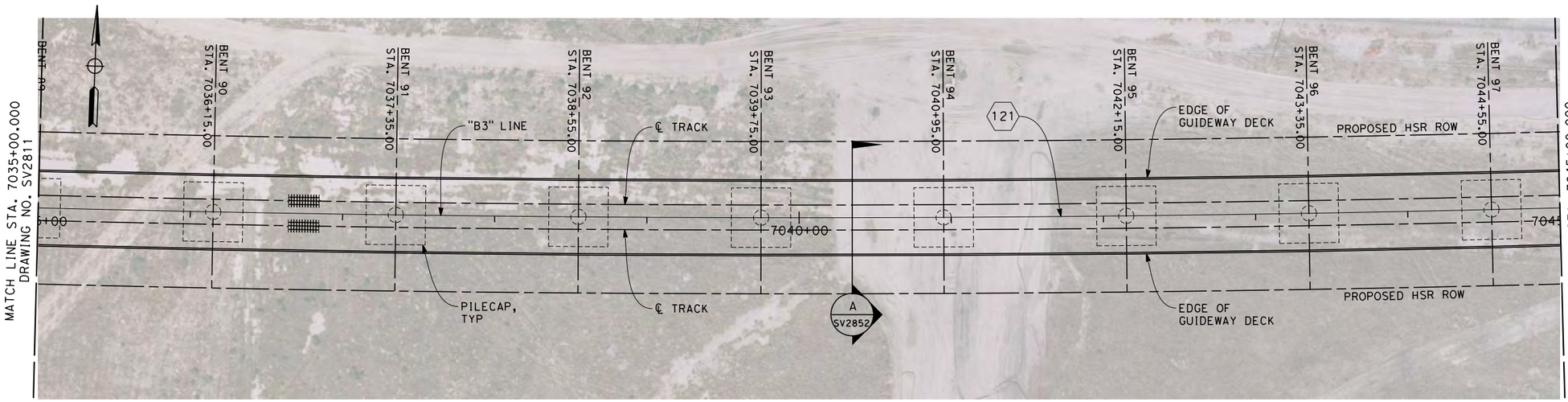


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

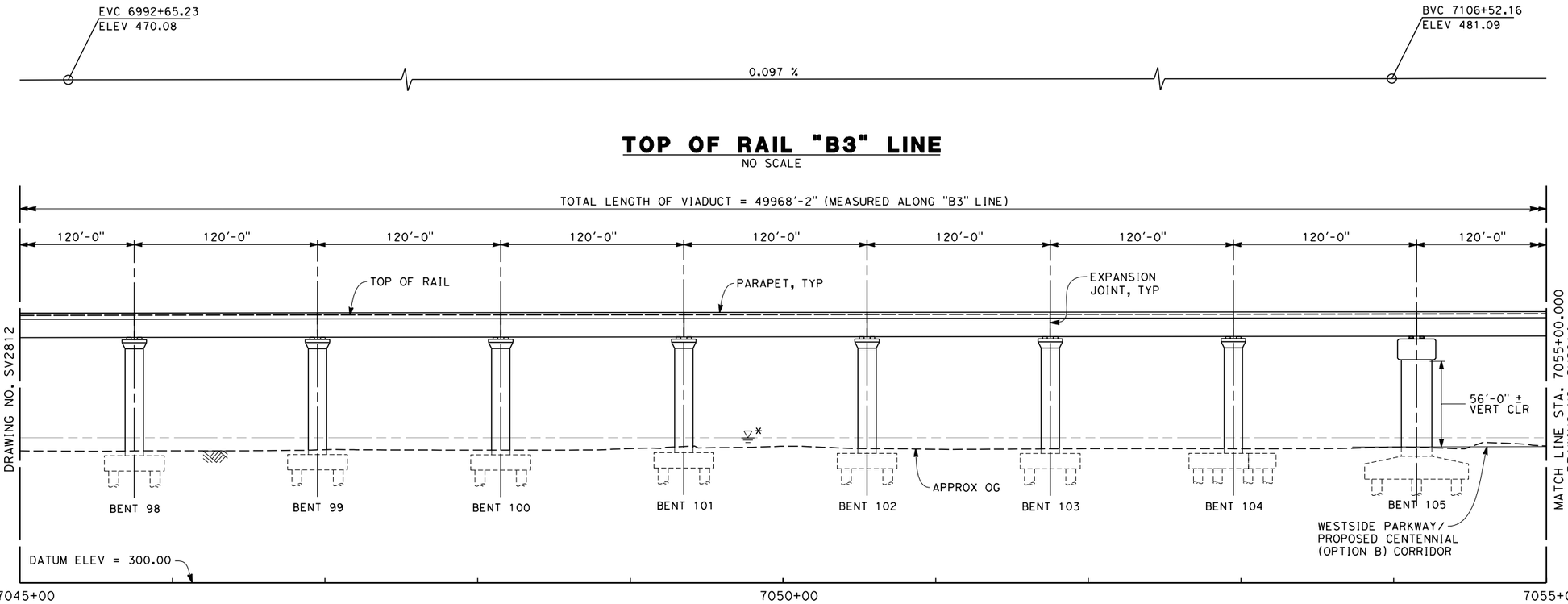
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

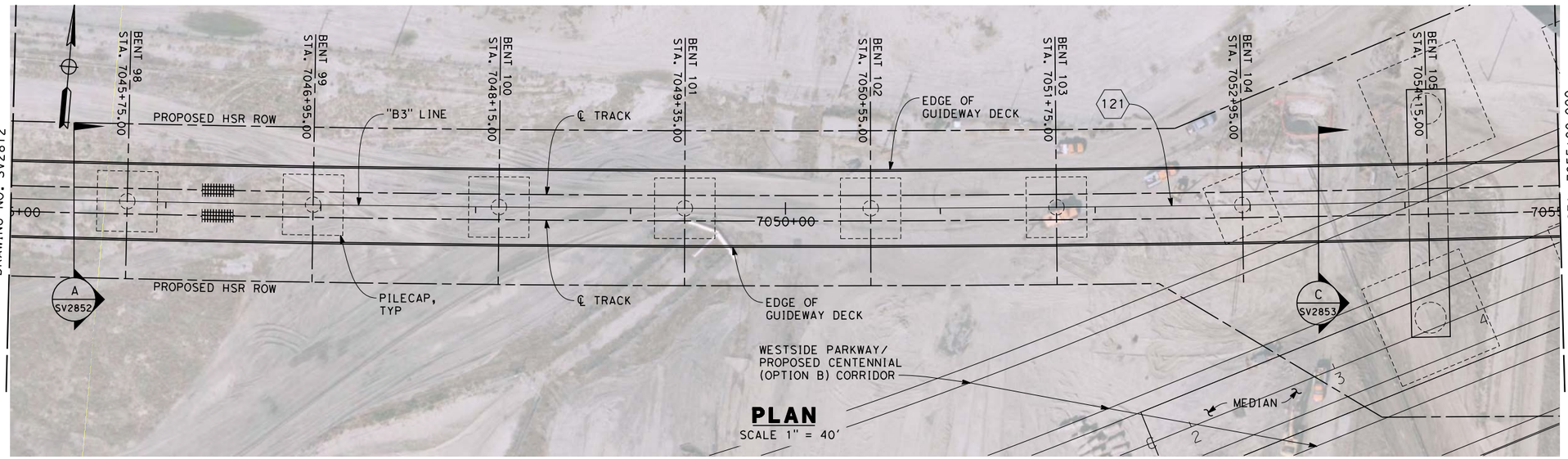
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2812
SCALE AS SHOWN
SHEET NO. 13 OF 57



TOP OF RAIL "B3" 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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

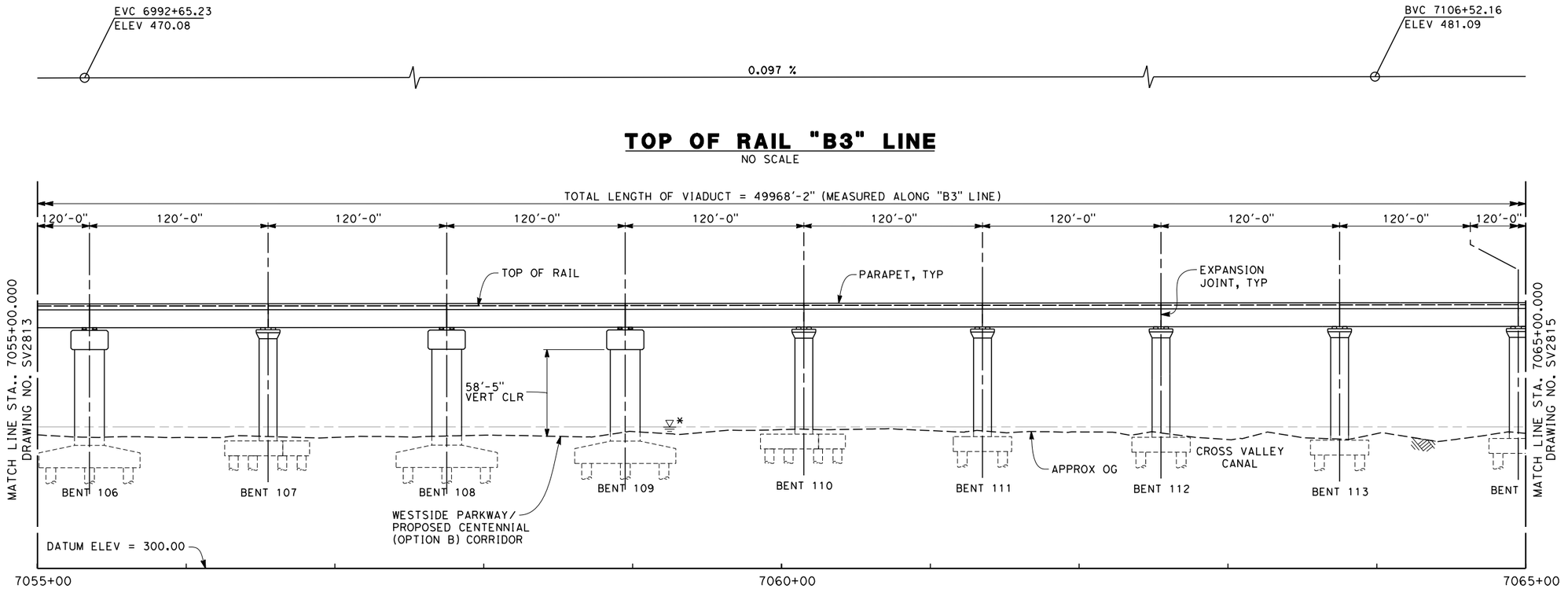
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2813
SCALE AS SHOWN
SHEET NO. 14 OF 57

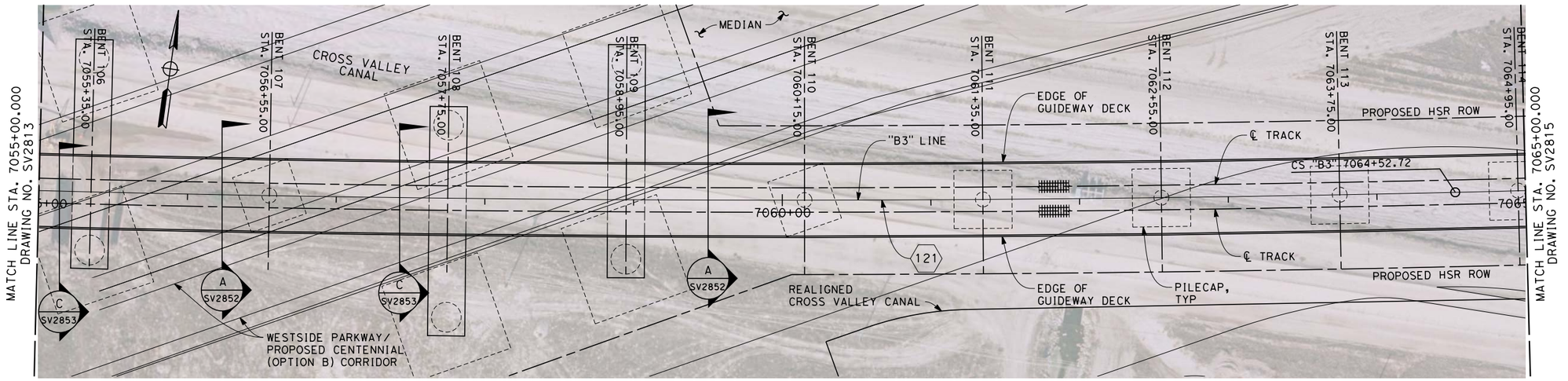


TOP OF RAIL "B3" LINE

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

(121)

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 D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 12/31/13

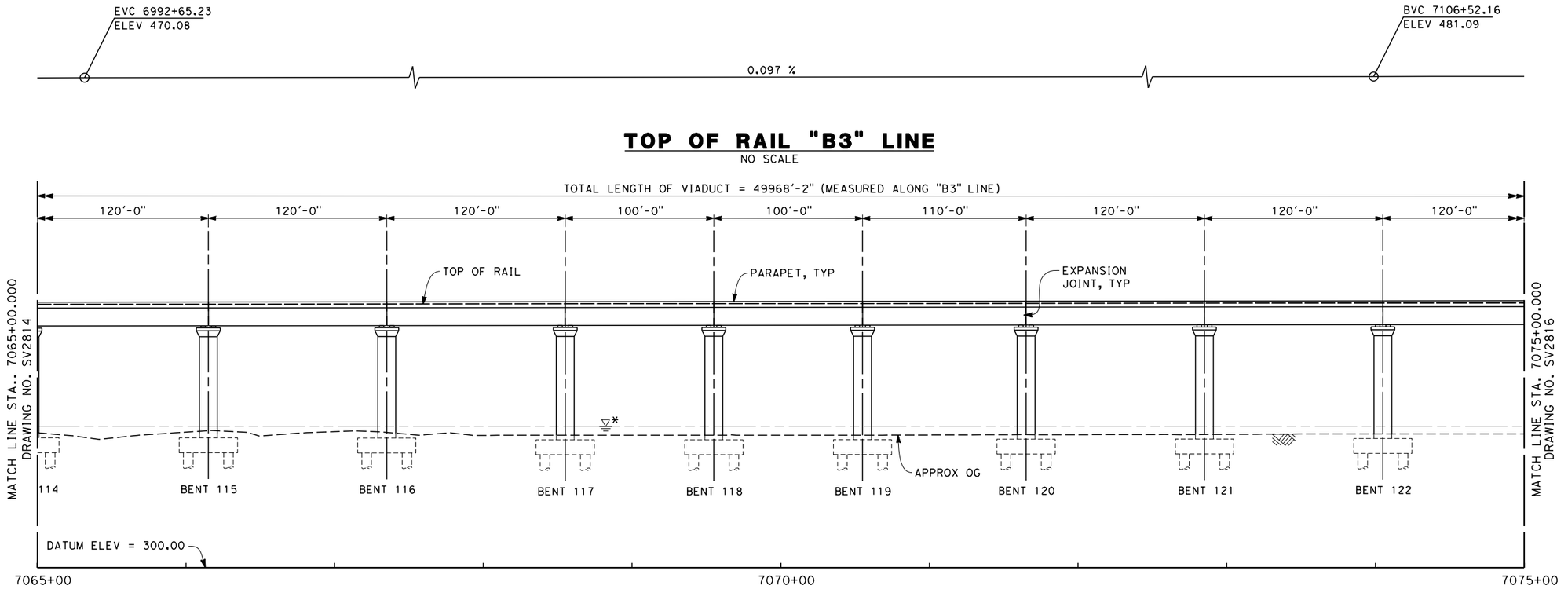
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2814
SCALE AS SHOWN
SHEET NO. 15 OF 57

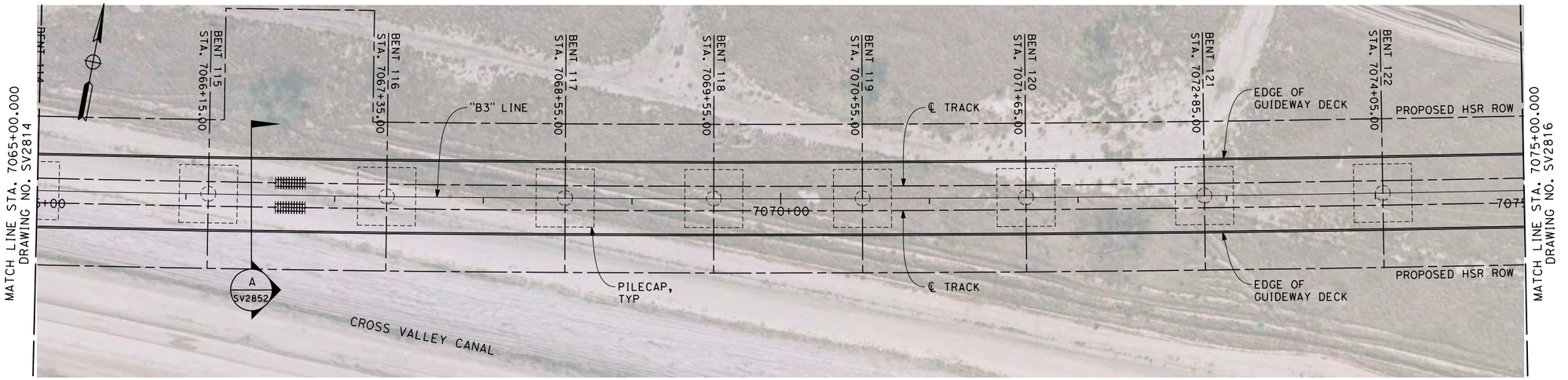


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

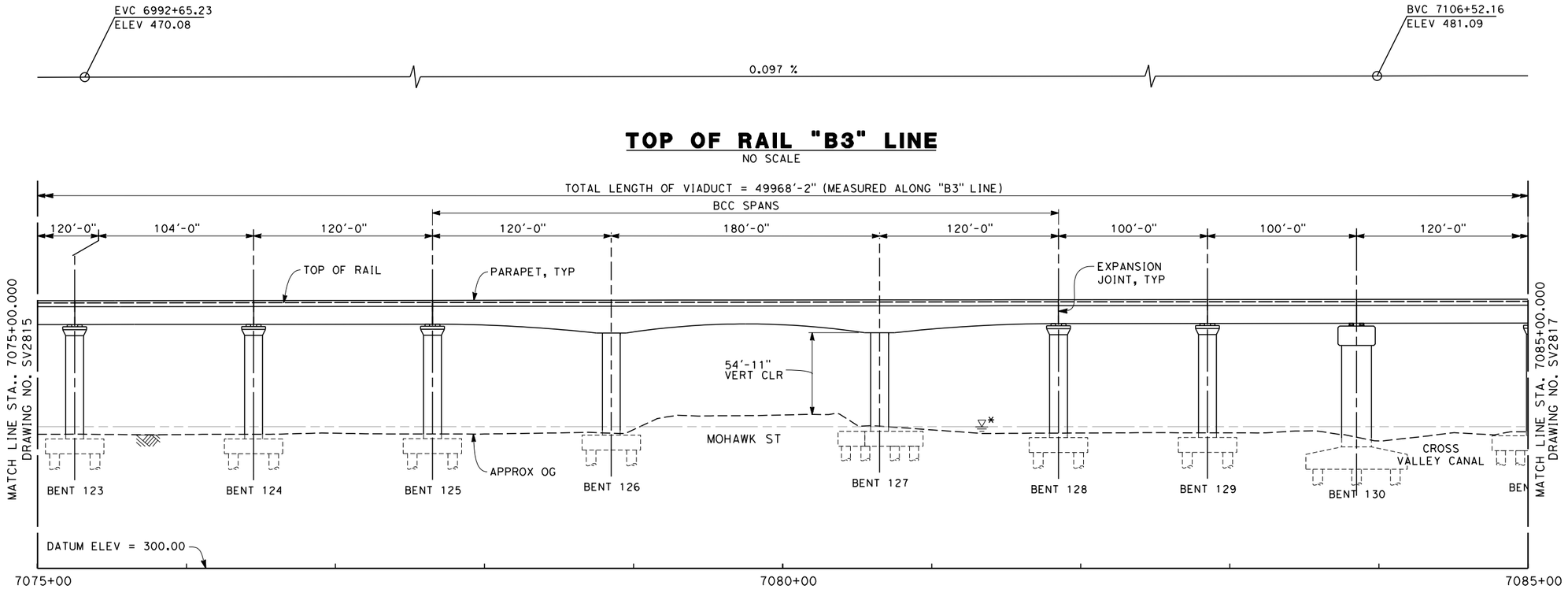
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2815
SCALE AS SHOWN
SHEET NO. 16 OF 57

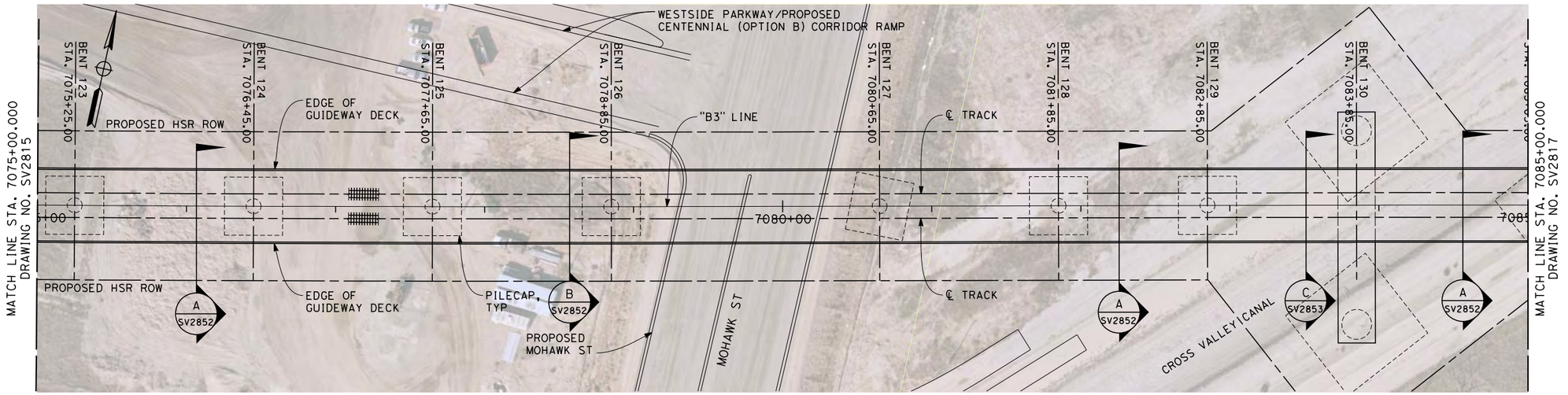


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

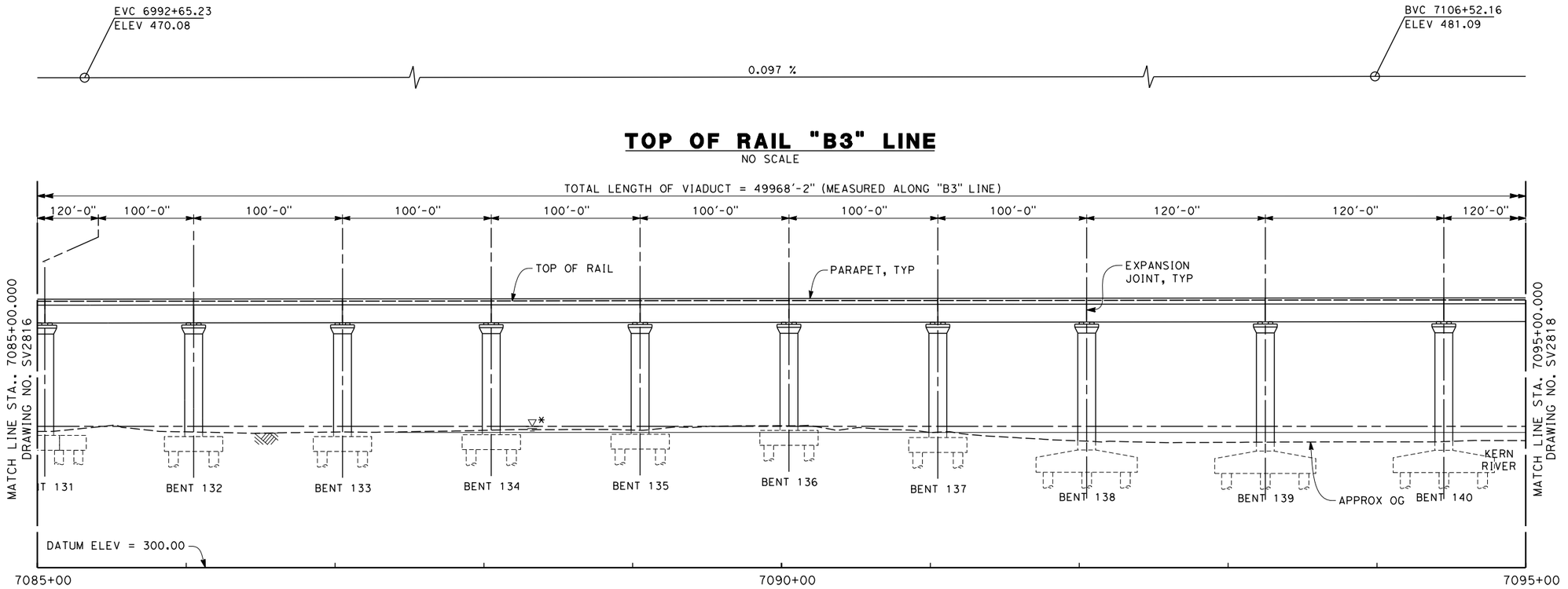
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2816
SCALE AS SHOWN
SHEET NO. 17 OF 57

frank.palermo 12/20/2013 5:43:11 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2816-B3.dgn

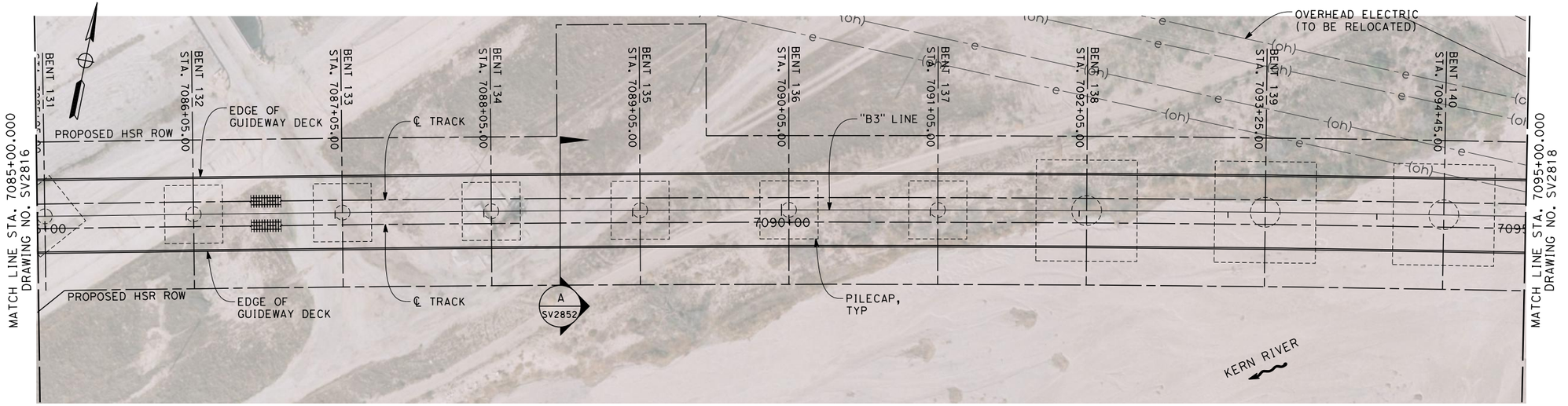


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY D. ORIZA
CHECKED BY M. FISHER
IN CHARGE R. COFFIN
DATE 03/19/14

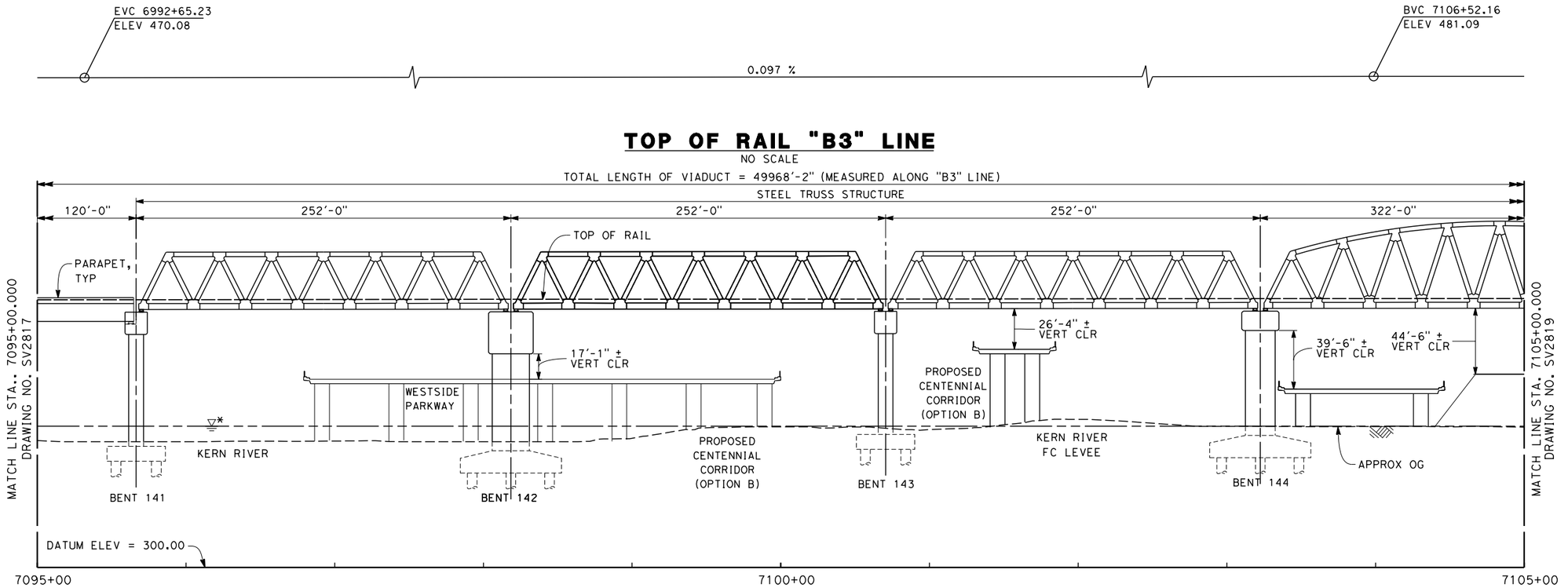
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

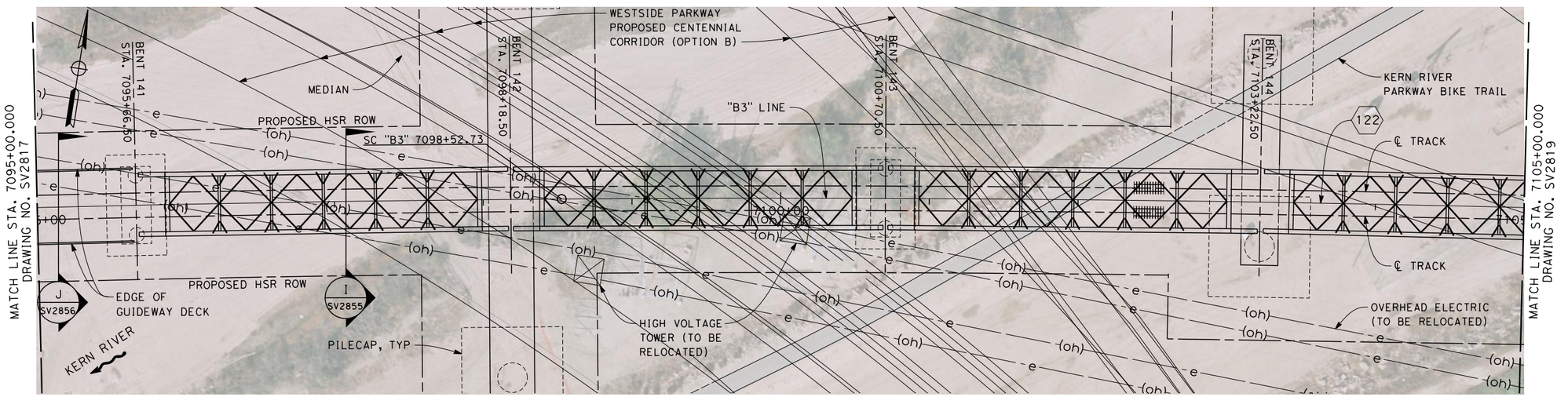
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2817
SCALE AS SHOWN
SHEET NO. 18 OF 57



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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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

122

R = 19680.00'

Δ = 06° 54' 55.9"

T = 1189.1'

L = 2375.3'

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY D. ORIZA
CHECKED BY M. FISHER
IN CHARGE R. COFFIN
DATE 03/19/14

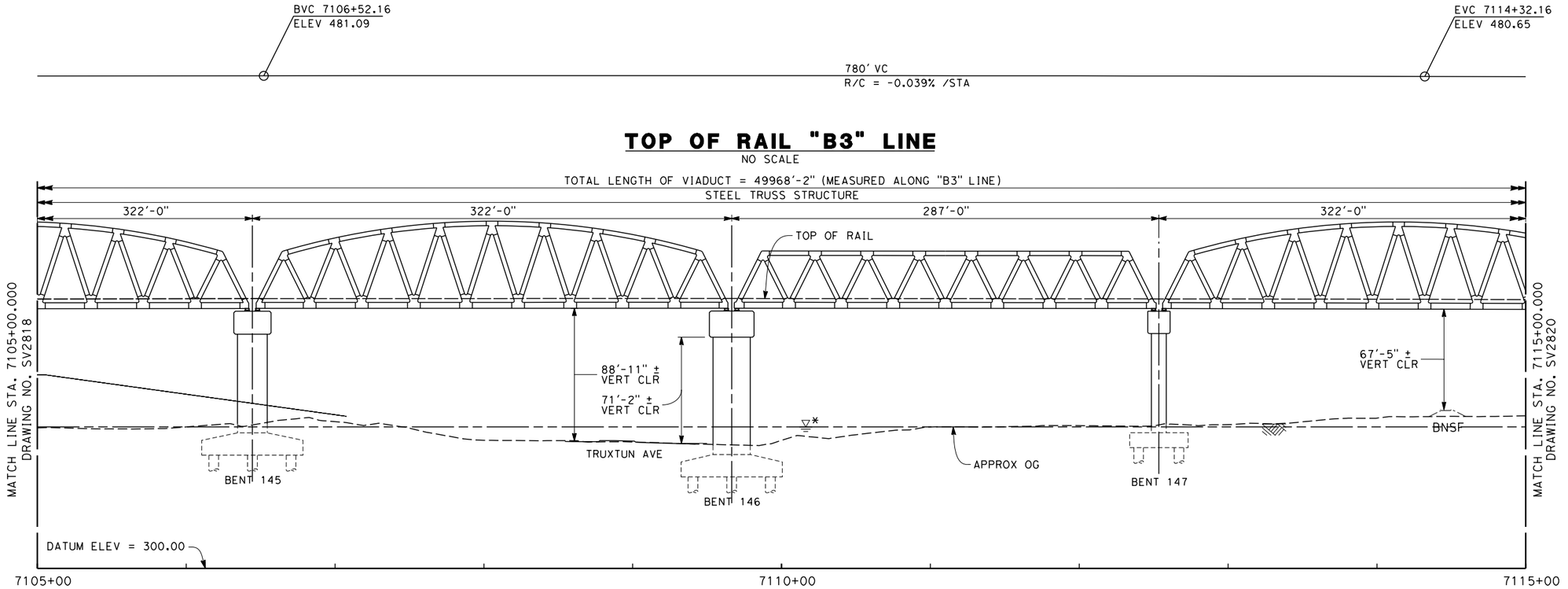
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2818
SCALE AS SHOWN
SHEET NO. 19 OF 57

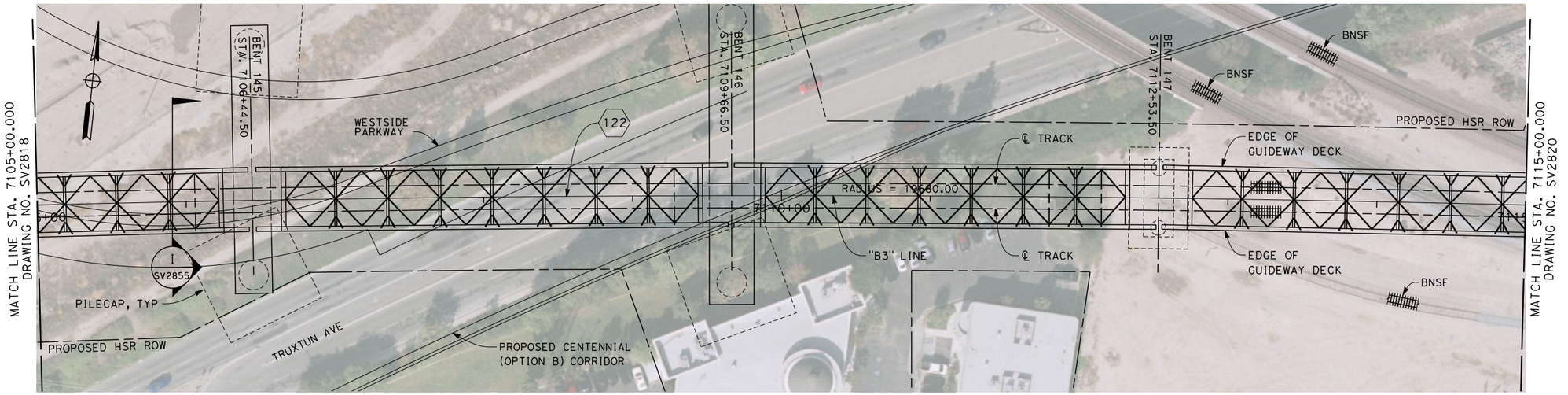


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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

(122)

R = 19680.00'

Δ = 06° 54' 55.9"

T = 1189.1'

L = 2375.3'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY D. ORIZA
CHECKED BY M. FISHER
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

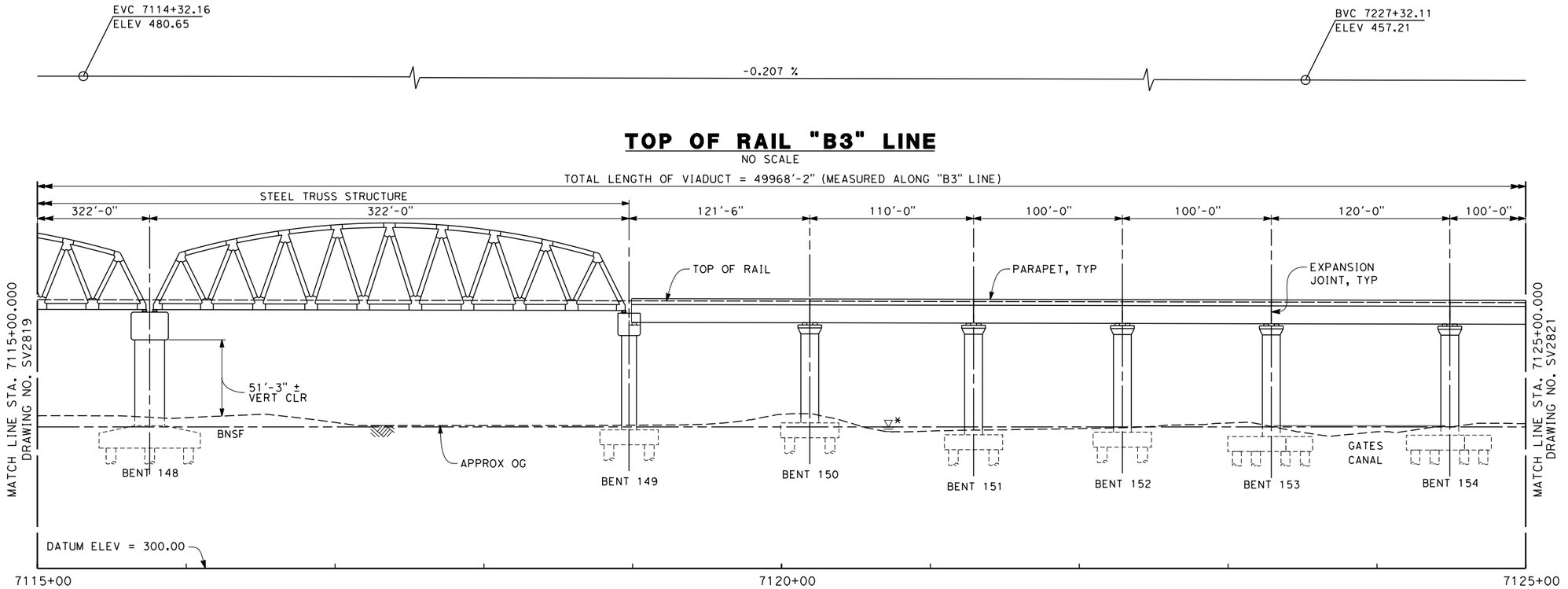
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2819
SCALE AS SHOWN
SHEET NO. 20 OF 57

eron.sudhausen 3/14/2014 4:04:56 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\dms71888\FB-SV-2819-B3.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 - IN-SITU, SLID OR LAUNCHED
   - ELEVATED SLABS - PC BEAM AND IN-SITU 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

(122)

R = 19680.00'

Δ = 06° 54' 55.9"

T = 1189.1'

L = 2375.3'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY A. ARMSTRONG
DRAWN BY D. ORIZA
CHECKED BY M. FISHER
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

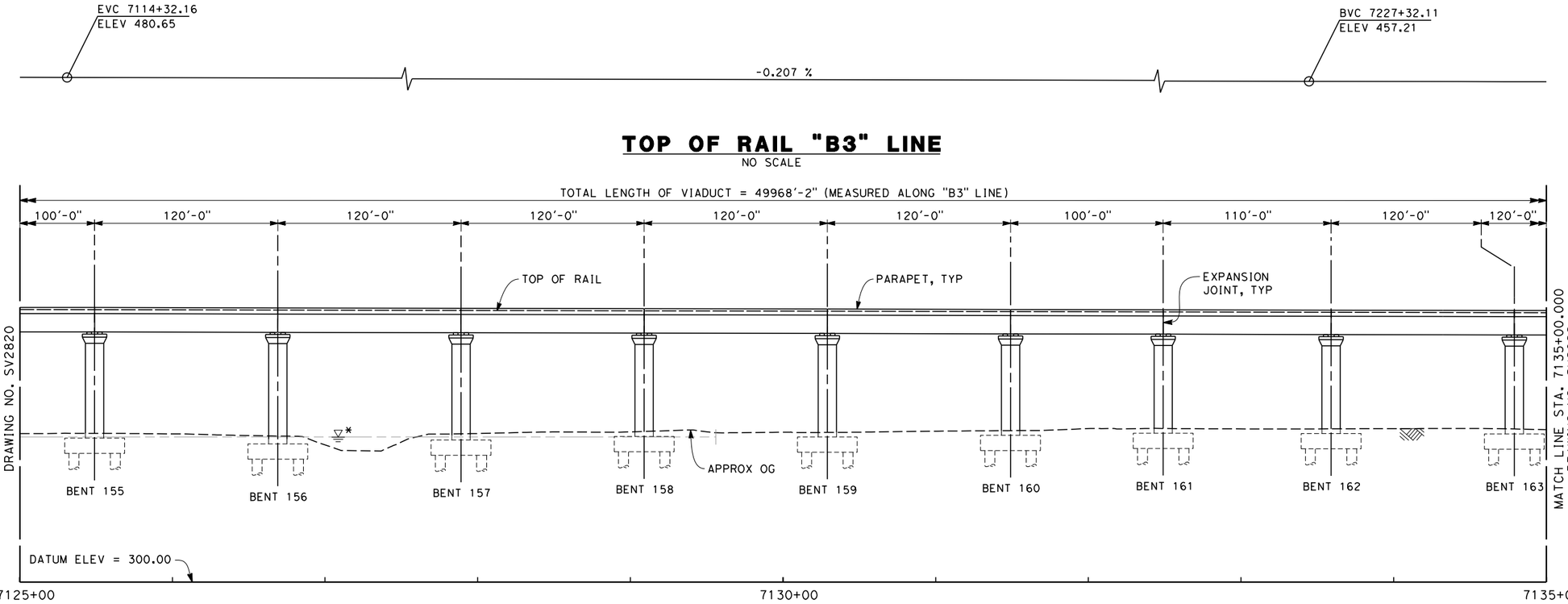
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2820
SCALE AS SHOWN
SHEET NO. 21 OF 57

eron.sudhausen 3/14/2014 4:12:13 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\dms71888\FB-SV-2820-B3.dgn



TOP OF RAIL "B3" LINE

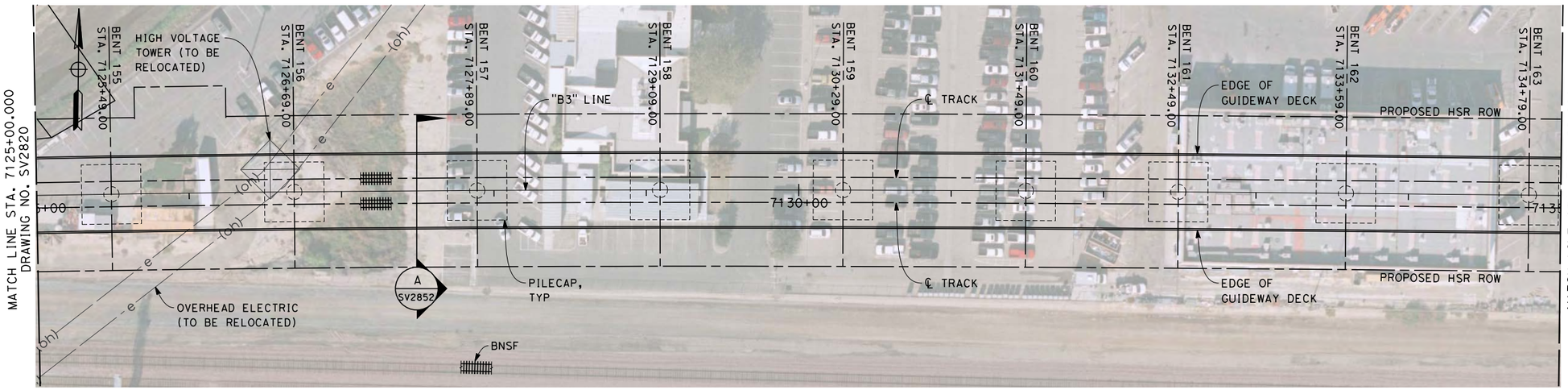
NO SCALE

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
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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

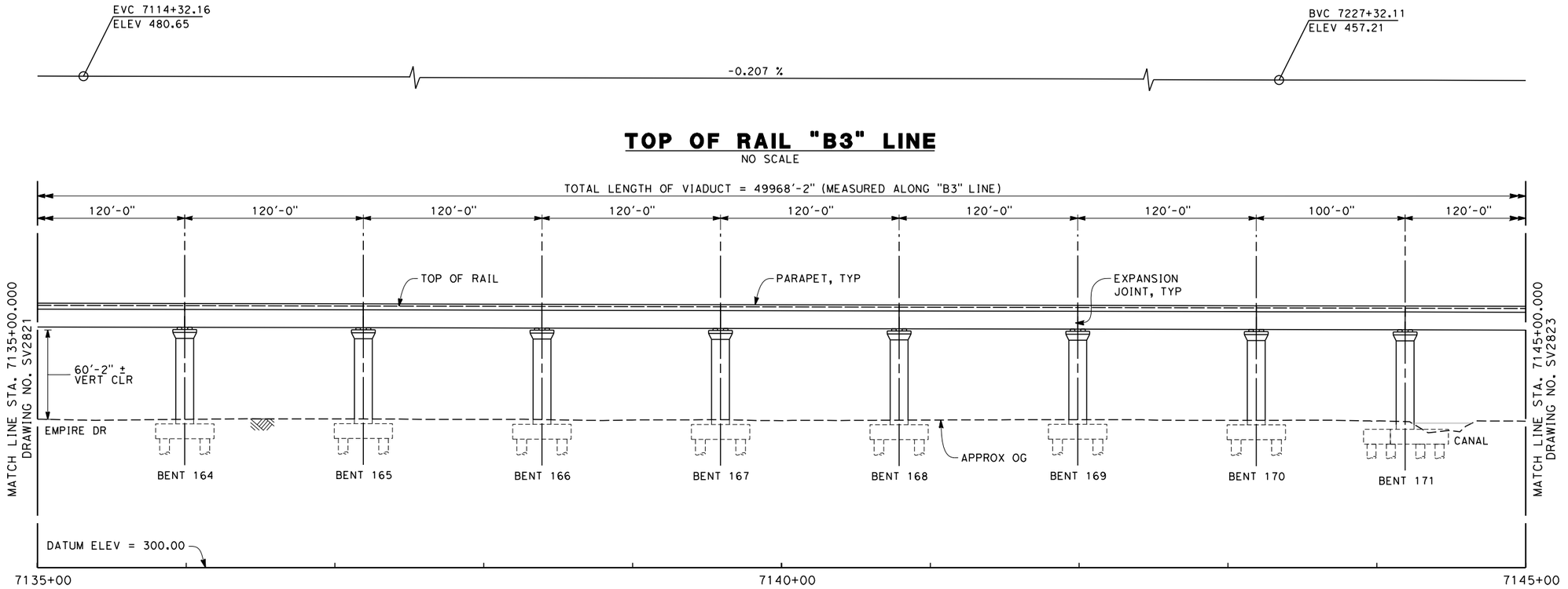
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2821
SCALE AS SHOWN
SHEET NO. 22 OF 57

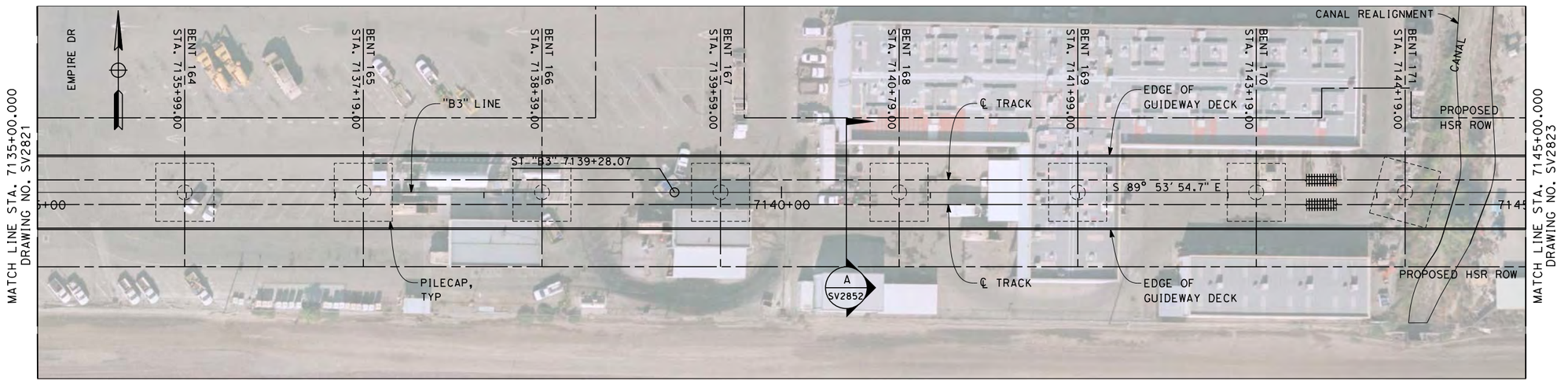


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

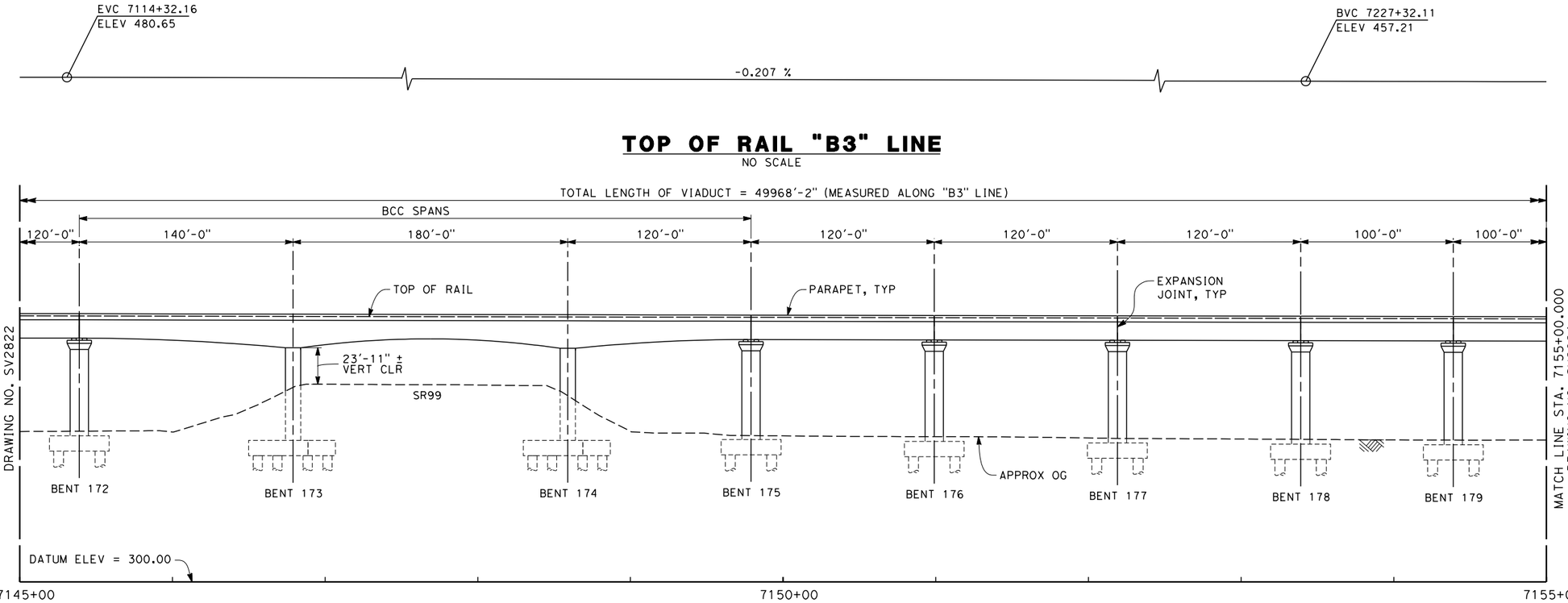
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2822
SCALE AS SHOWN
SHEET NO. 23 OF 57



TOP OF RAIL "B3" LINE

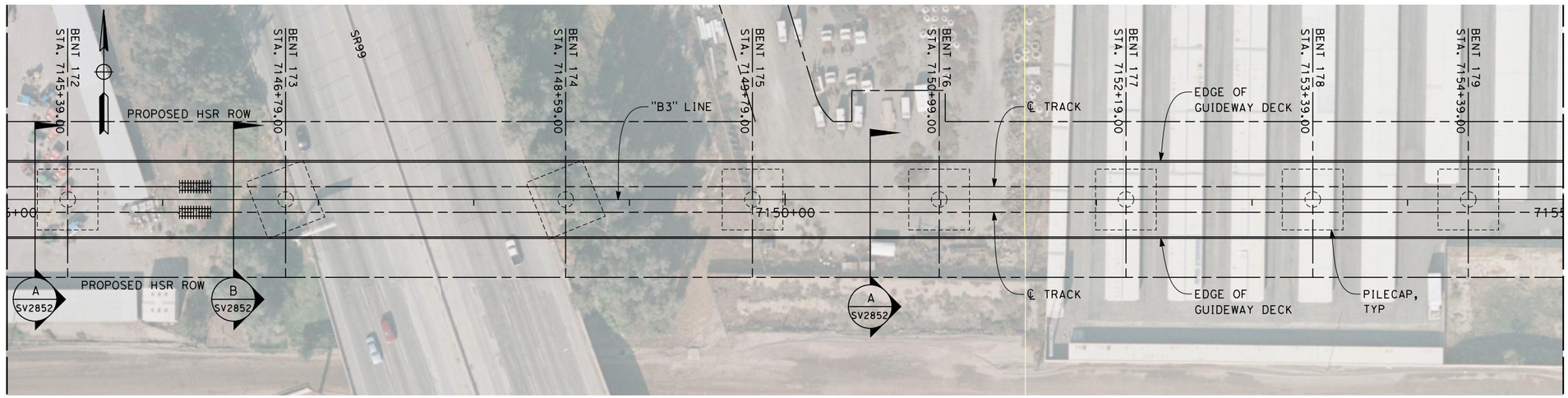
NO SCALE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

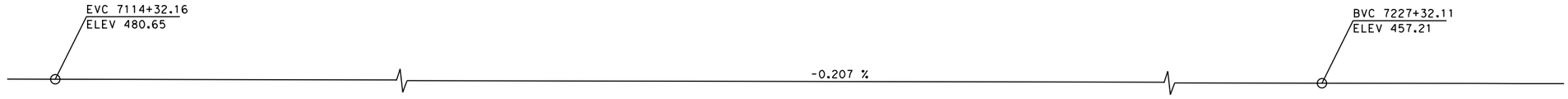
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

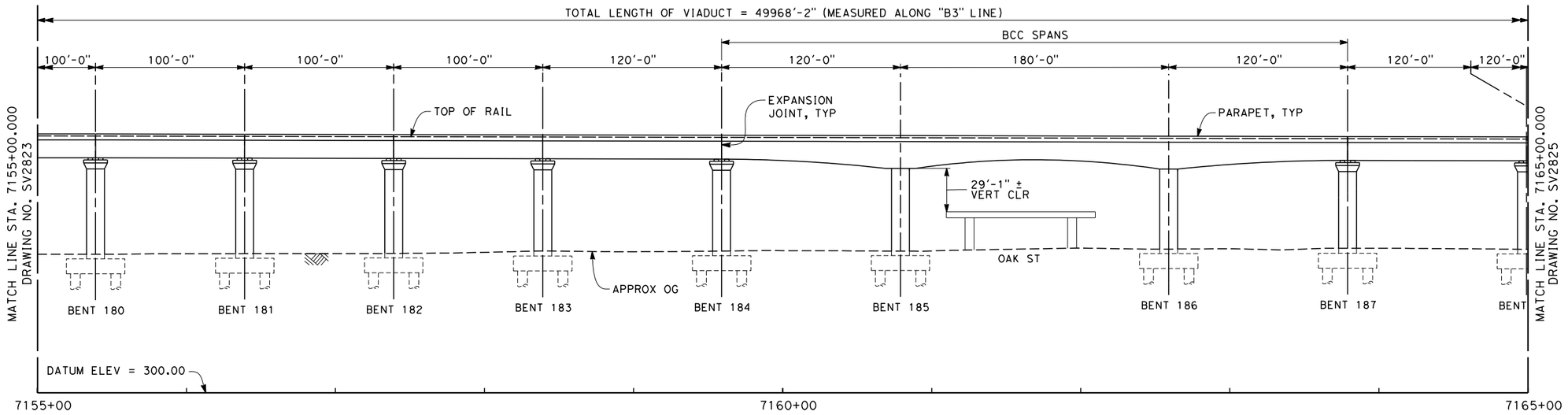
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2823
SCALE AS SHOWN
SHEET NO. 24 OF 57



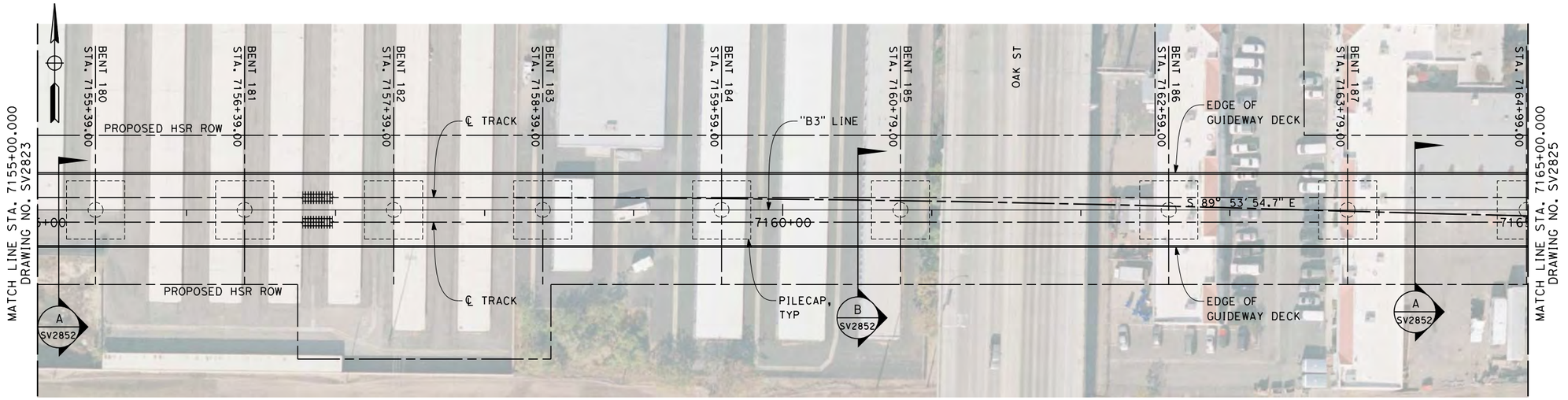
TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

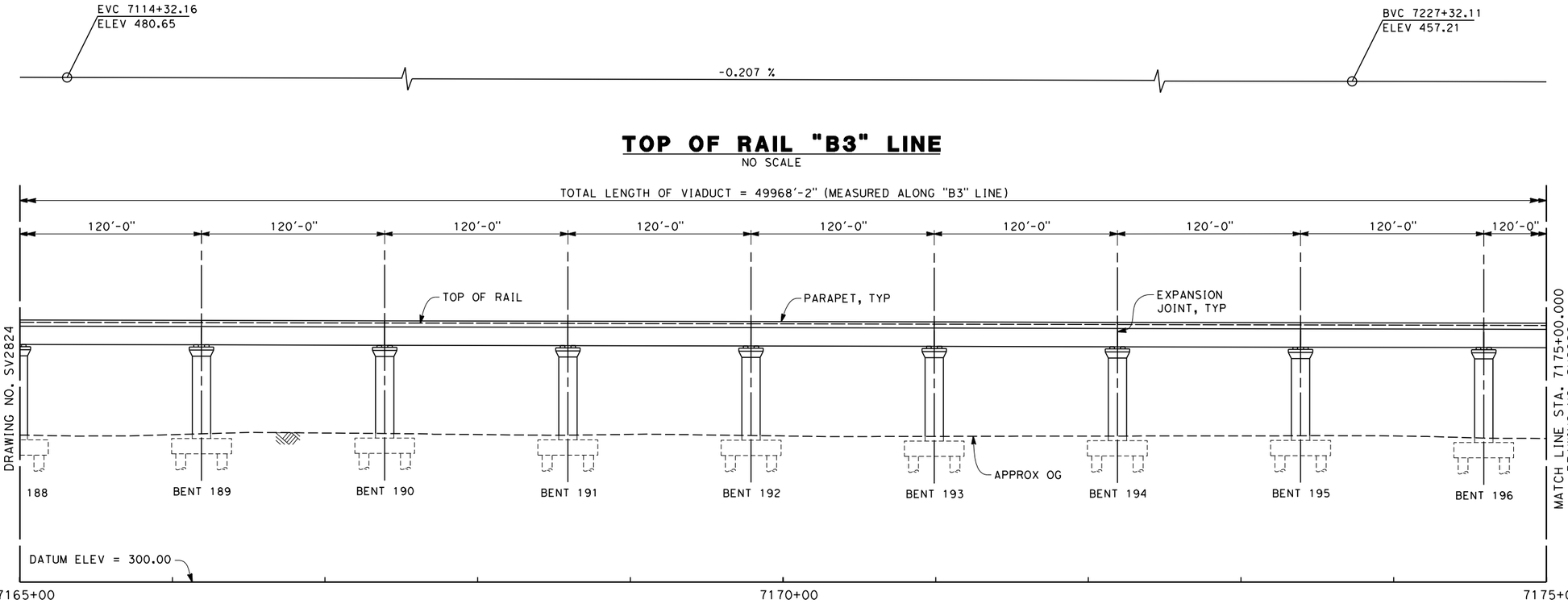
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2824
SCALE AS SHOWN
SHEET NO. 25 OF 57

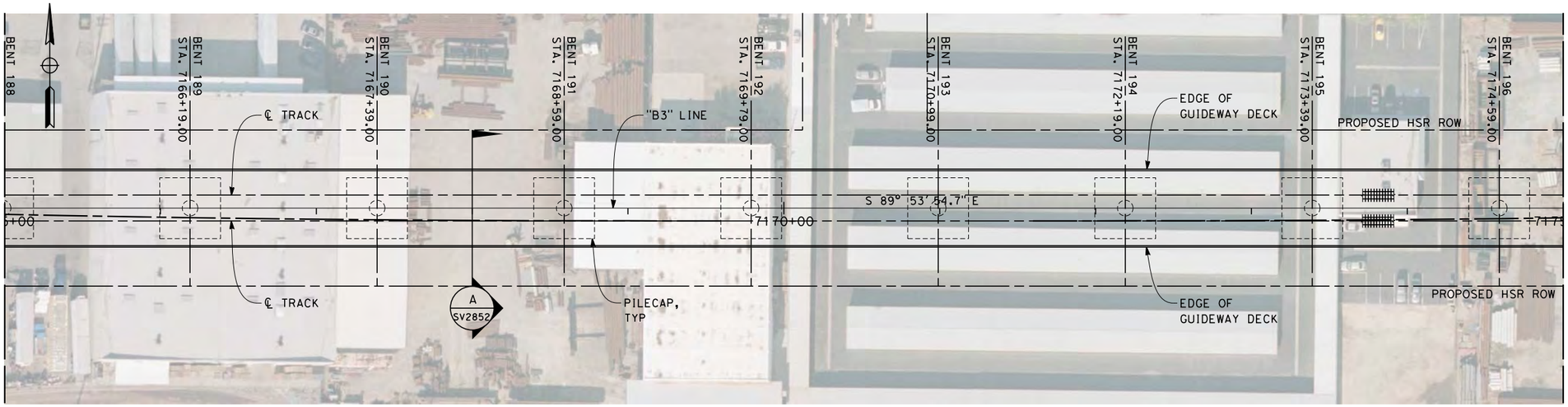


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

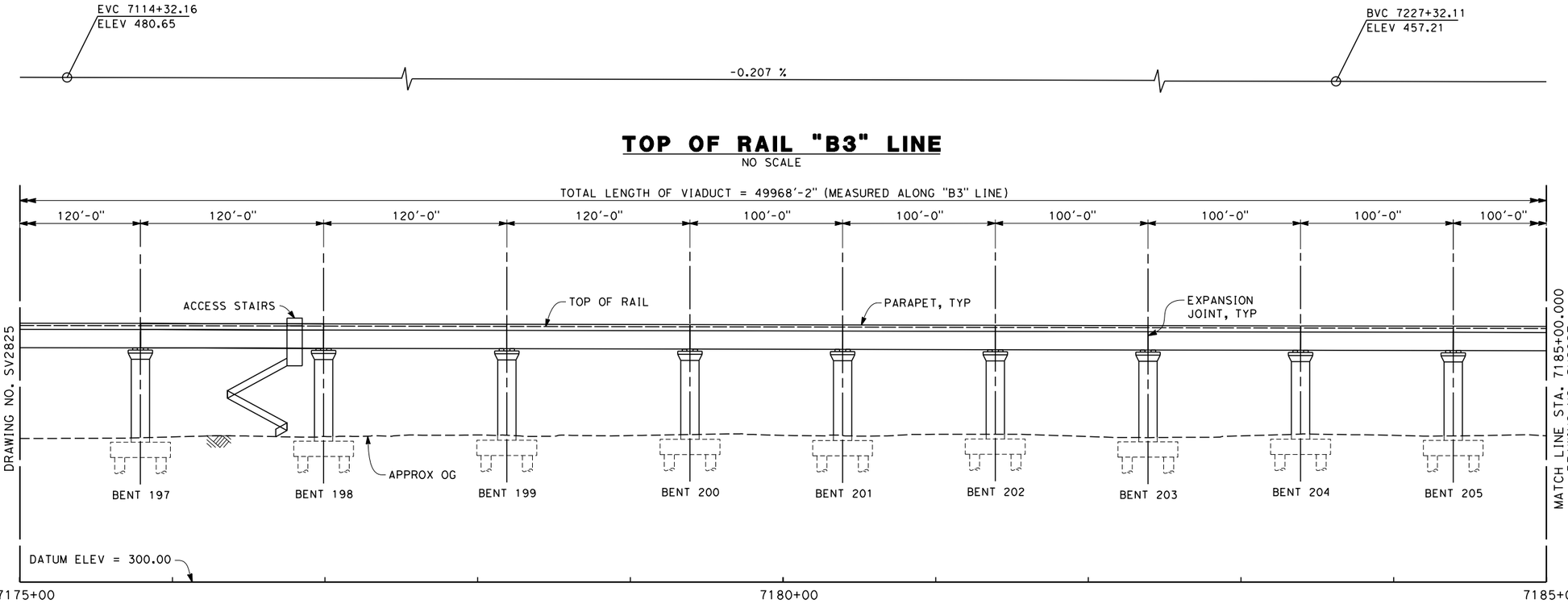
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2825
SCALE AS SHOWN
SHEET NO. 26 OF 57

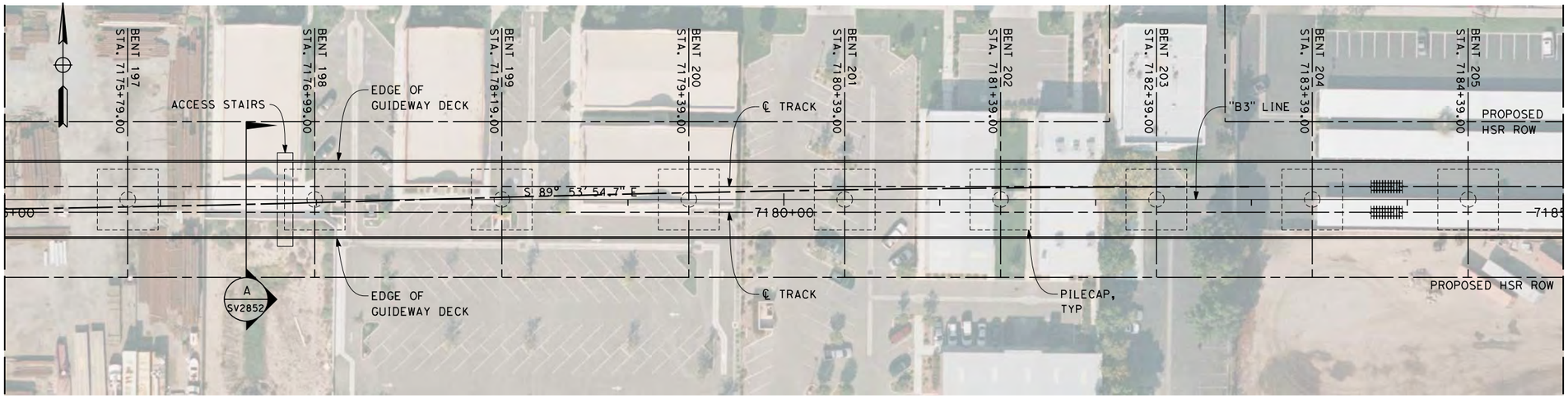


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

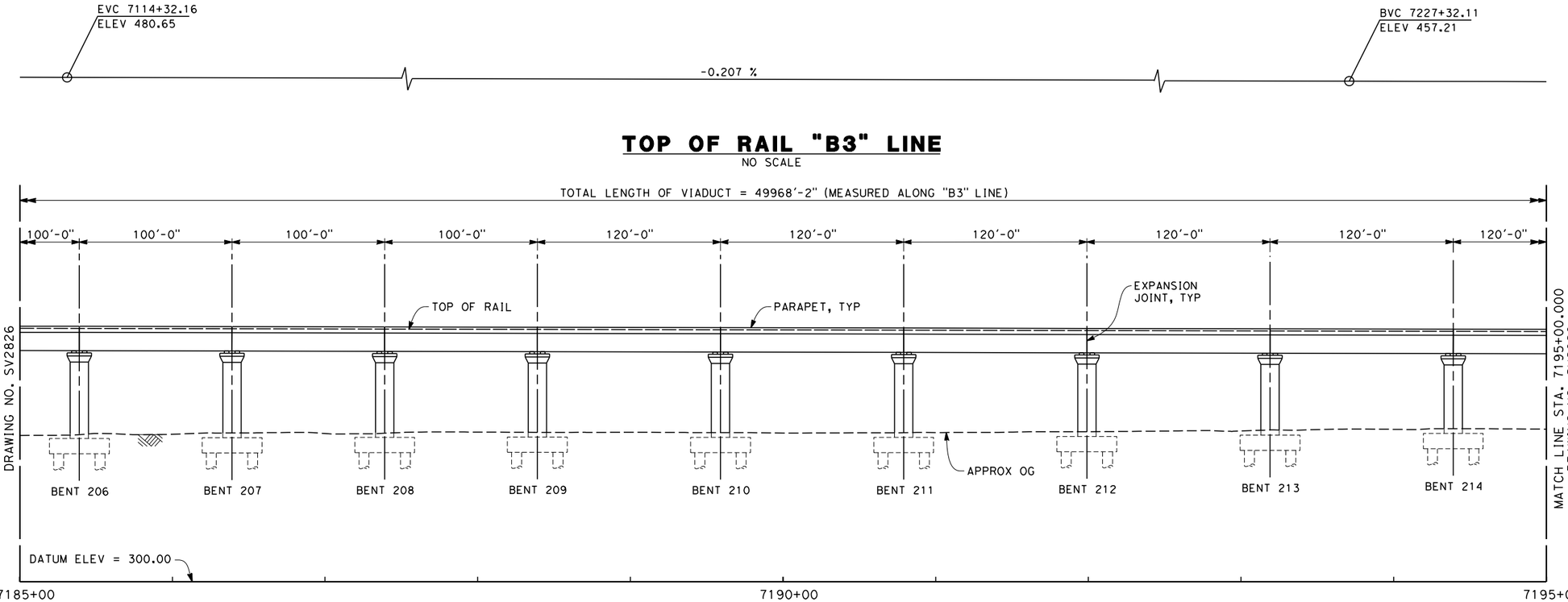
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

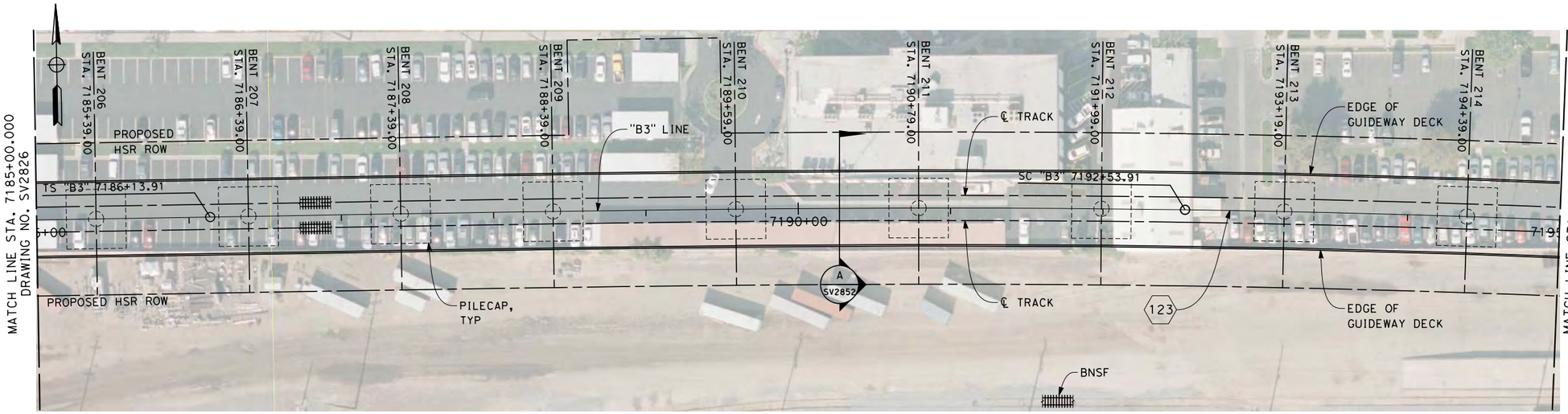
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2826
SCALE AS SHOWN
SHEET NO. 27 OF 57



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

(123)

R = 10108.25'

Δ = 07° 03' 31.7"

T = 623.5'

L = 1245.3'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

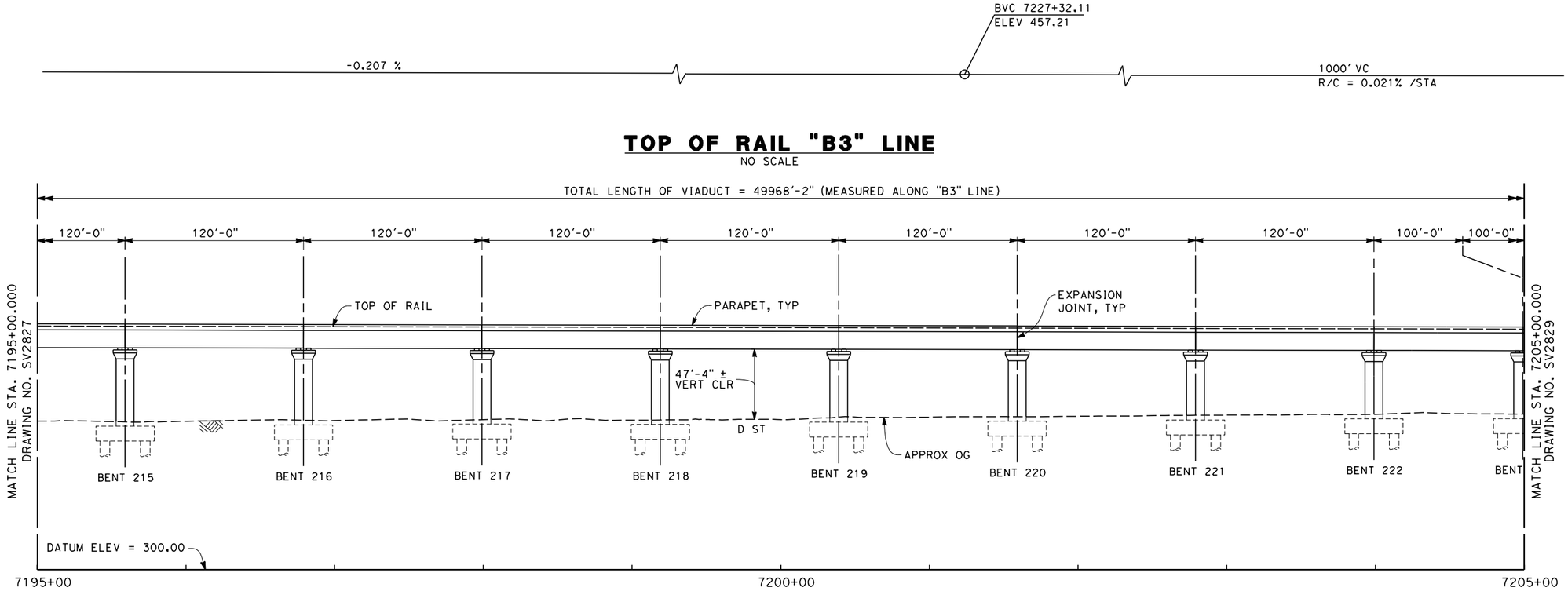
CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2827
SCALE AS SHOWN
SHEET NO. 28 OF 57

frank.palermo 12/20/2013 5:46:25 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2827-B3.dgn

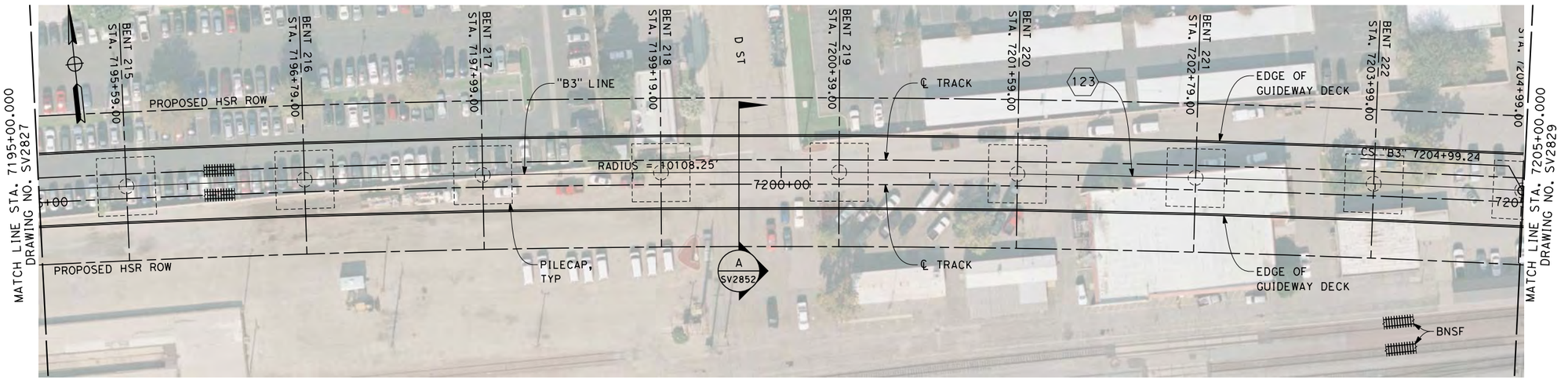


TOP OF RAIL "B3" LINE

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

⟨123⟩

R = 10108.25'

Δ = 07° 03' 31.7"

T = 623.5'

L = 1245.3'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

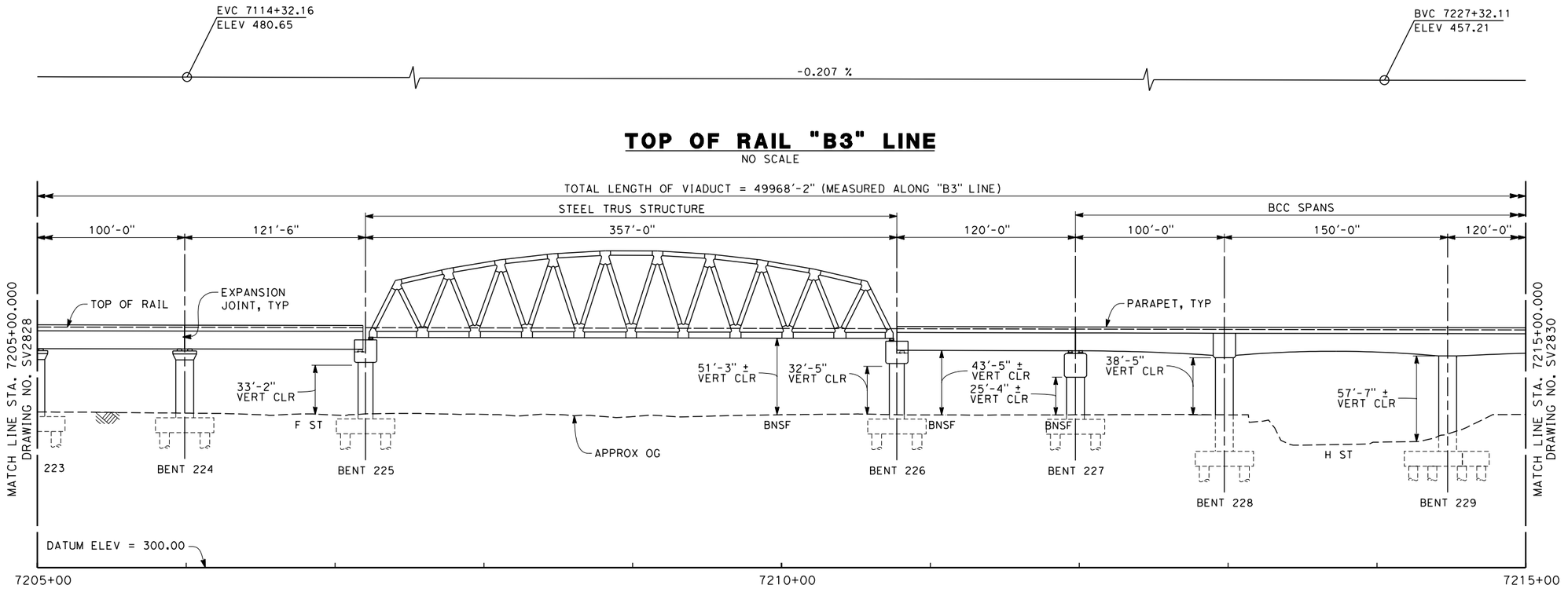
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2828
SCALE AS SHOWN
SHEET NO. 29 OF 57

frank.palermo 12/20/2013 5:46:43 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2828-B3.dgn

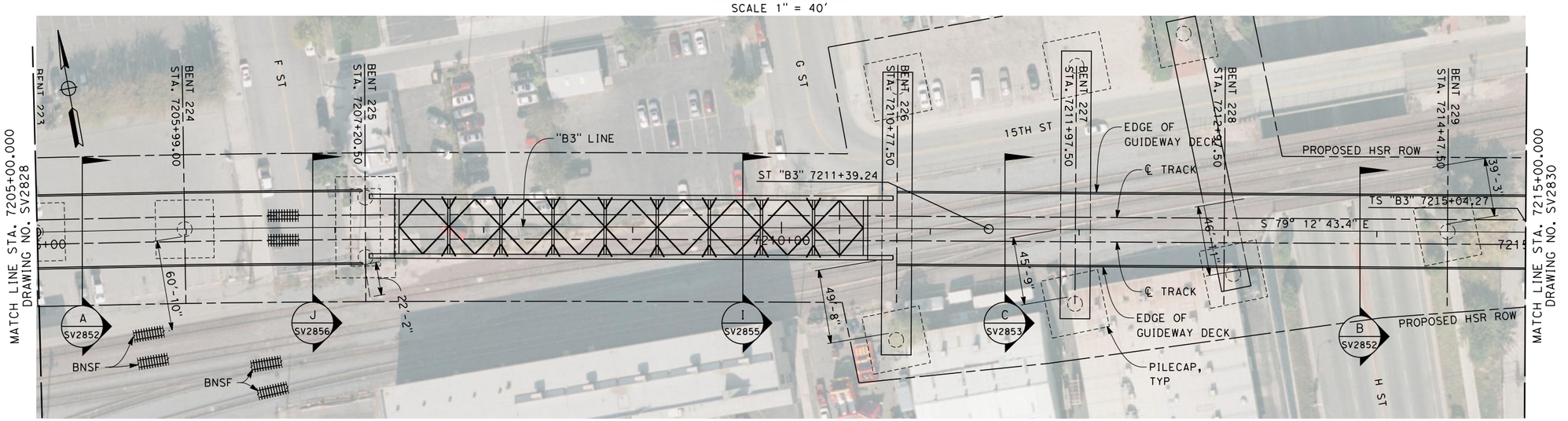


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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

(123)

R = 10108.25'

Δ = 07° 03' 31.7"

T = 623.5'

L = 1245.3'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

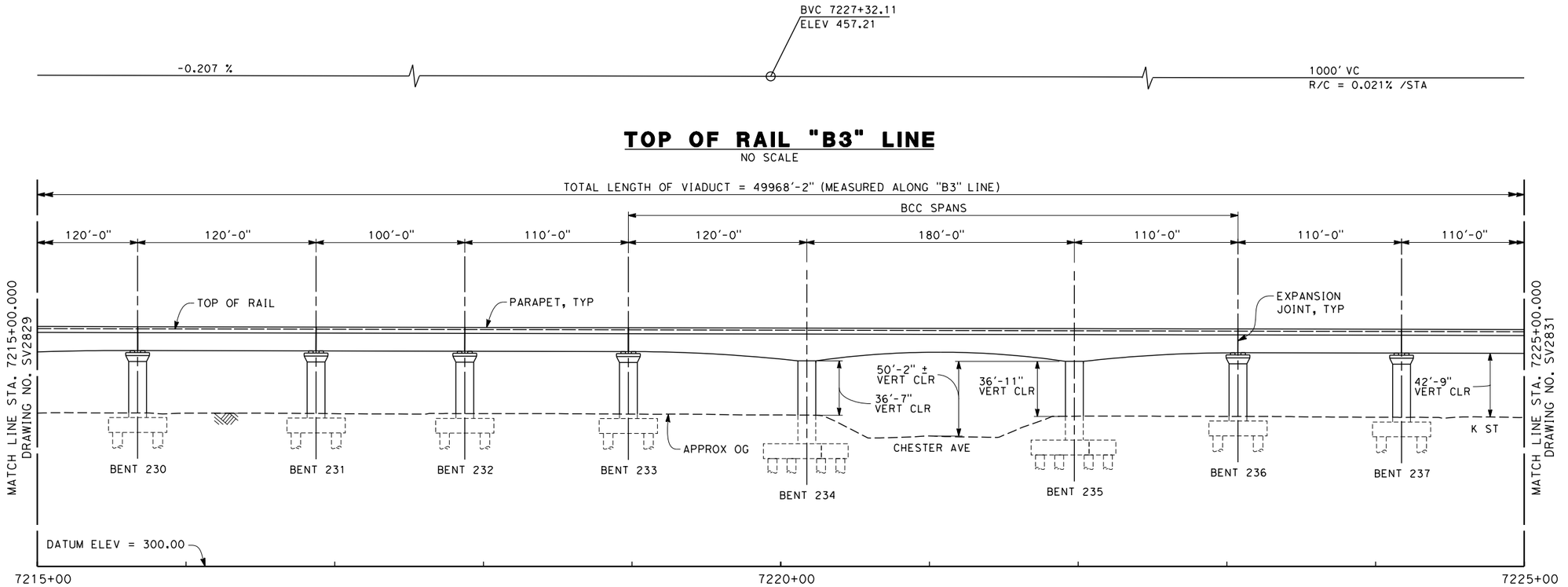
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2829
SCALE AS SHOWN
SHEET NO. 30 OF 57

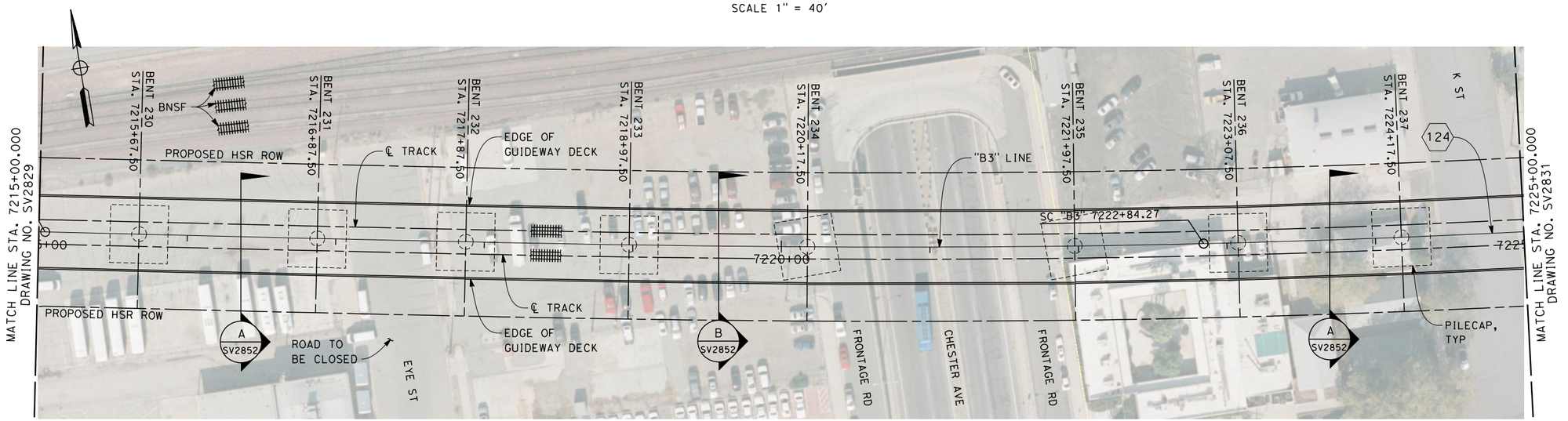


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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

⟨124⟩

R = 8108.25'

Δ = 13° 23' 44.0"

T = 952.2'

L = 1895.7'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

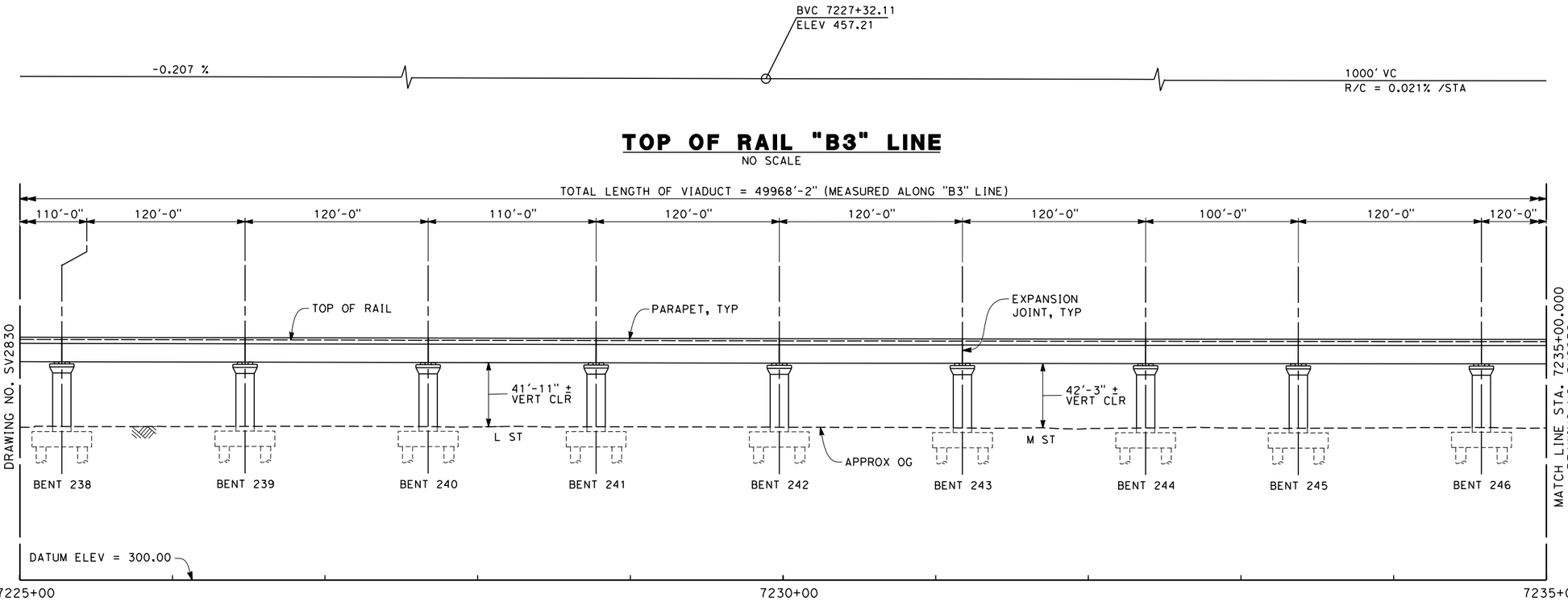
CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2830
SCALE AS SHOWN
SHEET NO. 31 OF 57

eron.sudhausen 3/14/2014 4:56:37 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\dms71888\FB-SV-2830-B3.dgn

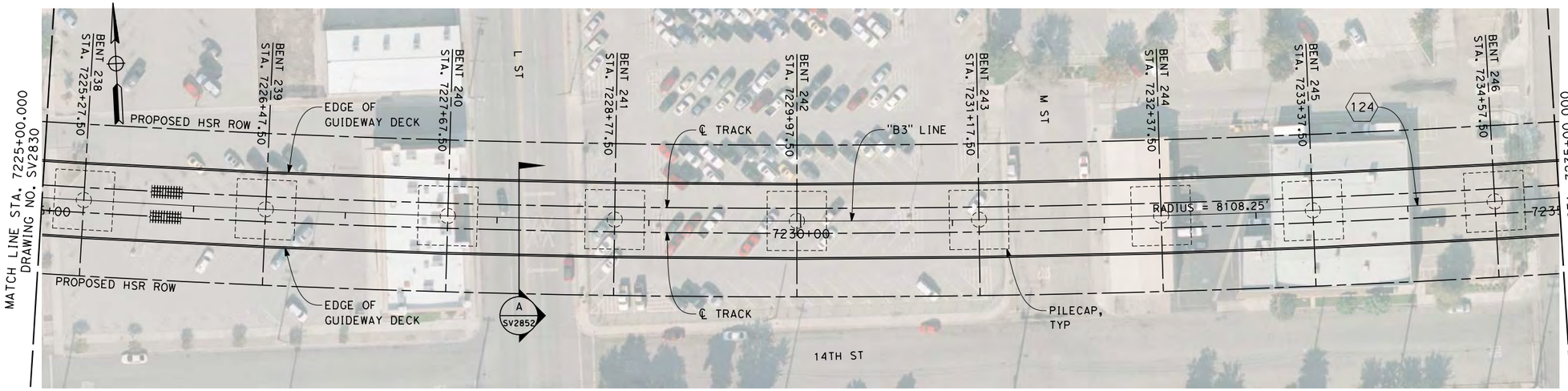


TOP OF RAIL "B3" LINE

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

(124)

R = 8108.25'

Δ = 13° 23' 44.0"

T = 952.2'

L = 1895.7'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

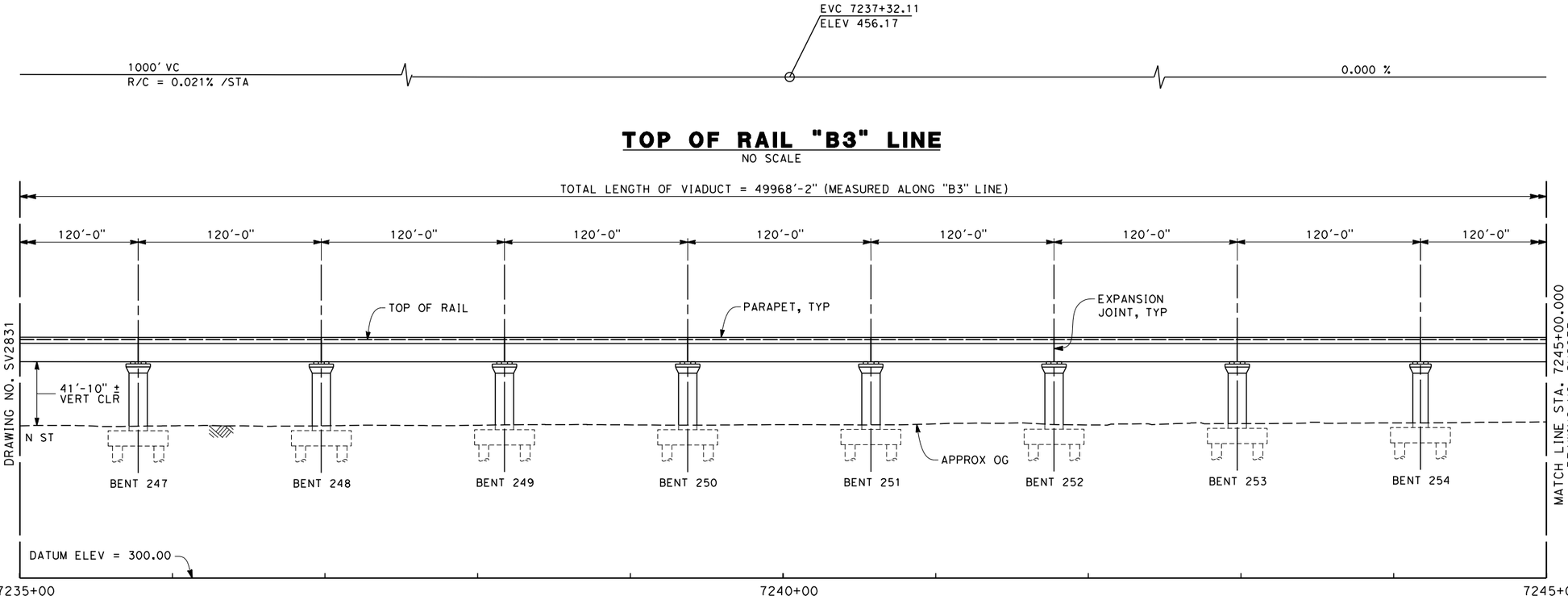
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2831
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
   - 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

(124)

R = 8108.25'

Δ = 13° 23' 44.0"

T = 952.2'

L = 1895.7'

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

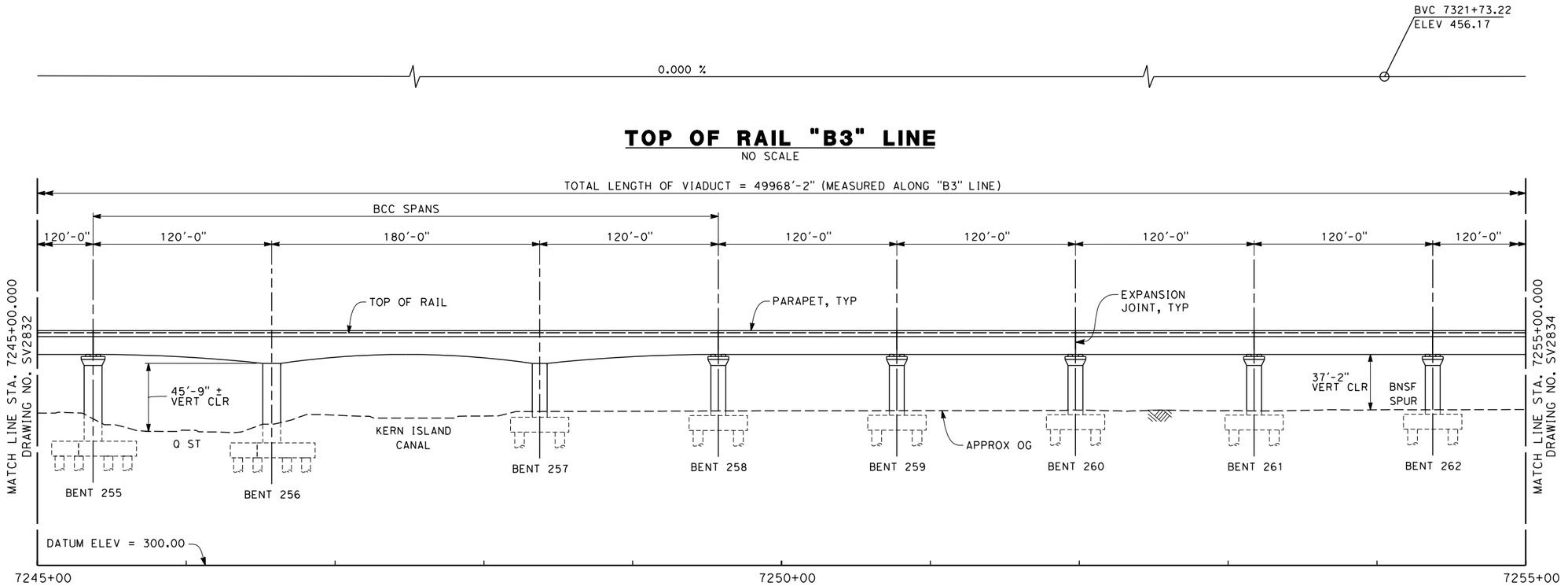
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2832
SCALE AS SHOWN
SHEET NO. 33 OF 57

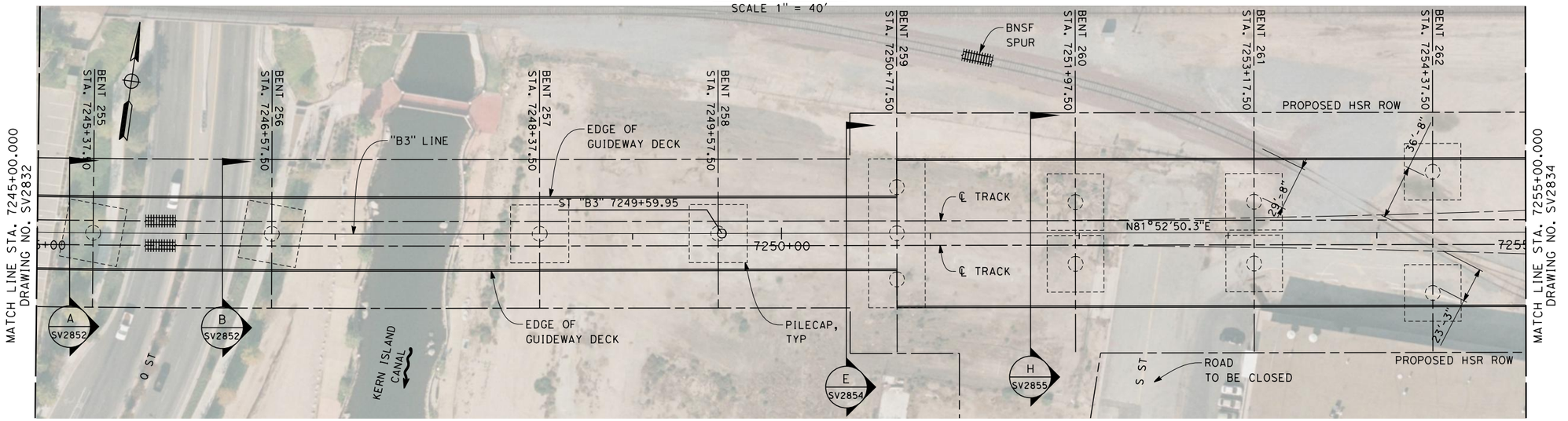


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

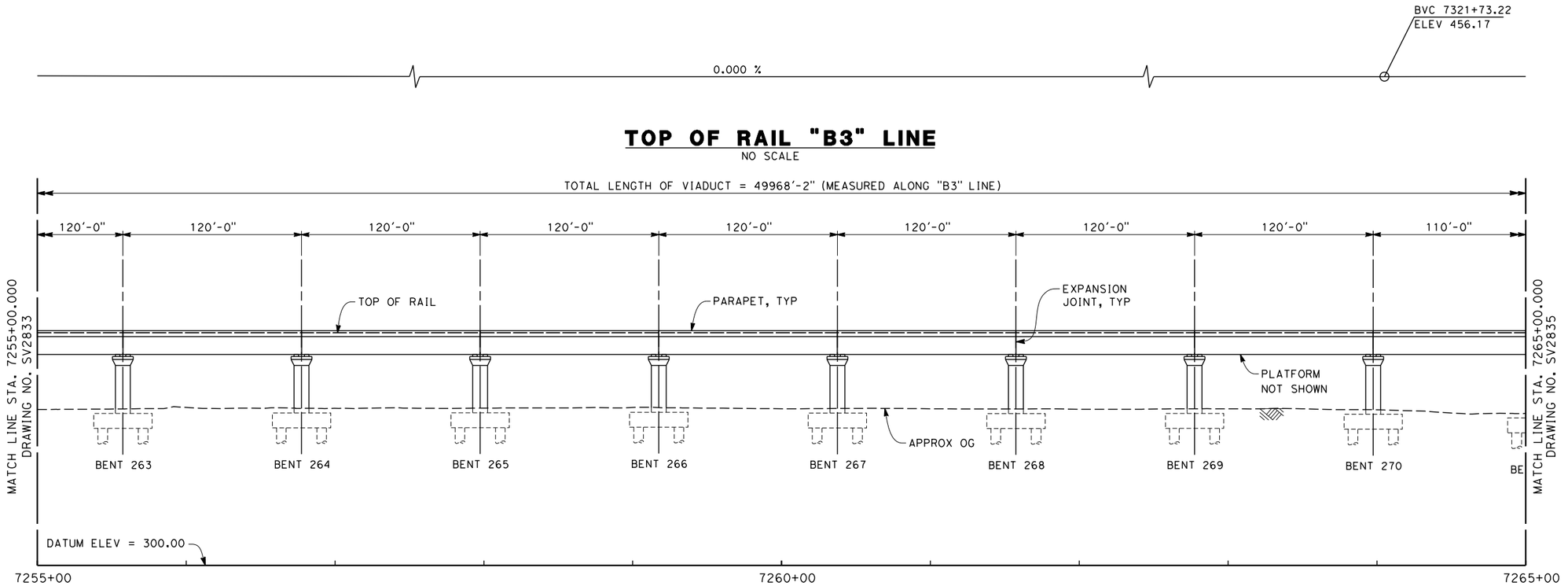
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD

BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

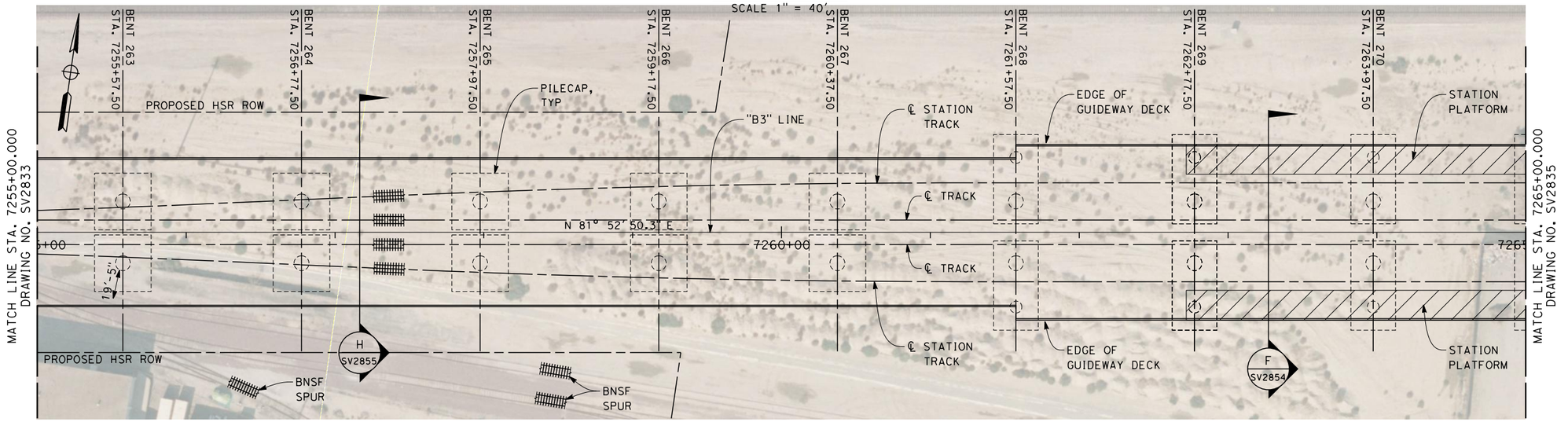
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2833
SCALE AS SHOWN
SHEET NO. 34 OF 57



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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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



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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

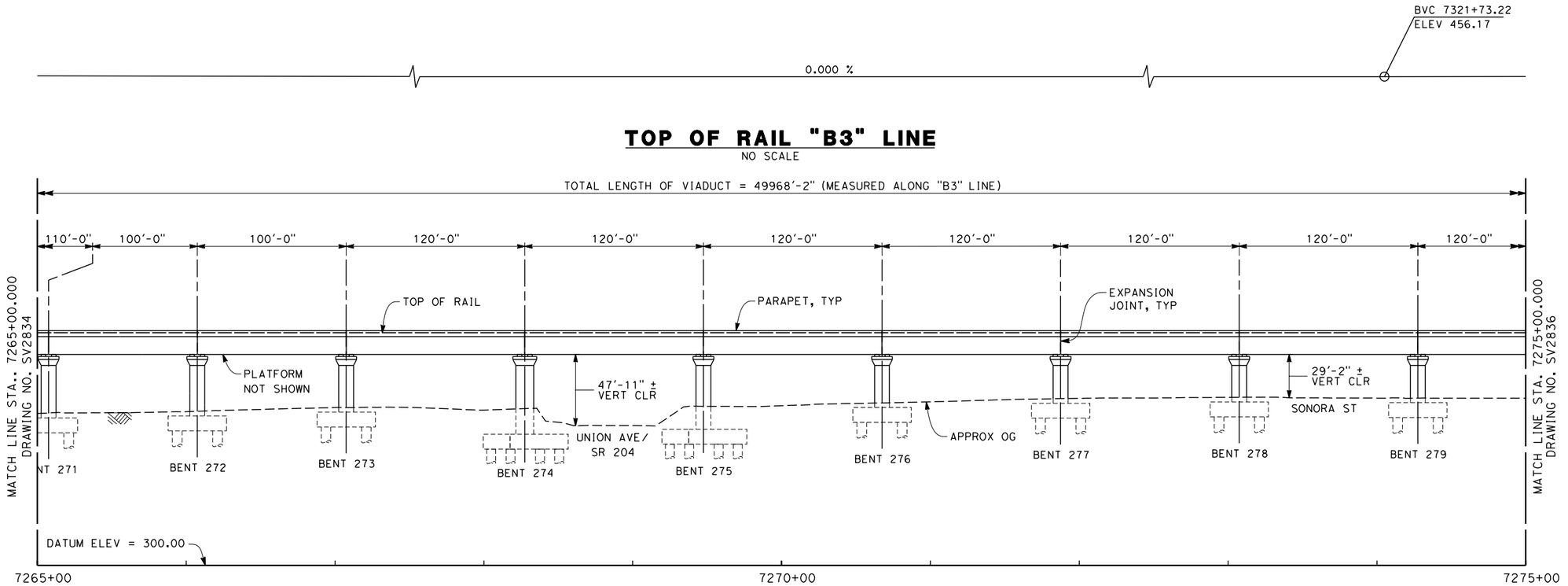
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2834
SCALE AS SHOWN
SHEET NO. 35 OF 57

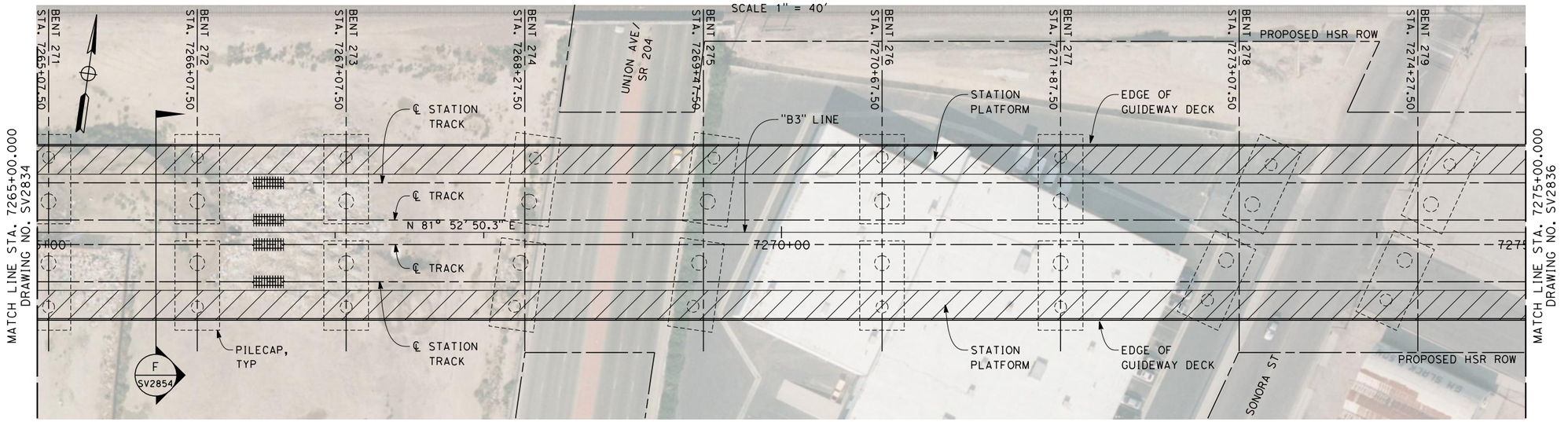


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

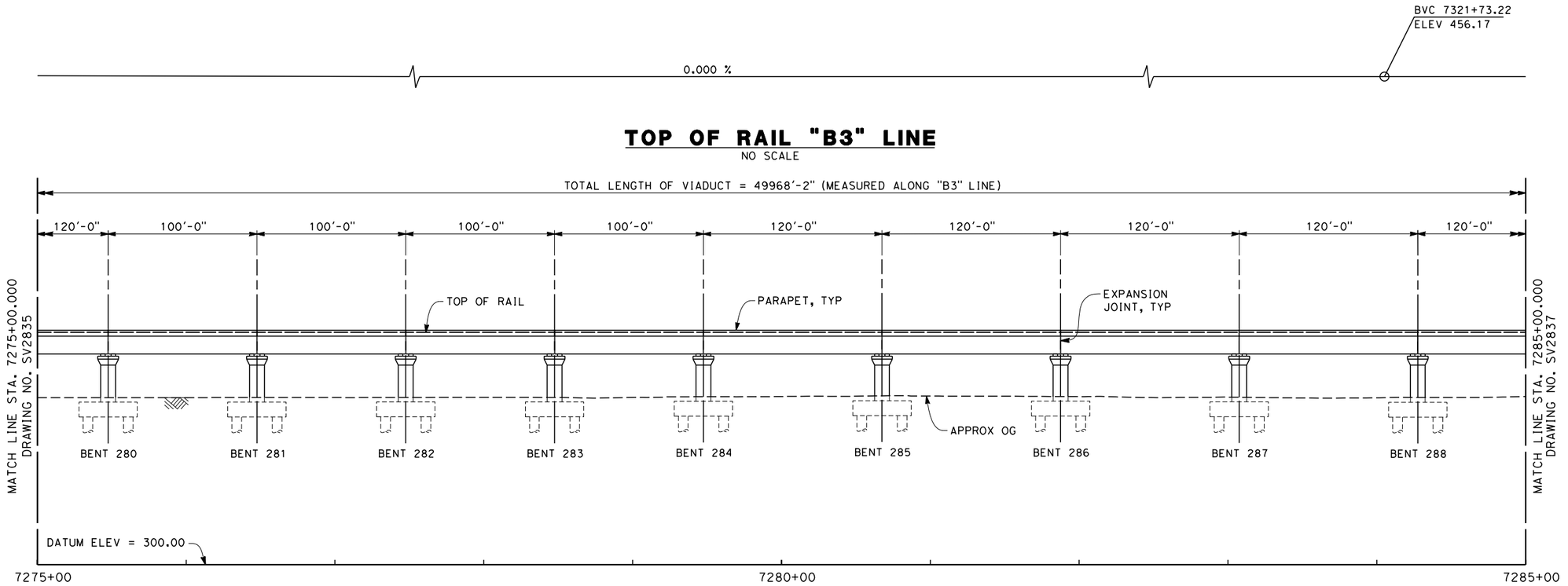
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2835
SCALE AS SHOWN
SHEET NO. 36 OF 57

eron.sudhausen 3/14/2014 5:28:25 PM c:\pwworking\hmm\external\eron.sudhausen-arup.com\dms71888\FB-SV-2835-B3.dgn

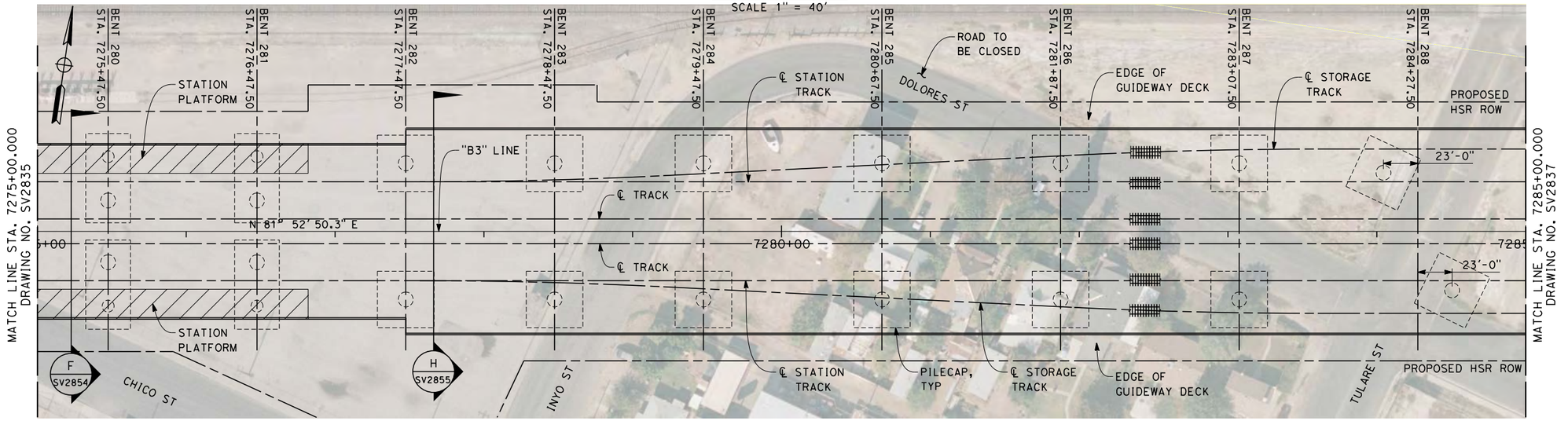


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

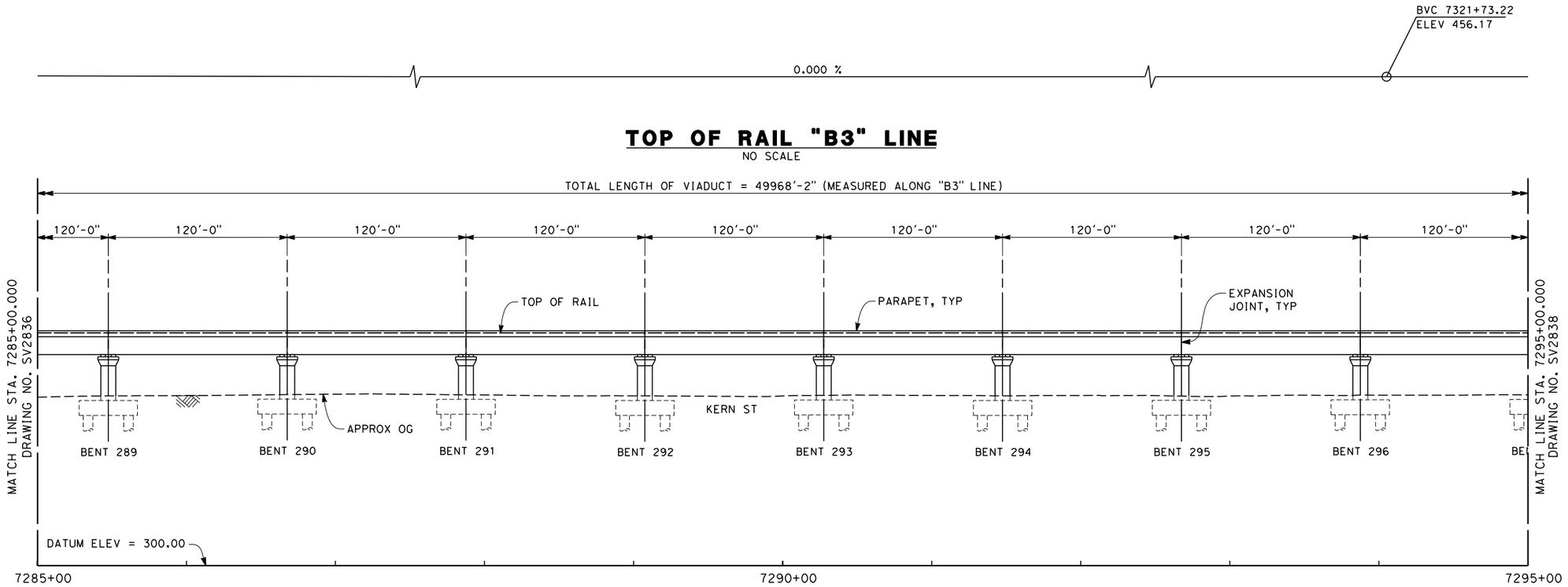
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2836
SCALE AS SHOWN
SHEET NO. 37 OF 57

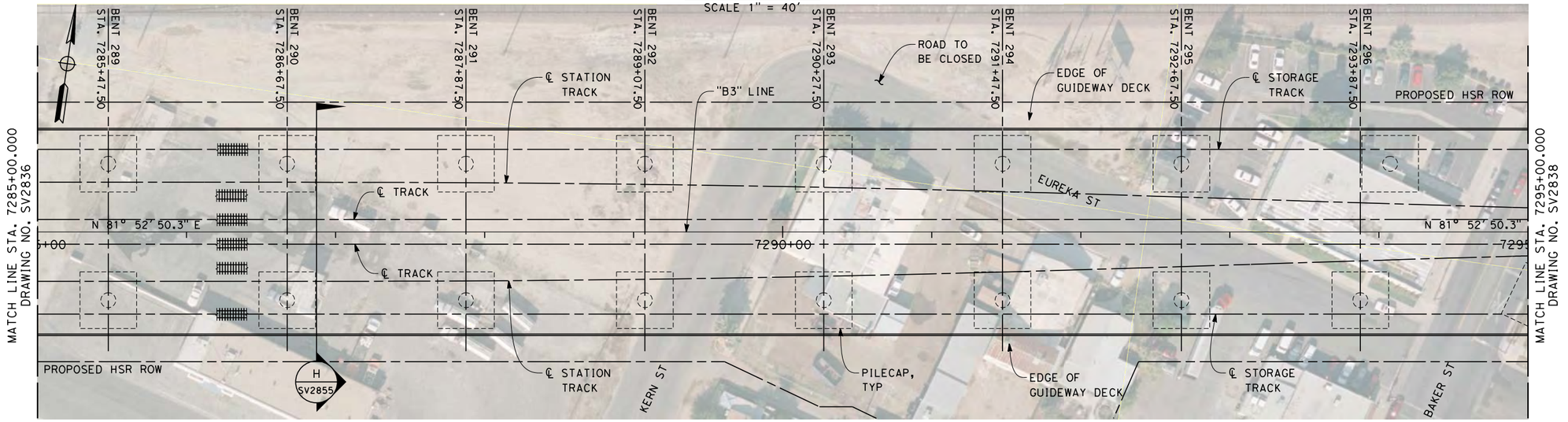


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

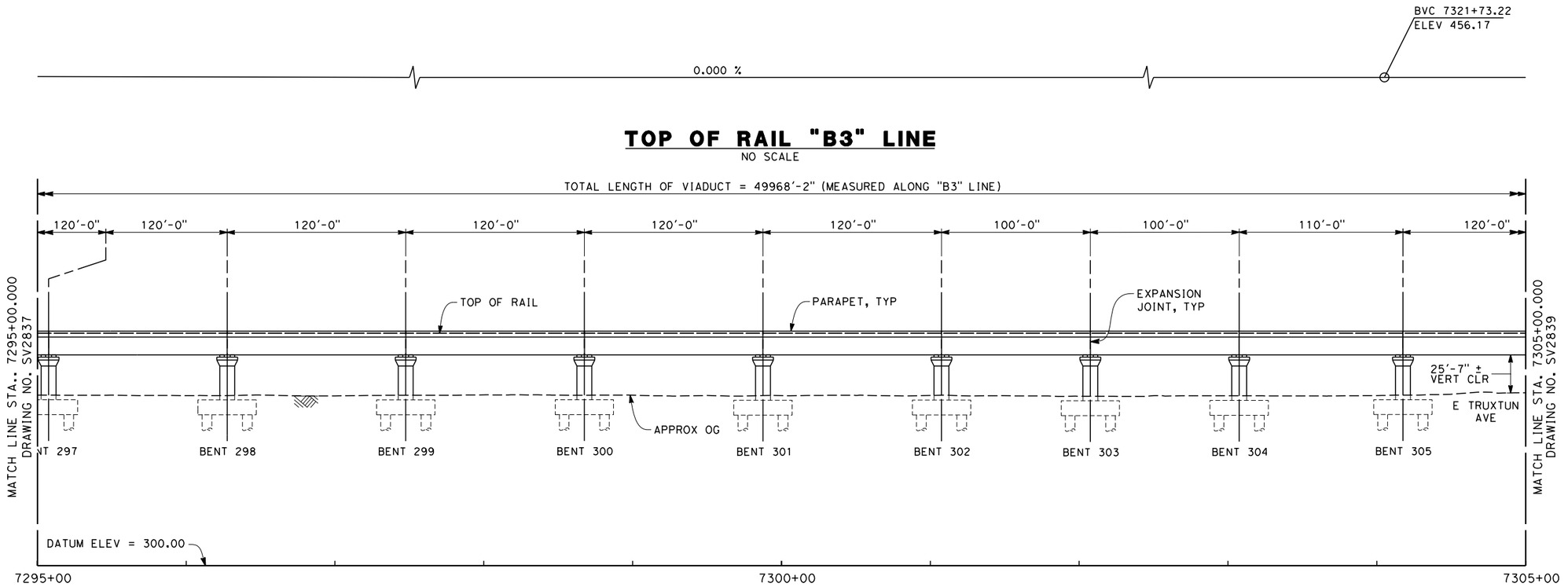
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2837
SCALE AS SHOWN
SHEET NO. 38 OF 57

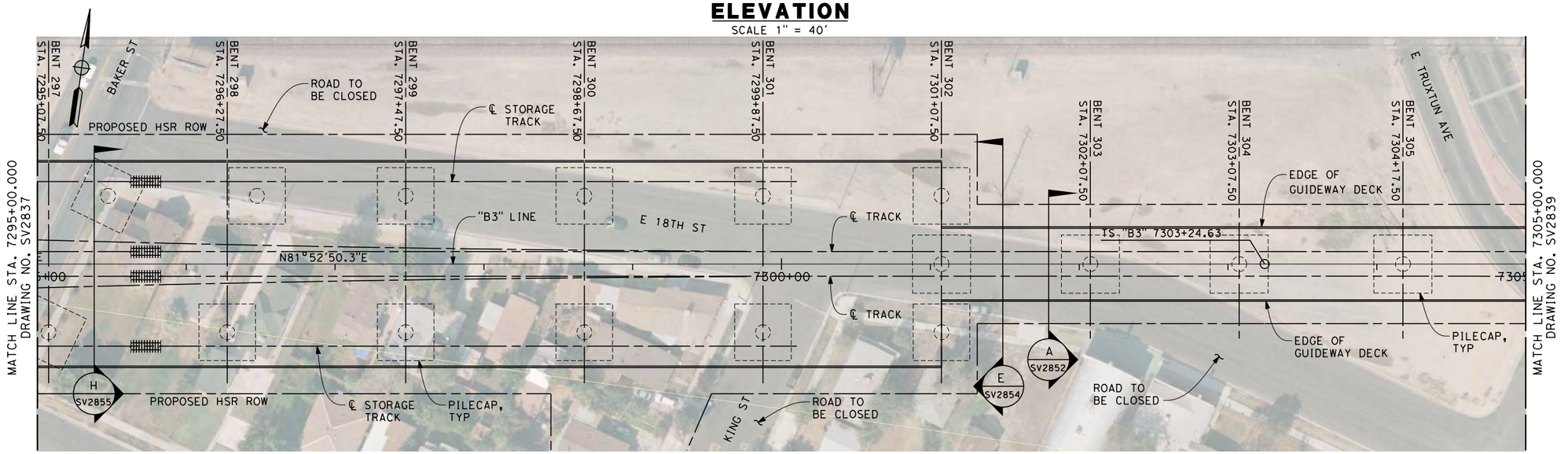


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

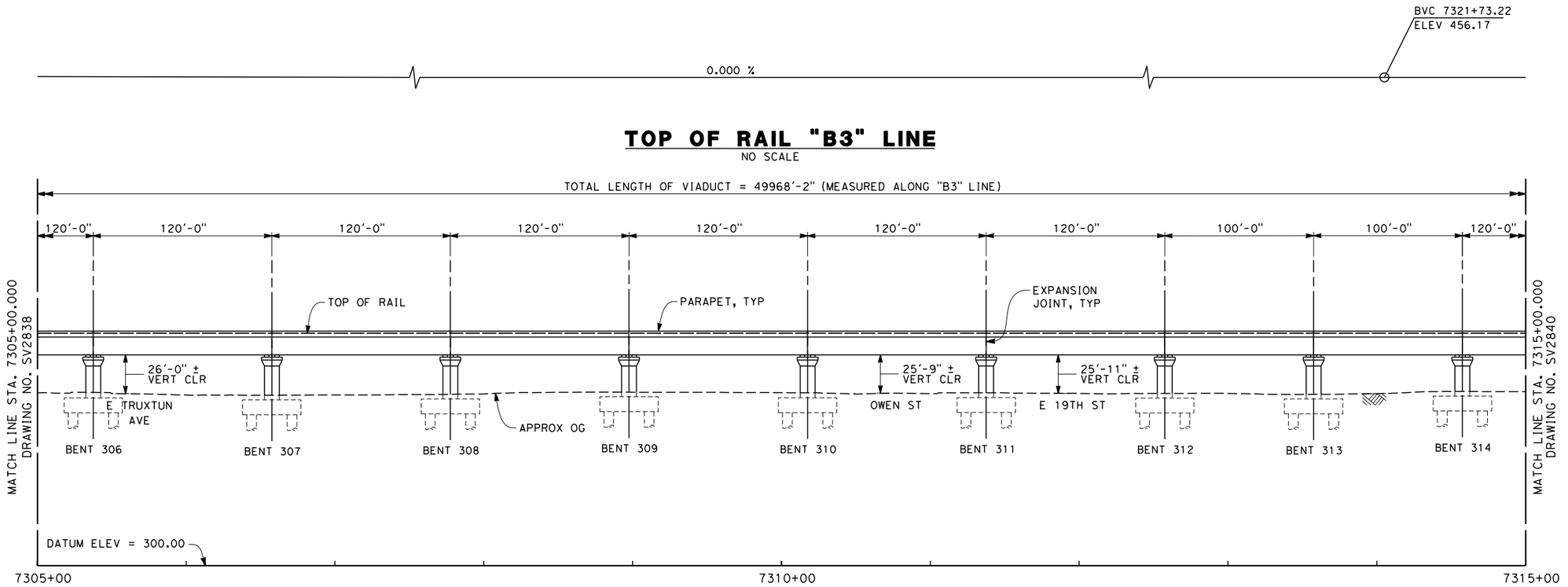
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2838
SCALE AS SHOWN
SHEET NO. 39 OF 57

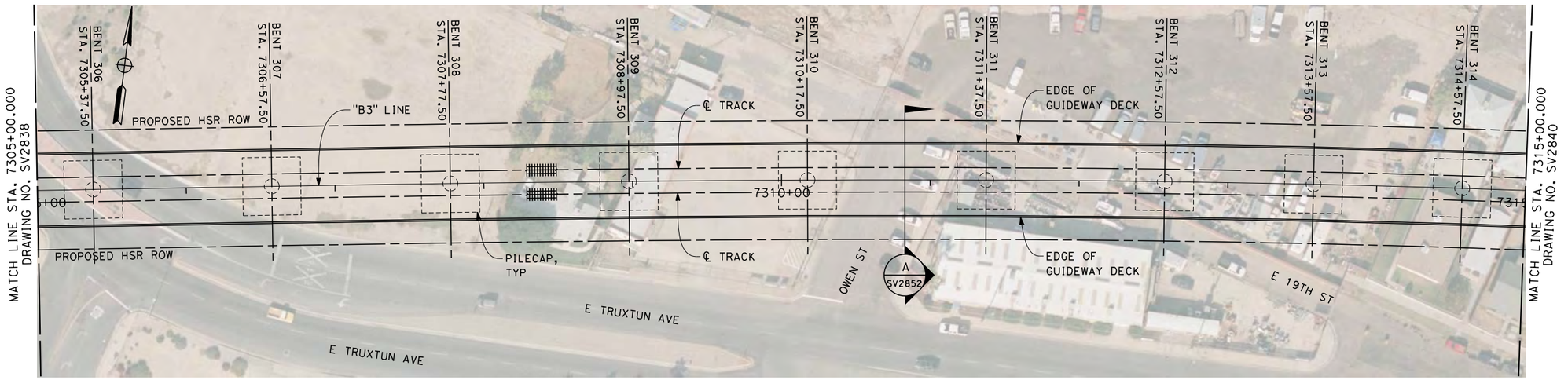


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

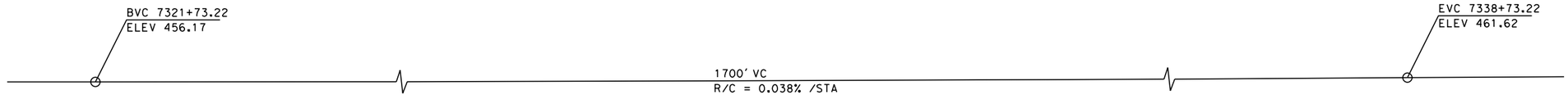
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

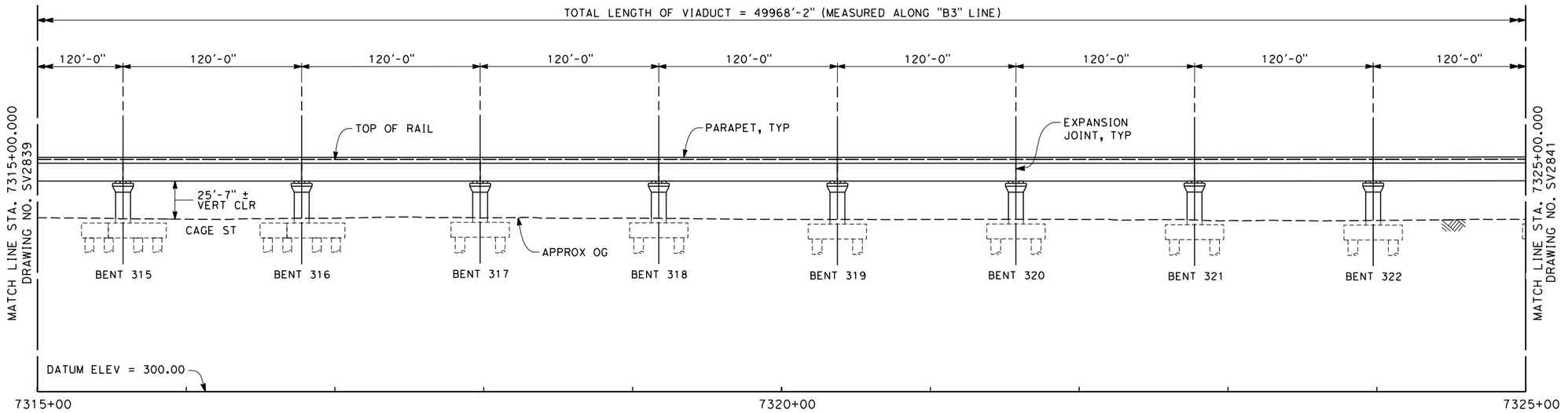
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2839
SCALE AS SHOWN
SHEET NO. 40 OF 57

frank.palermo 12/20/2013 5:50:09 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2839-B3.dgn



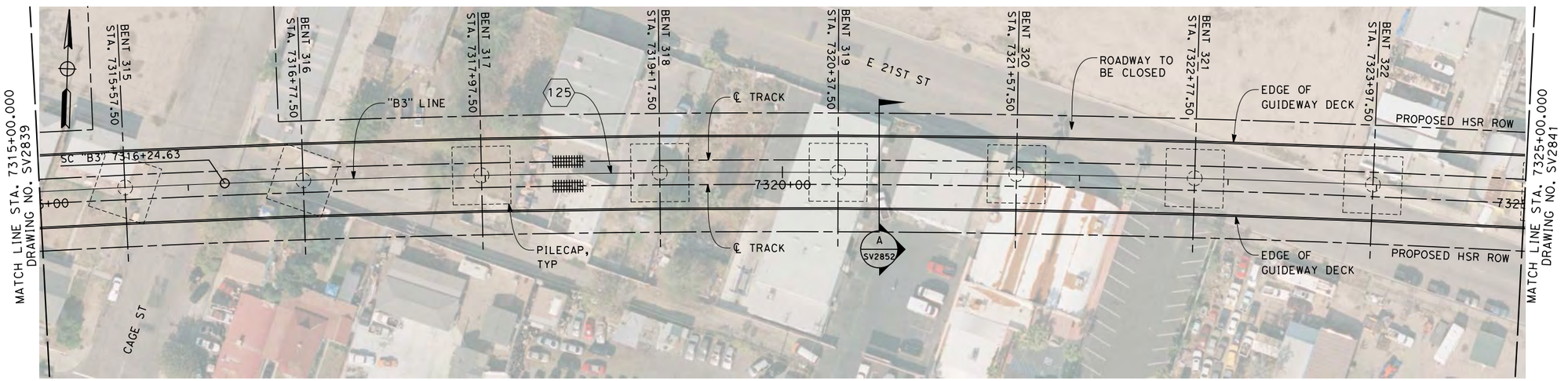
TOP OF RAIL "B3" LINE

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

(125)

R = 9500.00'

Δ = 17° 08' 35.7"

T = 1431.9'

L = 2842.5'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

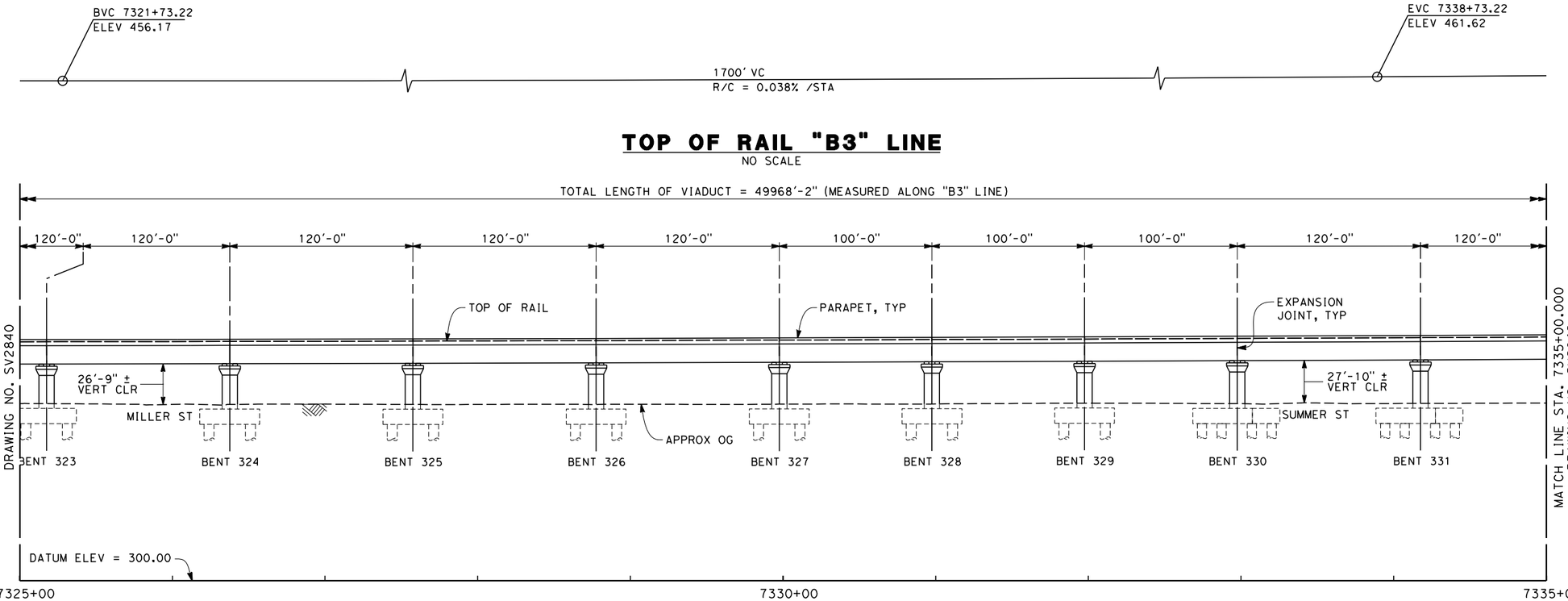
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2840
SCALE AS SHOWN
SHEET NO. 41 OF 57

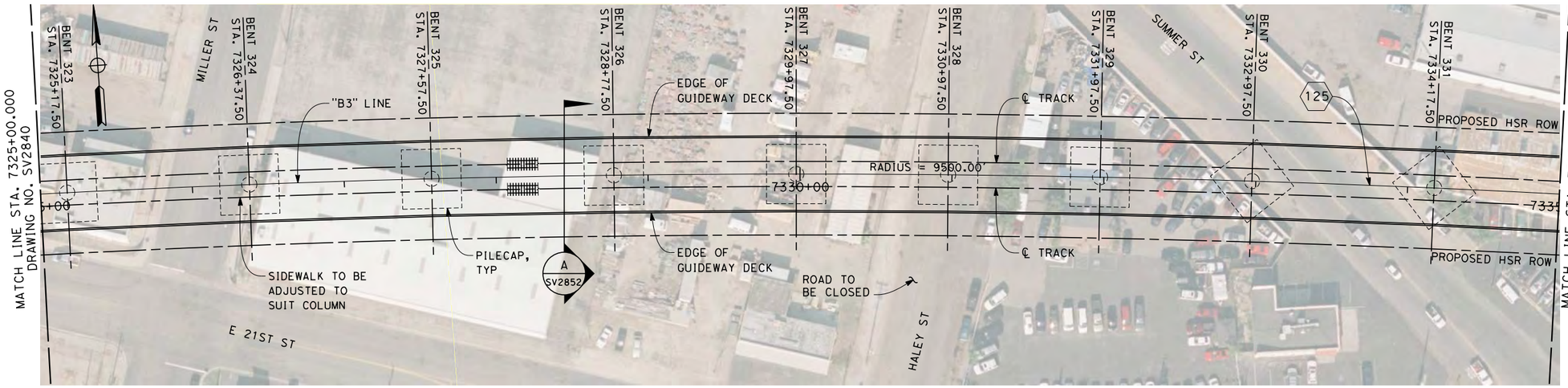


TOP OF RAIL "B3" LINE

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

125

R = 9500.00'

Δ = 17° 08' 35.7"

T = 1431.9'

L = 2842.5'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

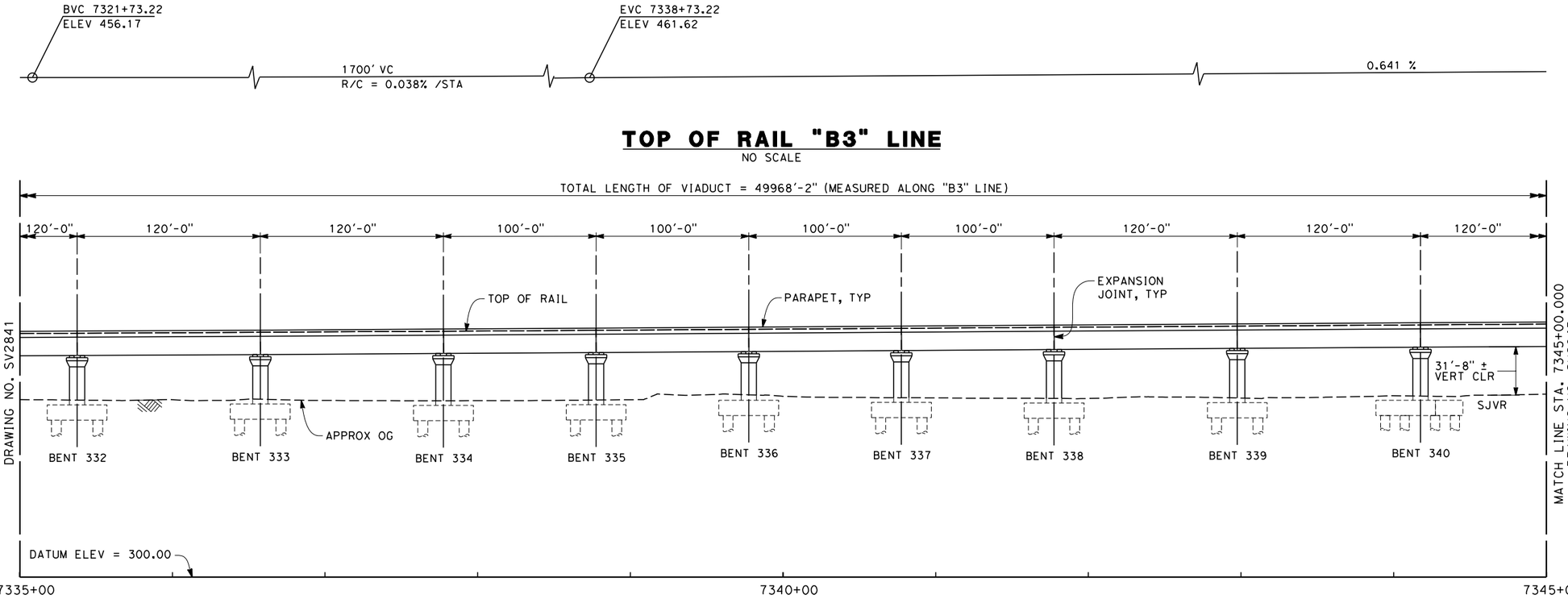
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2841
SCALE AS SHOWN
SHEET NO. 42 OF 57

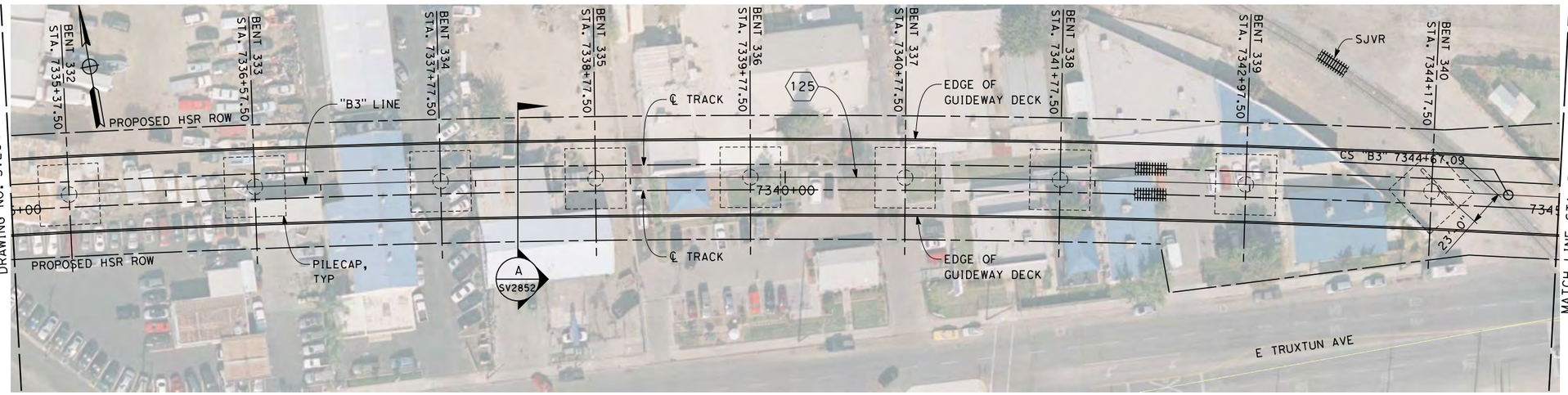


TOP OF RAIL "B3" LINE

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

(125)

R = 9500.00'

Δ = 17° 08' 35.7"

T = 1431.9'

L = 2842.5'

40 0 40 80

1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

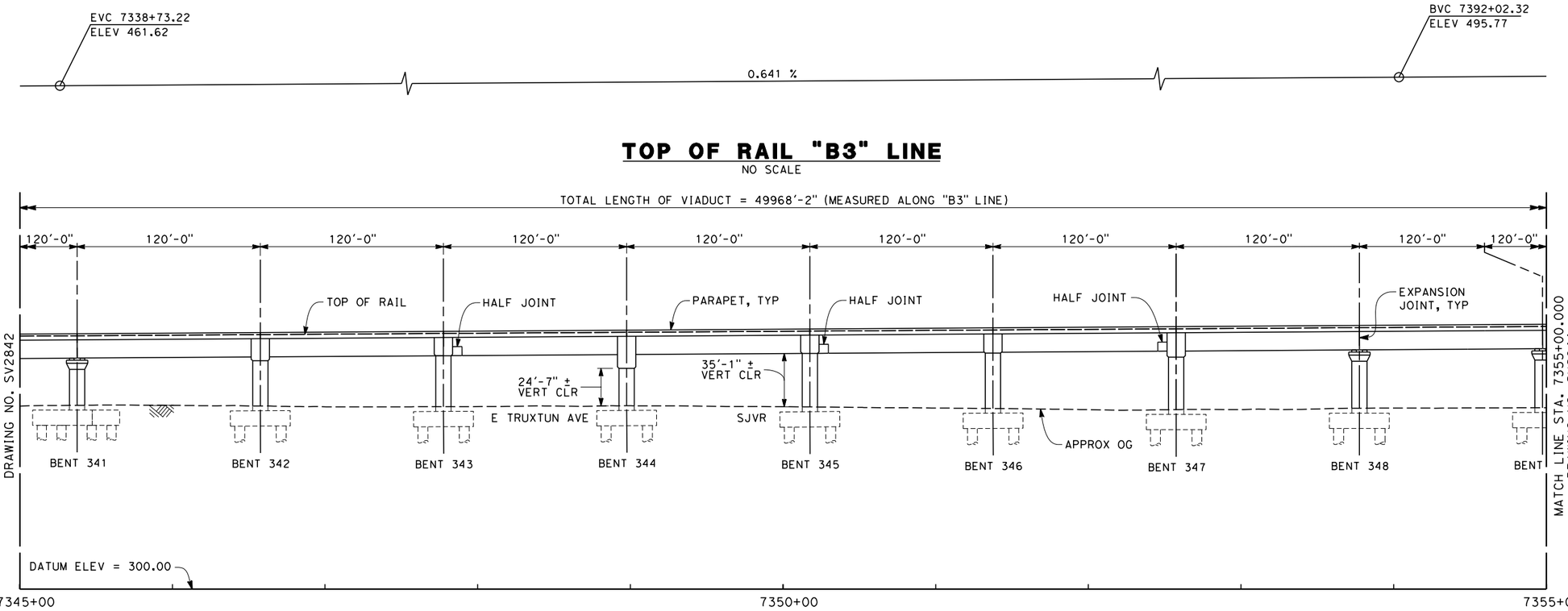
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2842
SCALE AS SHOWN
SHEET NO. 43 OF 57

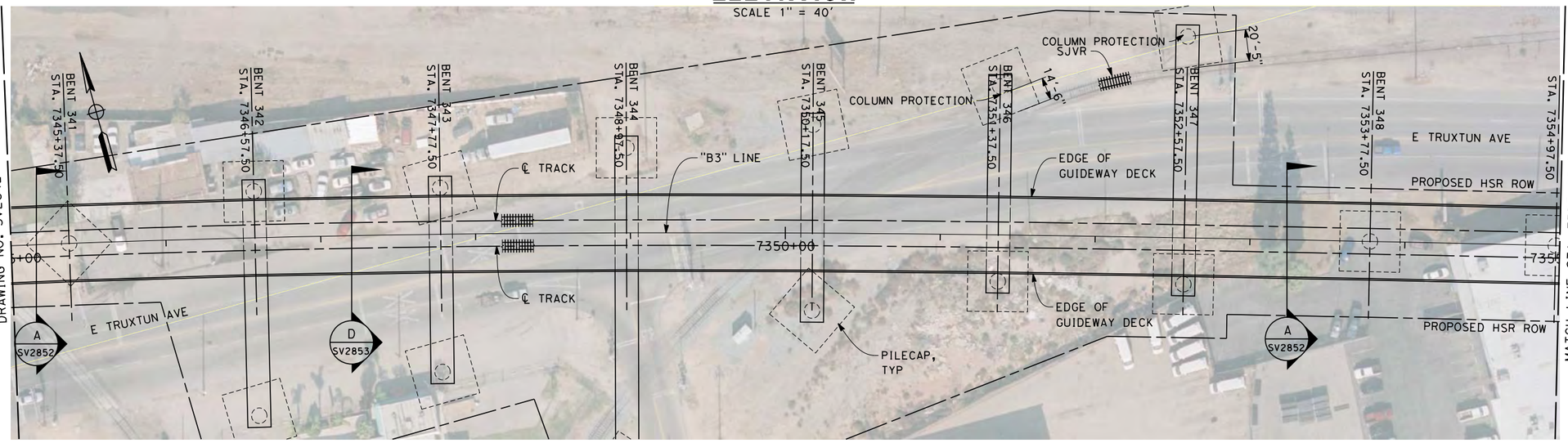


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

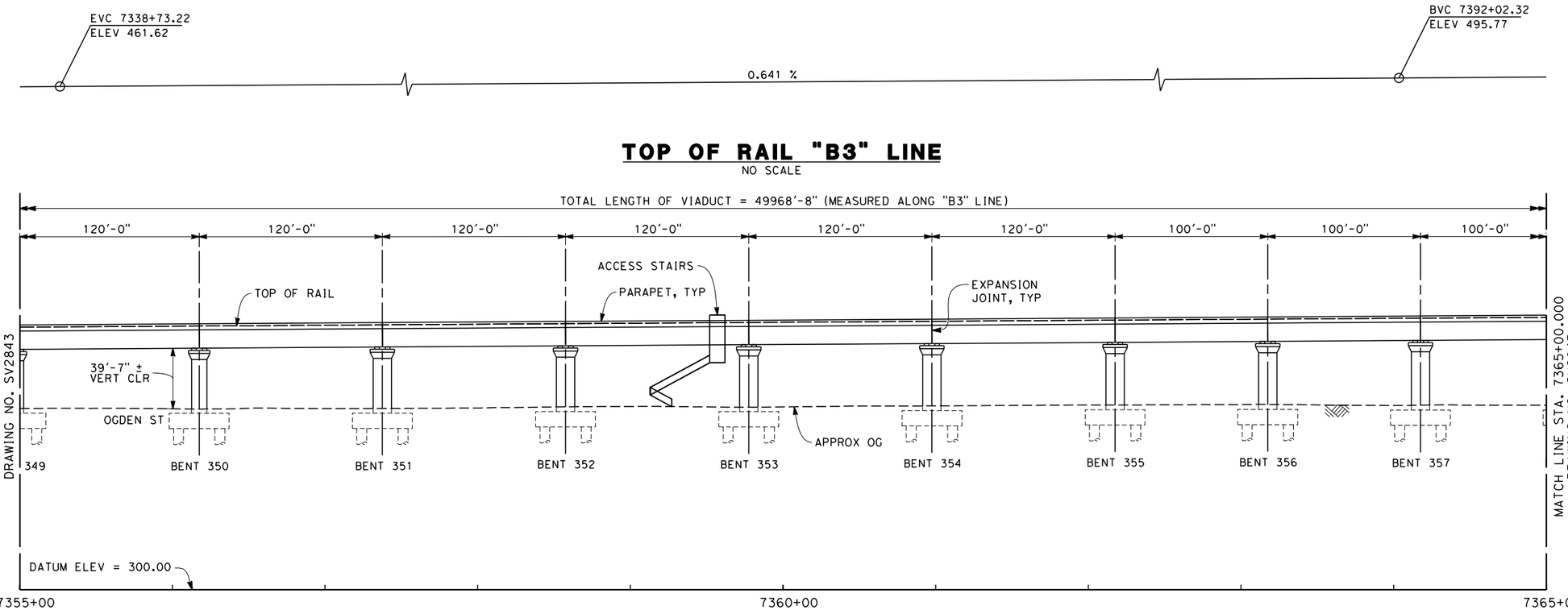
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2843
SCALE AS SHOWN
SHEET NO. 44 OF 57

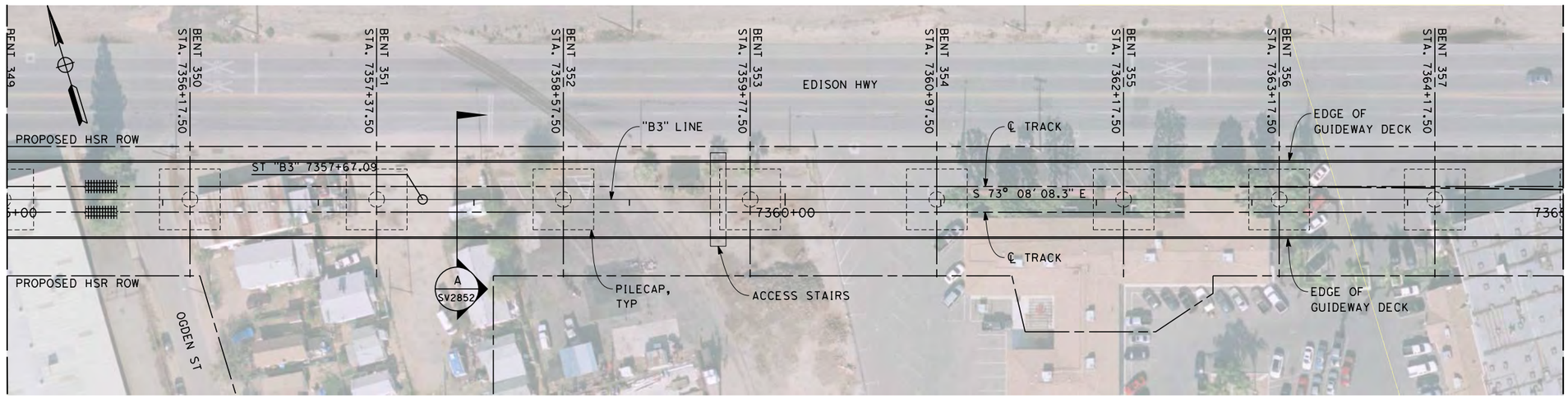


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

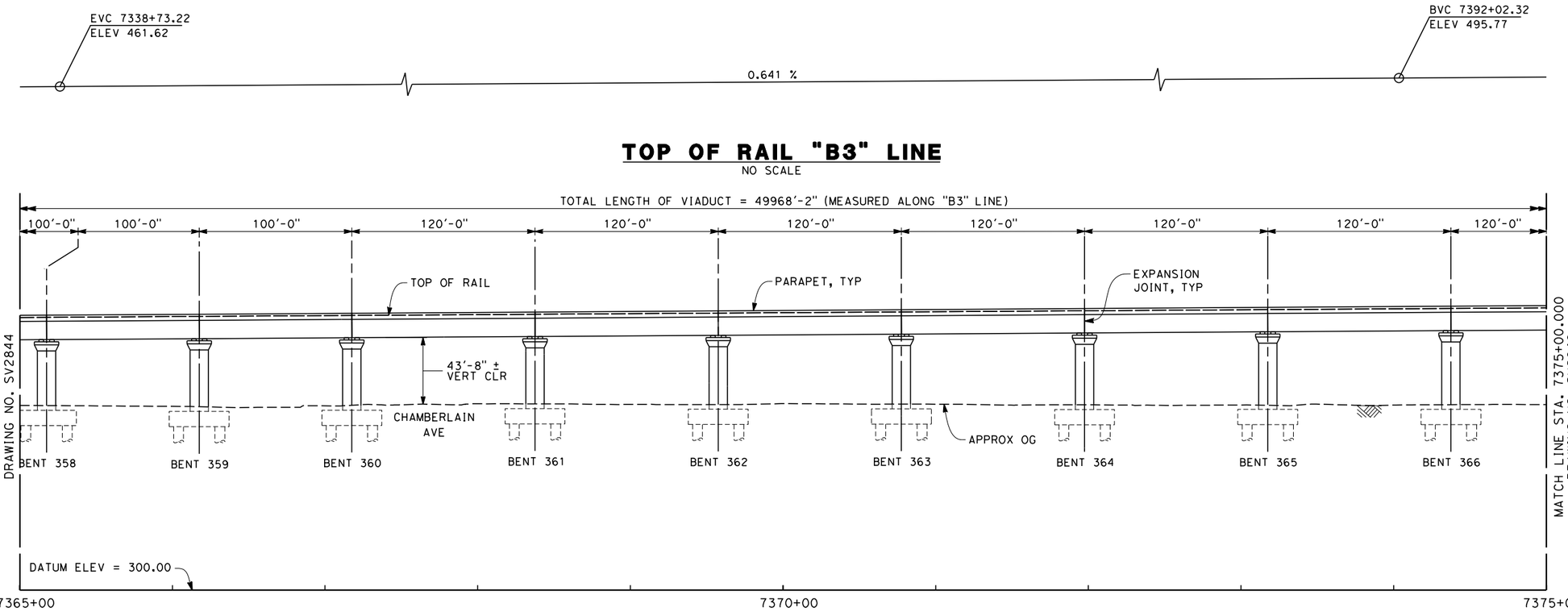
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2844
SCALE AS SHOWN
SHEET NO. 45 OF 57

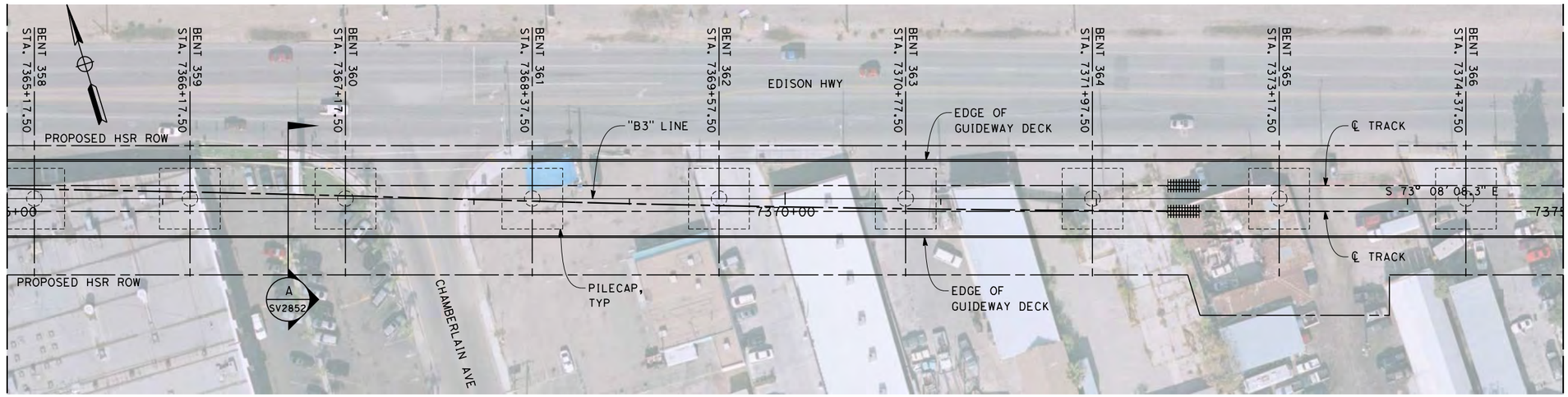


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

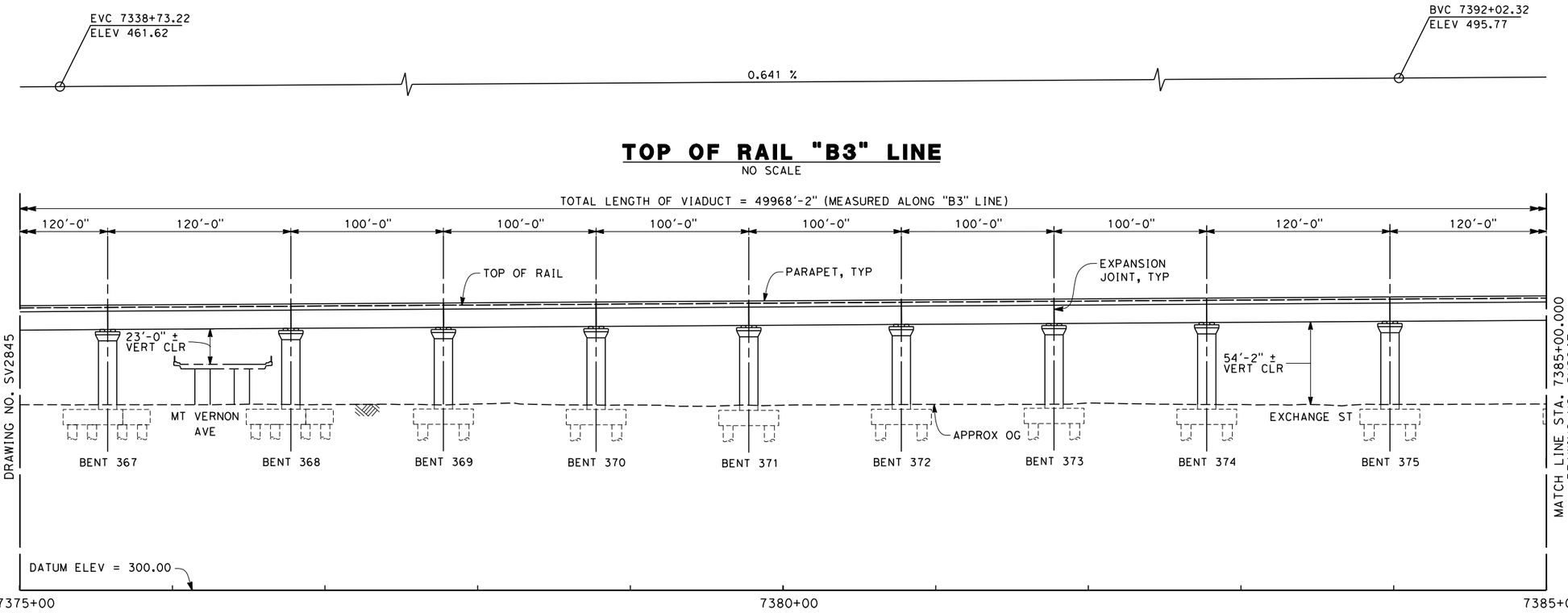
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2845
SCALE AS SHOWN
SHEET NO. 46 OF 57

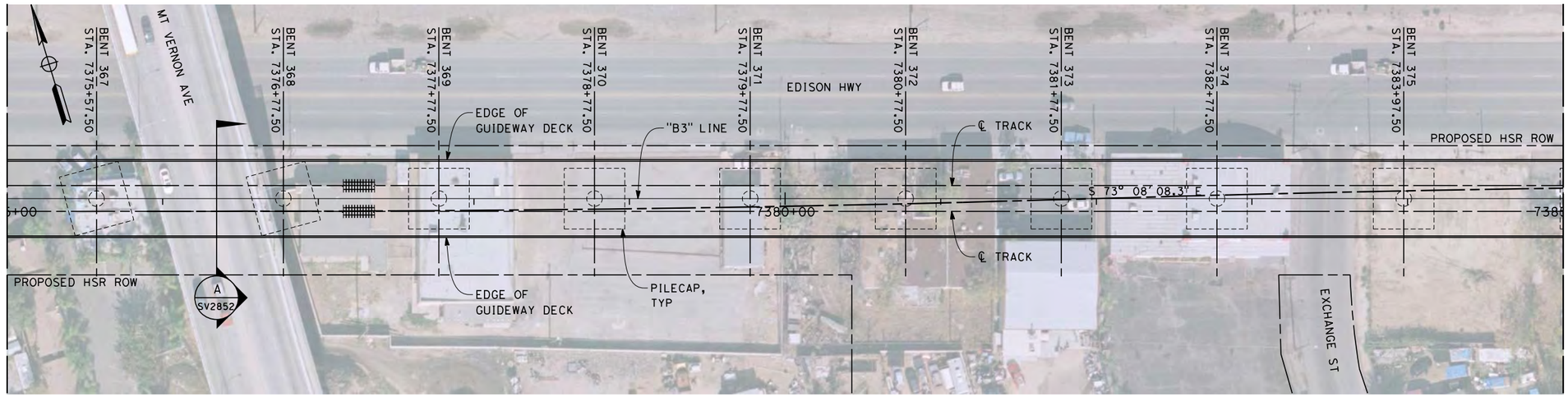


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

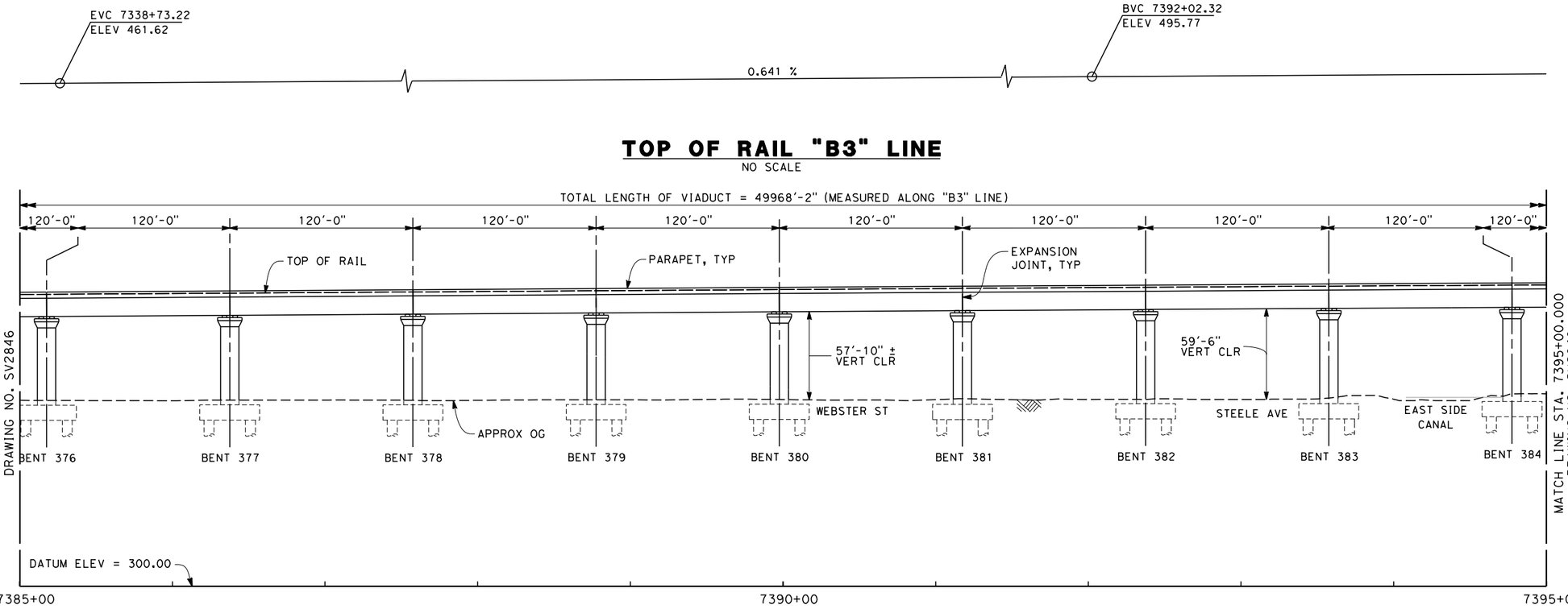
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2846
SCALE AS SHOWN
SHEET NO. 47 OF 57

frank.palermo 12/20/2013 5:52:32 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2846-B3.dgn



TOP OF RAIL "B3" LINE

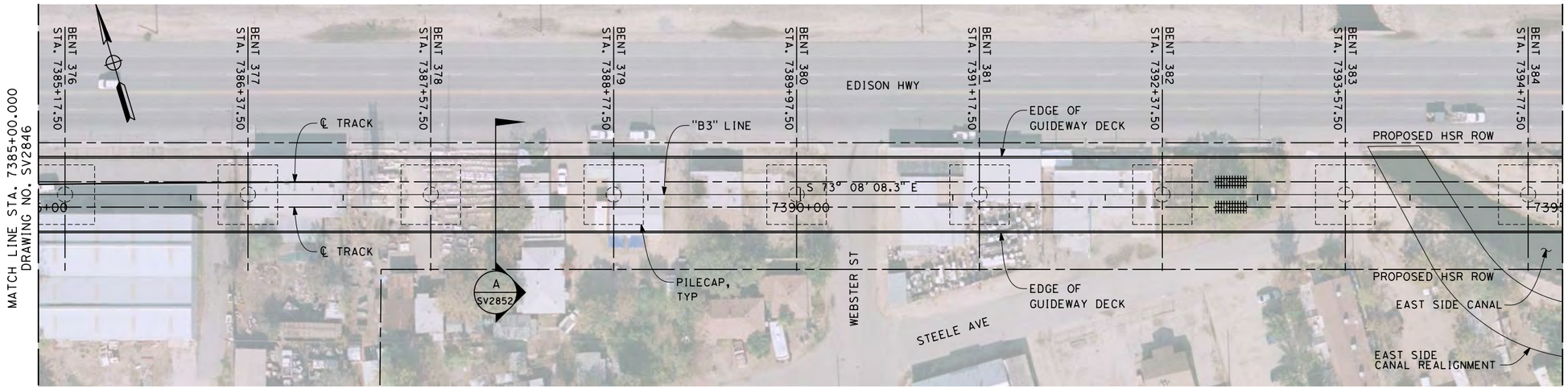
NO SCALE

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
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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

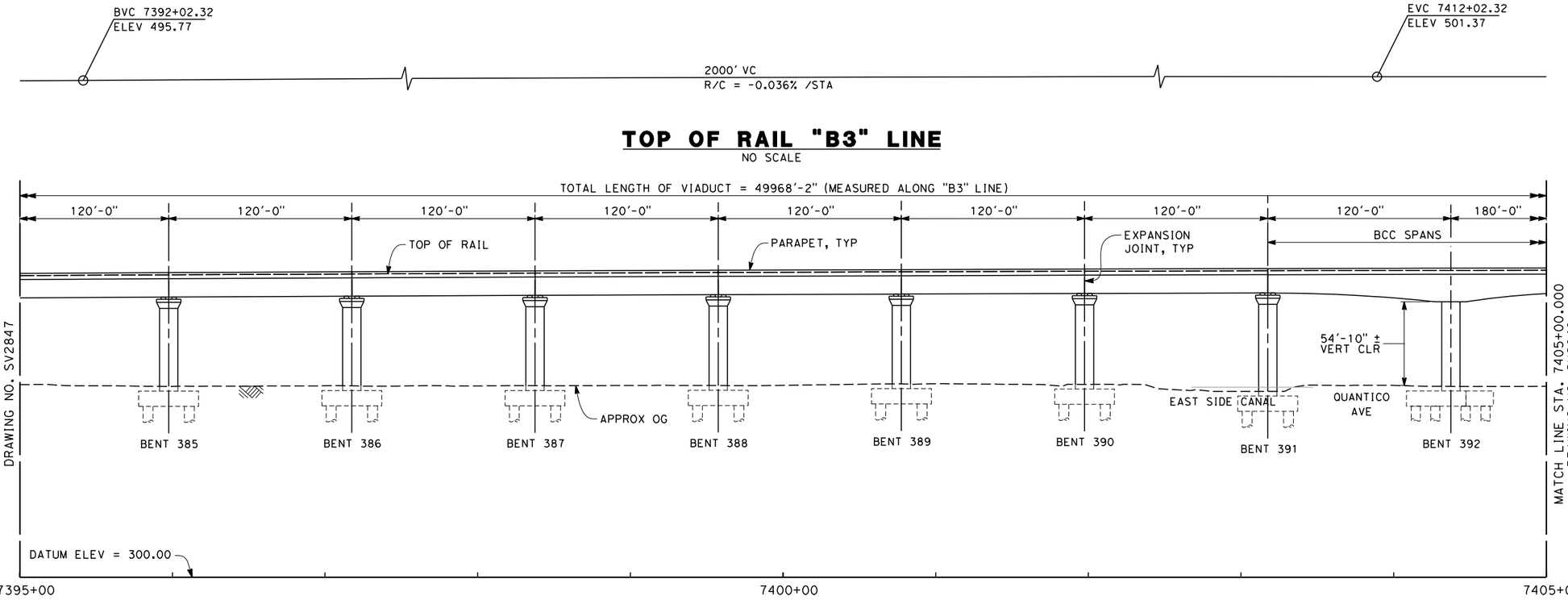
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2847
SCALE AS SHOWN
SHEET NO. 48 OF 57

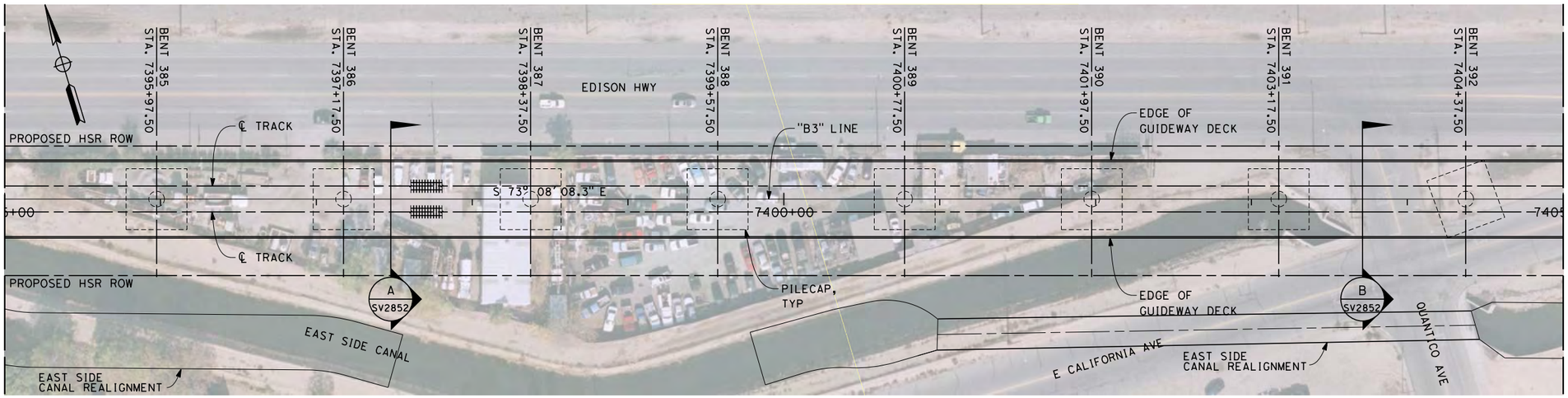


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

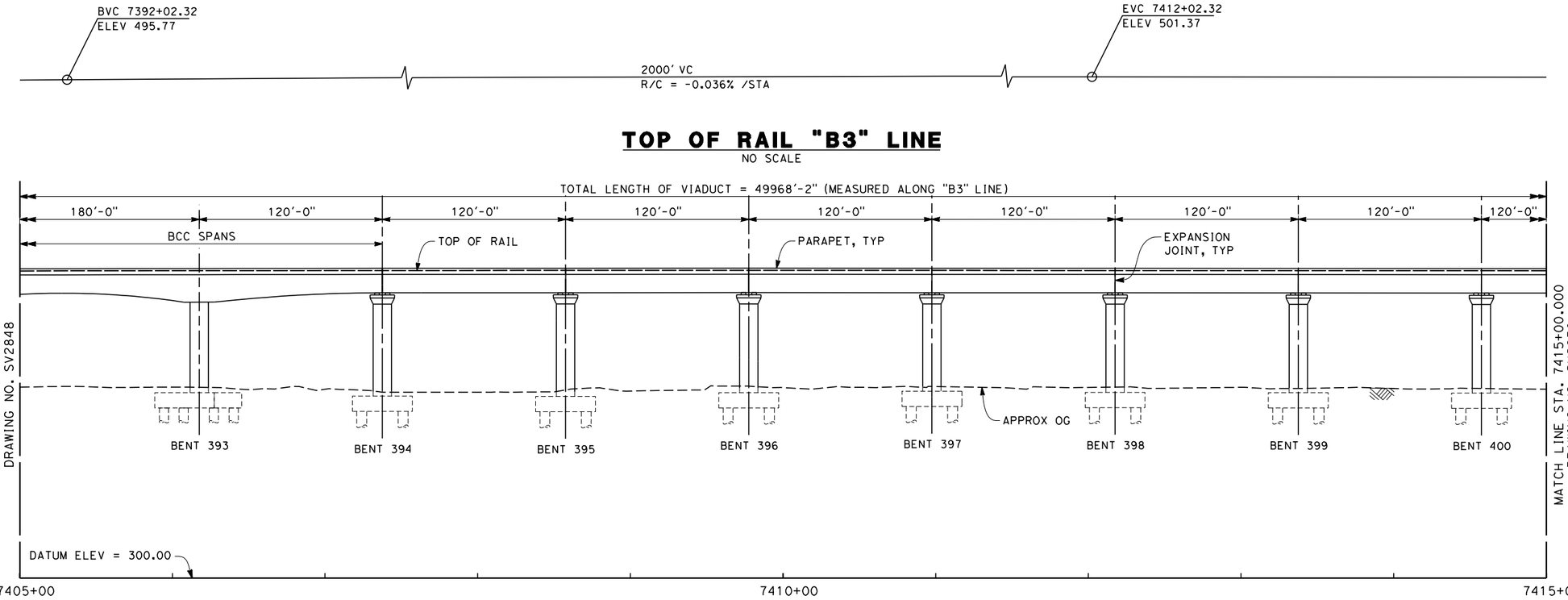
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2848
SCALE AS SHOWN
SHEET NO. 49 OF 57

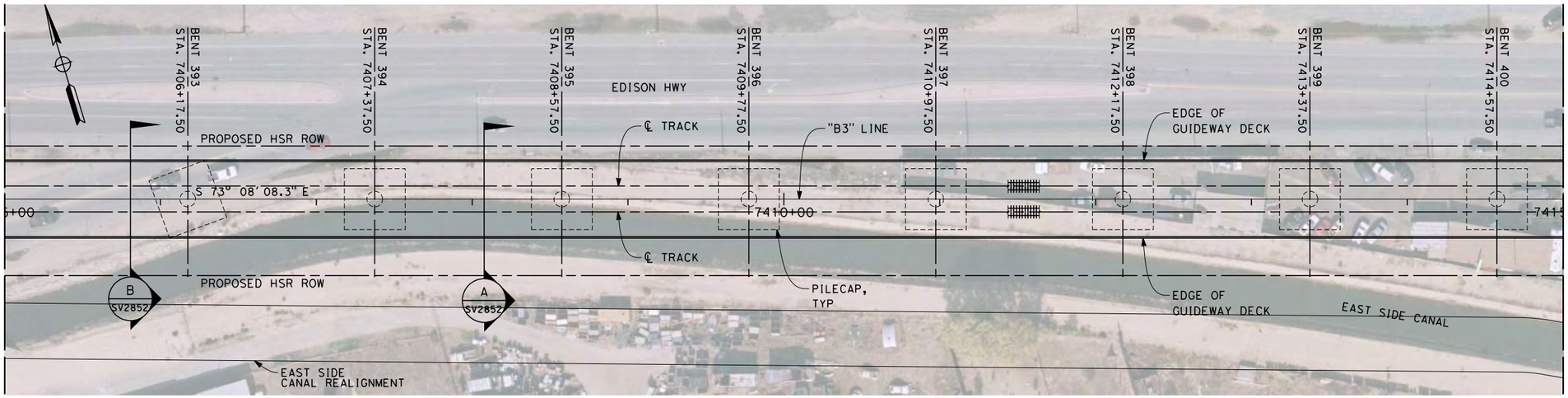


TOP OF RAIL "B3" LINE

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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

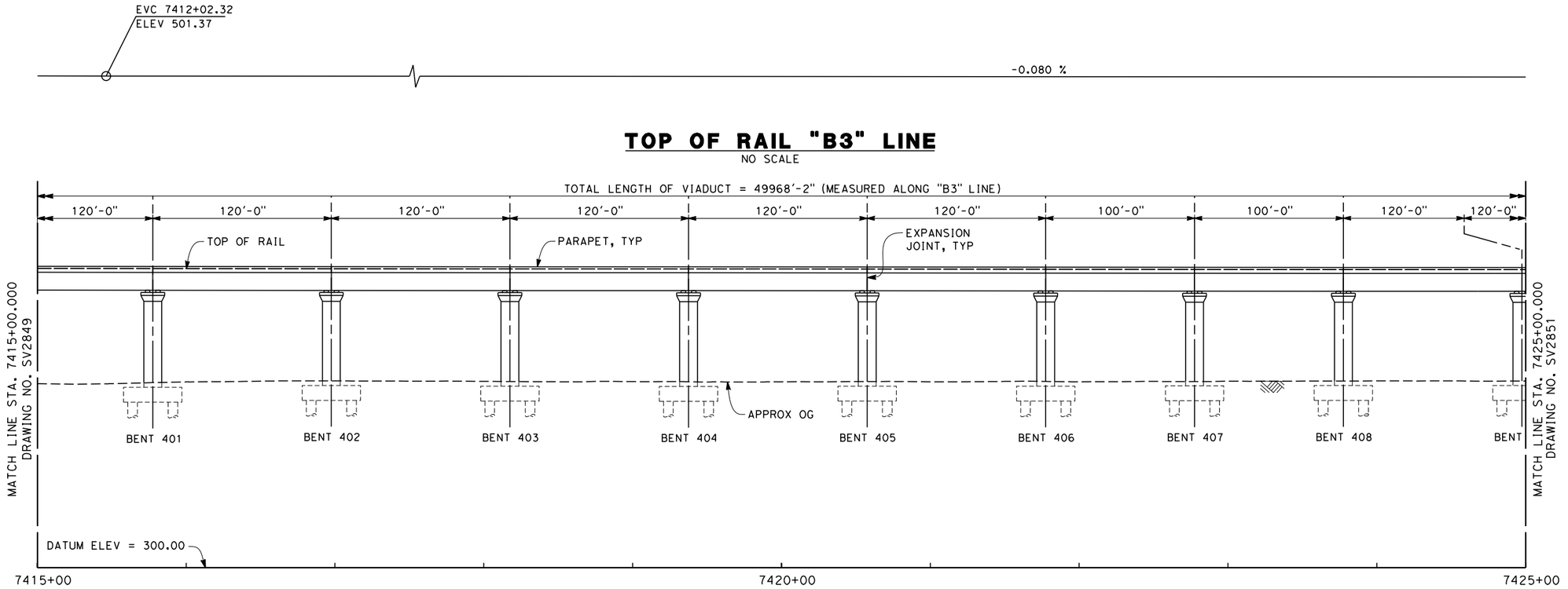
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

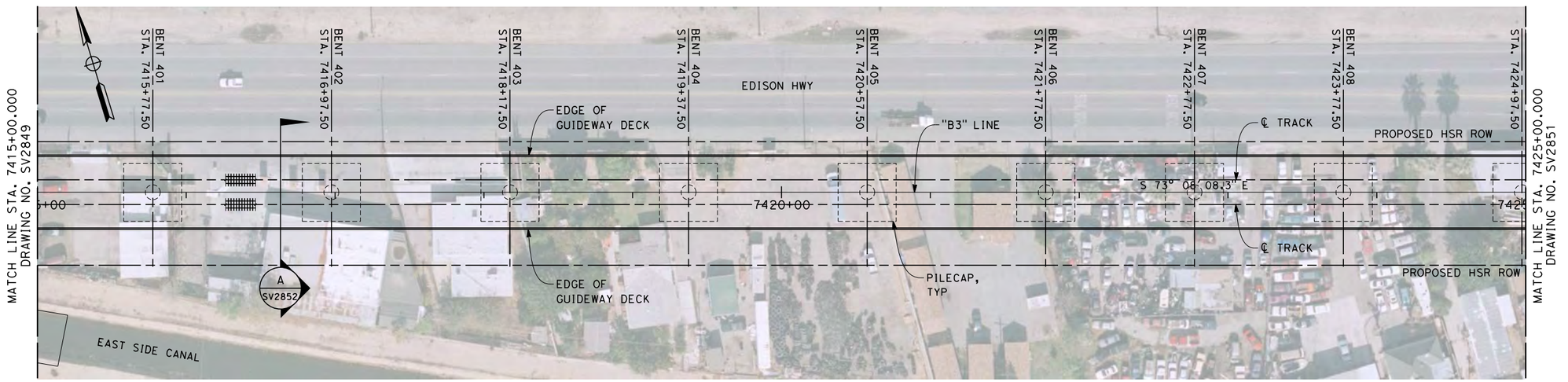
CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2849
SCALE AS SHOWN
SHEET NO. 50 OF 57



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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

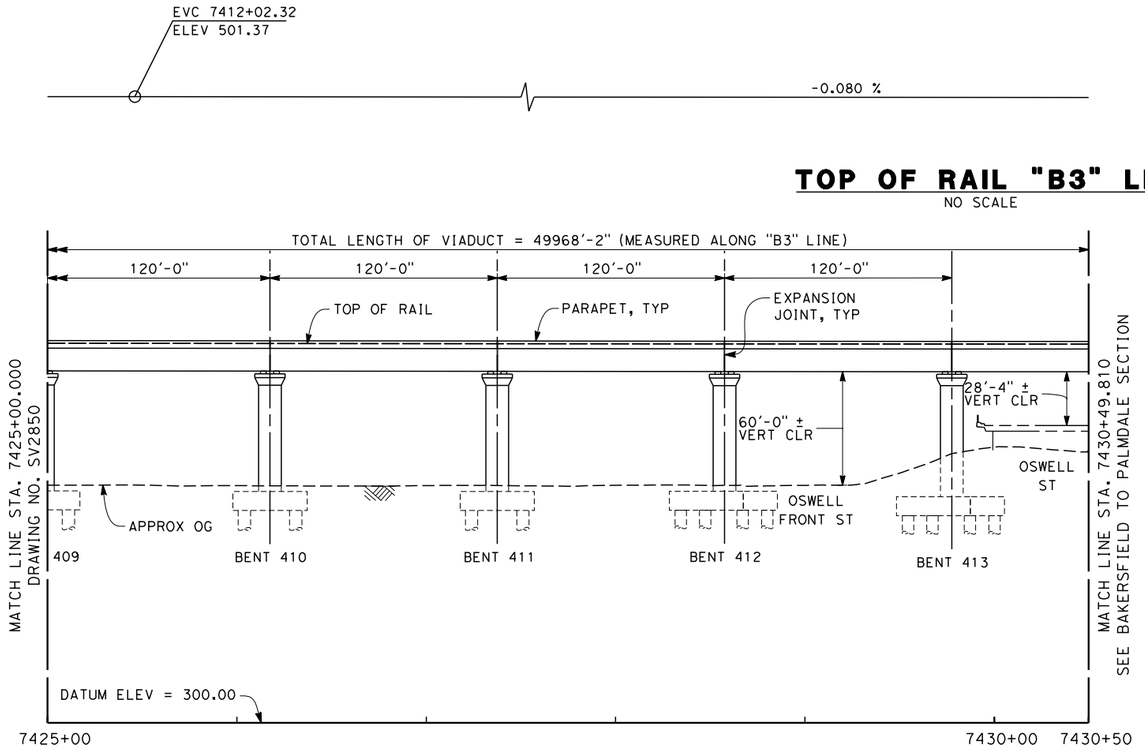
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2850
SCALE AS SHOWN
SHEET NO. 51 OF 57

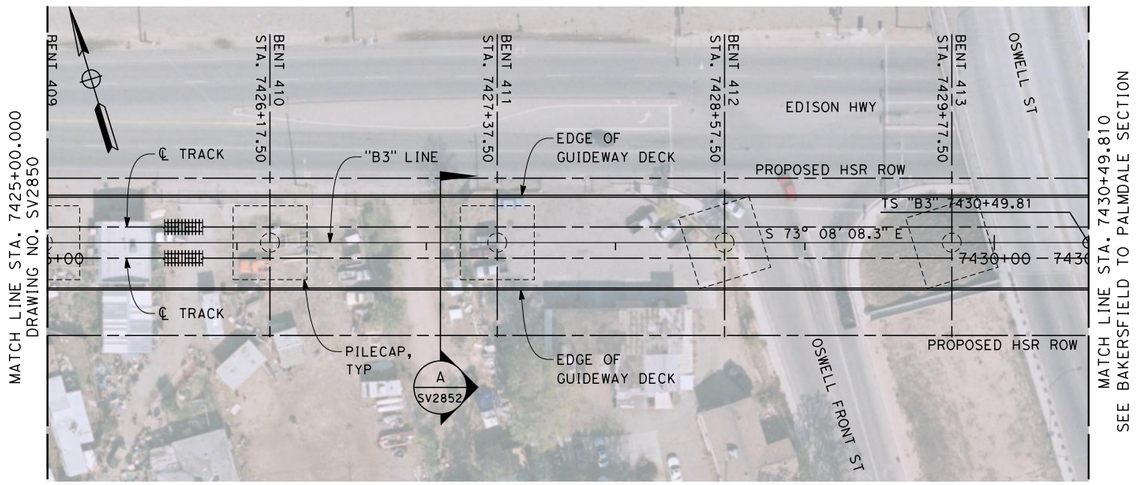


TOP OF RAIL "B3" LINE

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 - IN-SITU, SLID OR LAUNCHED
   ELEVATED SLABS - PC BEAM AND IN-SITU 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".

40 0 40 80
1"=40'

REV	DATE	BY	CHK	APP	DESCRIPTION

DESIGNED BY M. FISHER
DRAWN BY D. ORIZA
CHECKED BY A. ARMSTRONG
IN CHARGE R. COFFIN
DATE 03/19/14

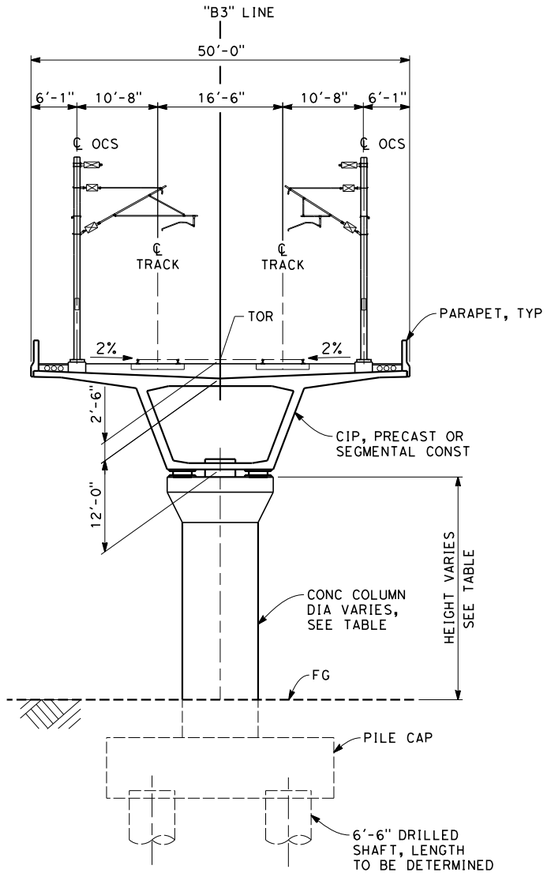
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
PLAN AND ELEVATION

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2851
SCALE AS SHOWN
SHEET NO. 52 OF 57

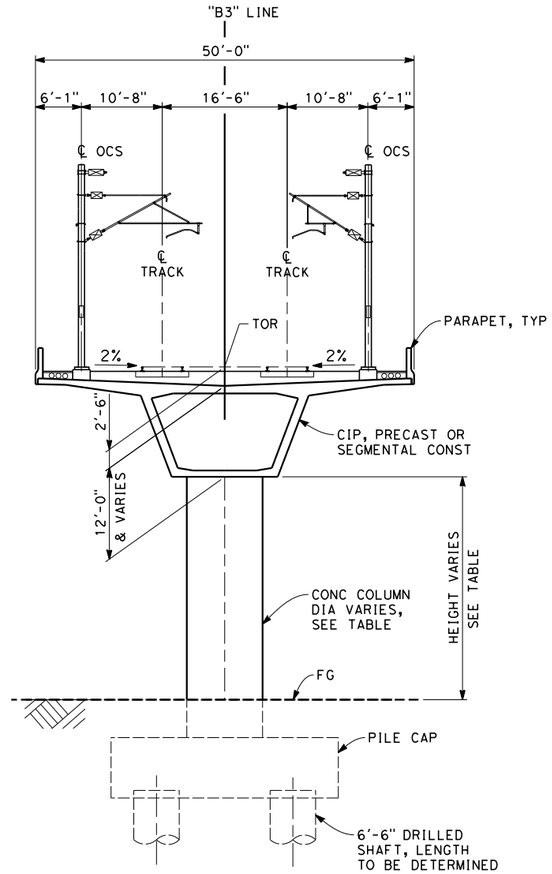


SECTION A

SCALE: 1"=10'

STA 6930+70.00 THROUGH 6943+71.50
STA 6946+93.50 THROUGH 6998+55.00
STA 7002+95.00 THROUGH 7010+13.50
STA 7024+15.00 THROUGH 7054+15.00
STA 7055+33.50 THROUGH 7057+75.00
STA 7058+95.00 THROUGH 7077+65.00
STA 7081+85.00 THROUGH 7082+85.00
STA 7083+85.00 THROUGH 7095+66.50
STA 7118+97.50 THROUGH 7145.39.00
STA 7149+97.00 THROUGH 7159+59.00
STA 7163+77.50 THROUGH 7207+20.50
STA 7215+67.50 THROUGH 7218+97.50
STA 7223+07.50 THROUGH 7245+37.50
STA 7249+57.50 THROUGH 7250+77.50
STA 7301+07.50 THROUGH 7346+57.50
STA 7352+57.50 THROUGH 7403+17.50
STA 7407+37.50 THROUGH 7430+49.81

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 B

SCALE: 1"=10'

STA 6998+55.00 THROUGH 7002+95.00
STA 7077+63.00 THROUGH 7081+85.00
STA 7145+39.00 THROUGH 7149+79.00
STA 7159+59.00 THROUGH 7163+79.00
STA 7214+47.50 THROUGH 7215+67.50
STA 7218+97.50 THROUGH 7223+07.50
STA 7245+37.50 THROUGH 7249+57.50
STA 7403+17.50 THROUGH 7407+37.50

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

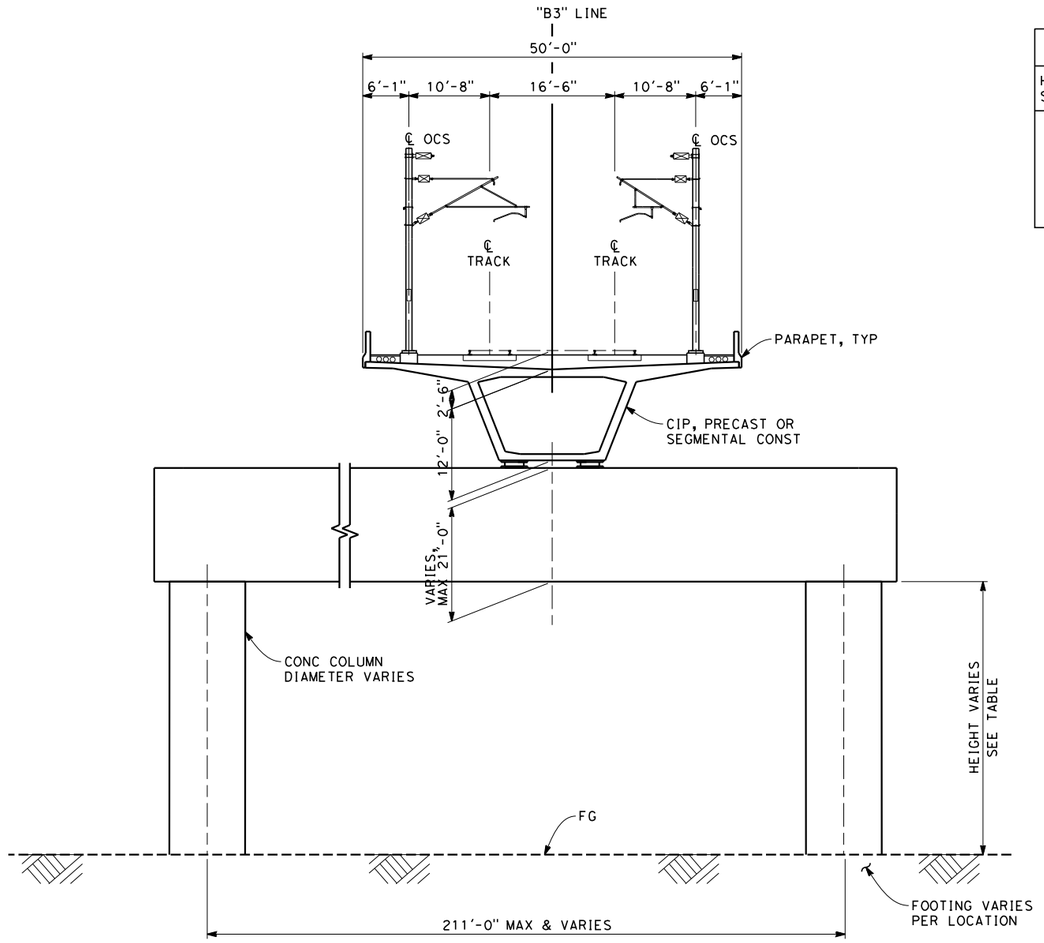
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2852
SCALE AS SHOWN
SHEET NO. 53 OF 57

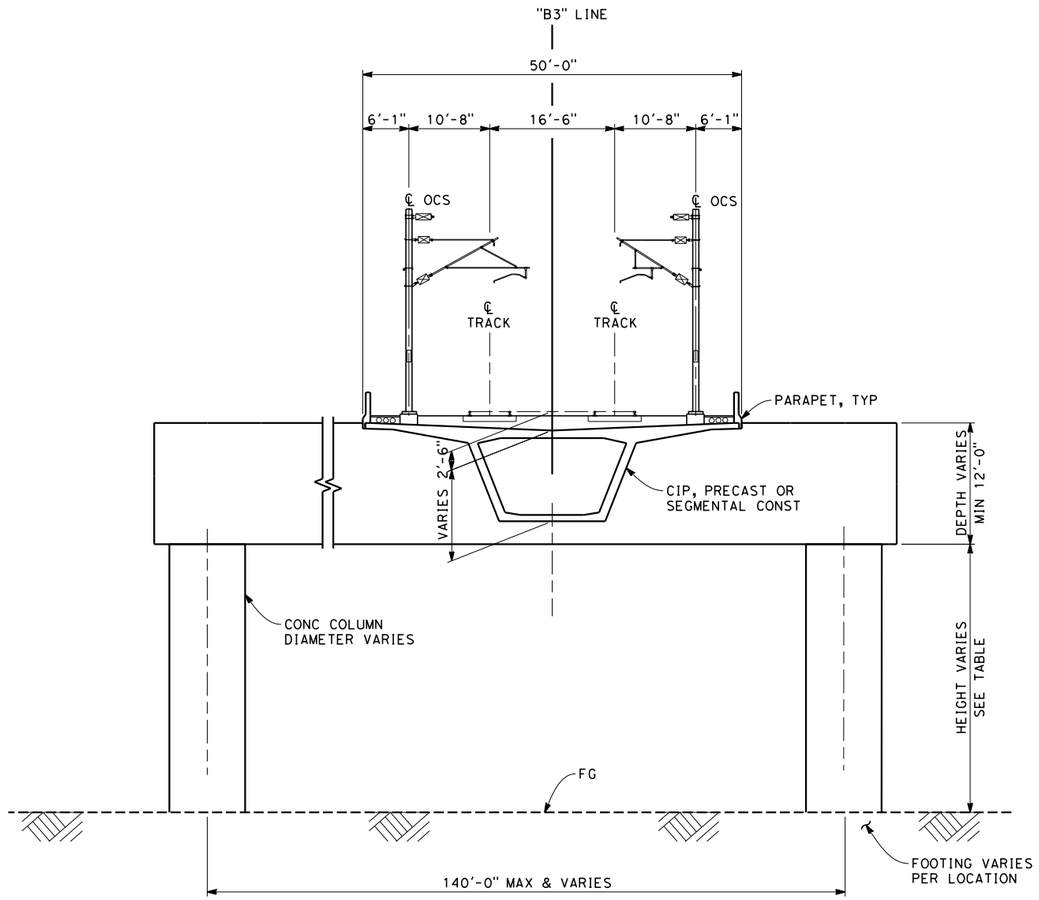
COLUMN DIAMETERS	
HEIGHT TO SOFFIT	DIAMETER
0-20	8 FT
20-40	10 FT
40-50	12 FT
50-60	15 FT
60-80	20 FT
80-100	25 FT



SECTION C

SCALE: 1"=10'

STA 7011+15.00 THROUGH 7013+13.50
STA 7017+33.50 THROUGH 7024+15.00
STA 7054+15.00 THROUGH 7055+33.50
STA 7057+75.00 THROUGH 7058+95.00
STA 7082+85.00 THROUGH 7083+85.00
STA 7210+77.50 THROUGH 7213+17.50



SECTION D

SCALE: 1"=10'

STA 7013+13.50 THROUGH 7017+33.50
STA 7346+57.50 THROUGH 7352+56.00

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

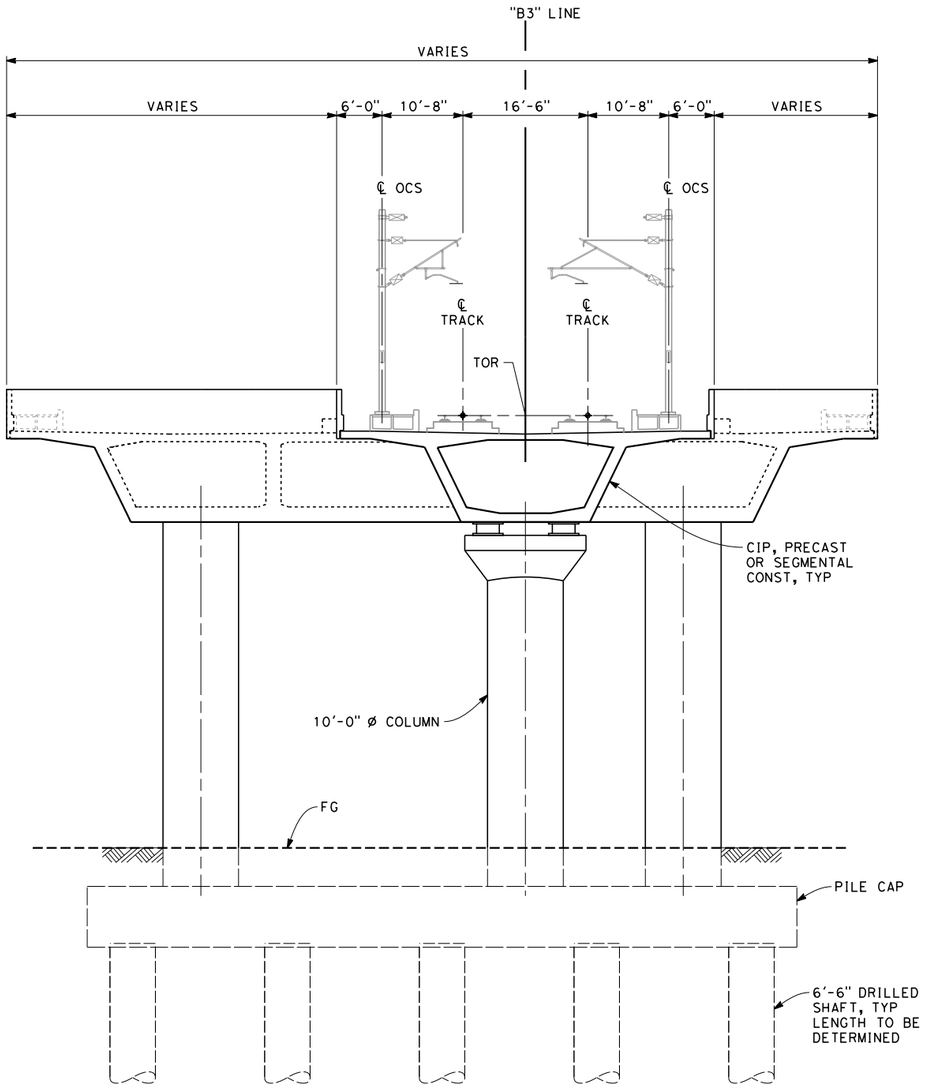
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

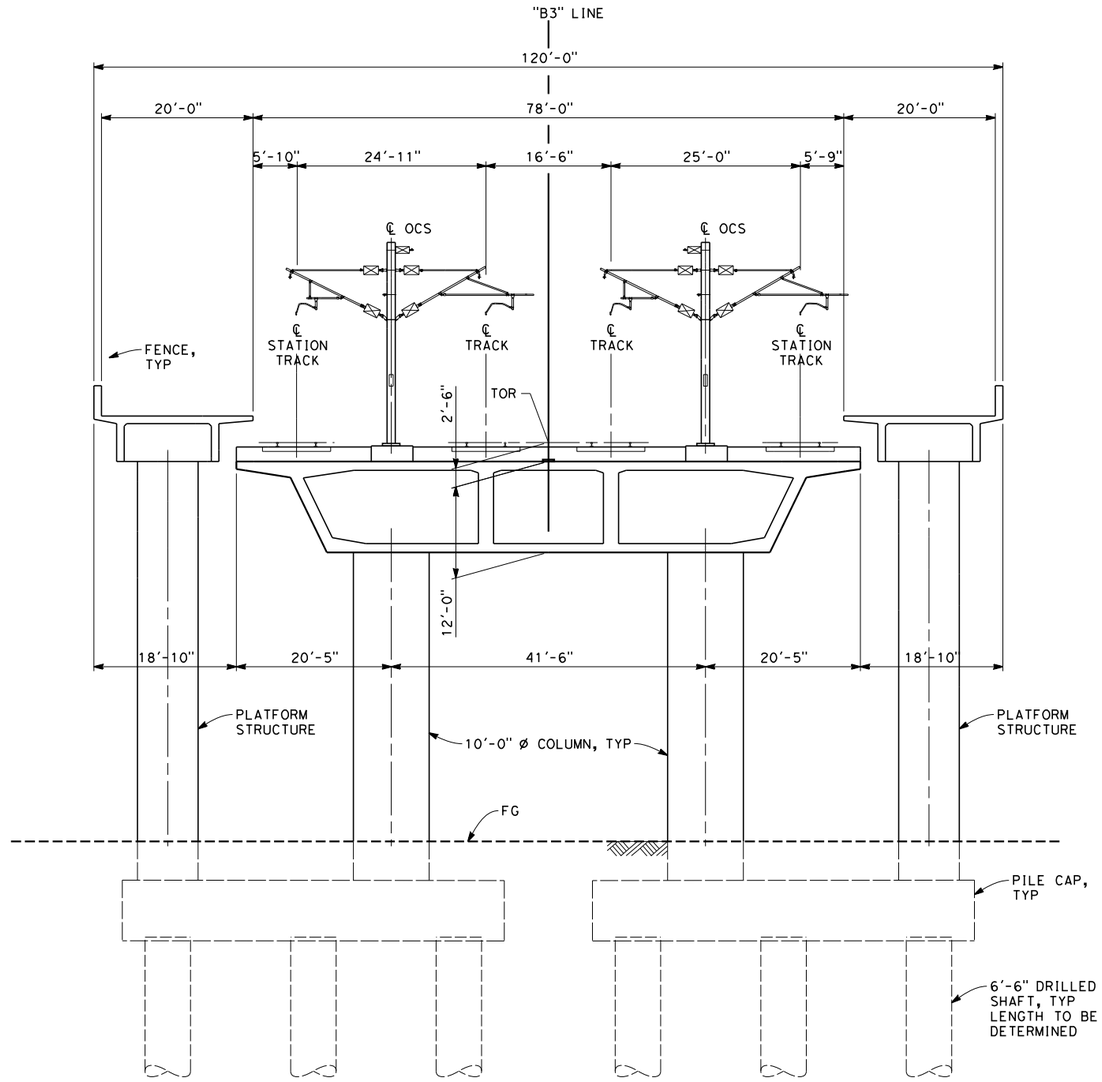
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2853
SCALE AS SHOWN
SHEET NO. 54 OF 57



SECTION E

SCALE: 1"=10'

STA 7250+77.50 (BENT 259)
STA 7301+07.50 (BENT 302)



SECTION F

SCALE: 1"=10'

STA 7262+77.50 THROUGH 7277+47.50

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

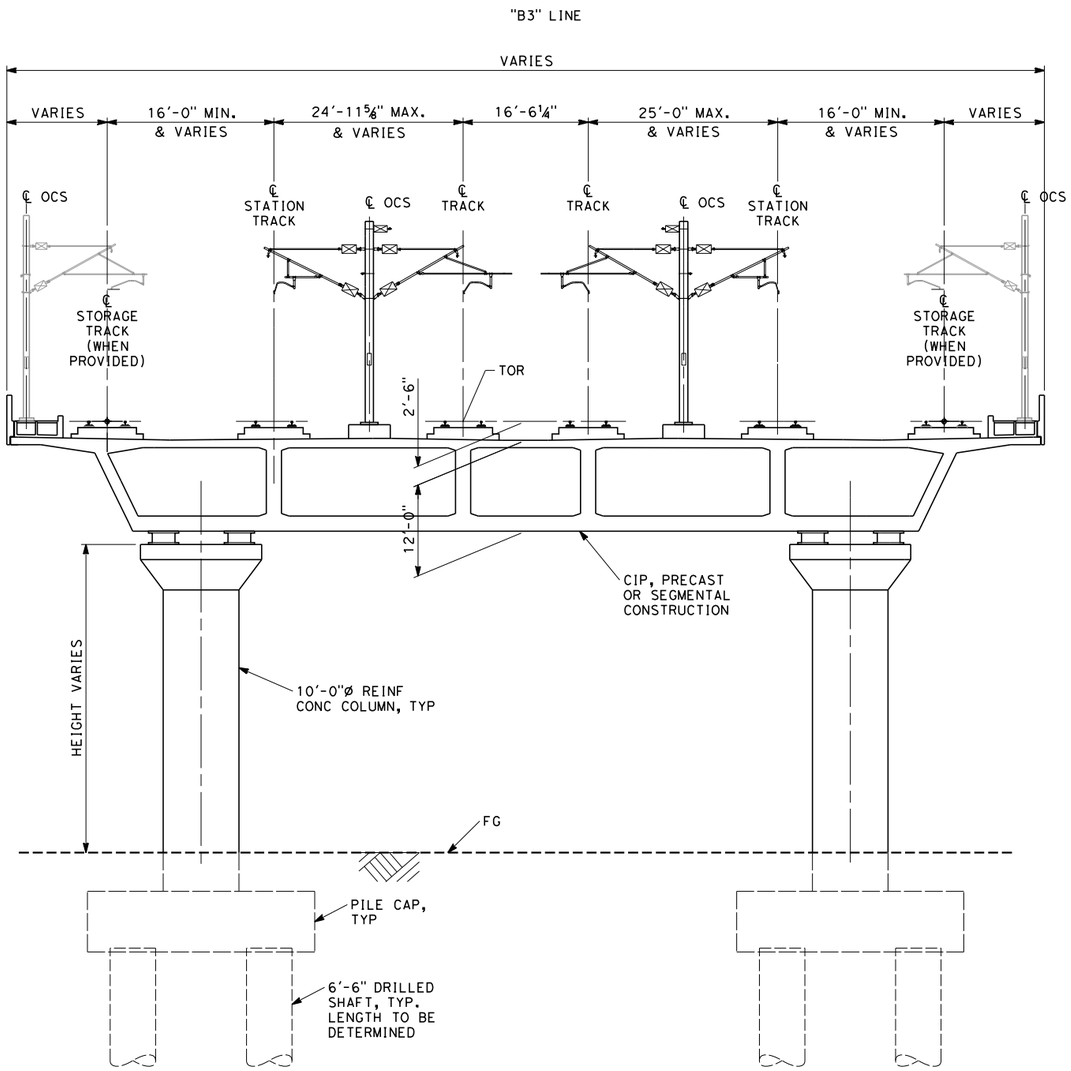
RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

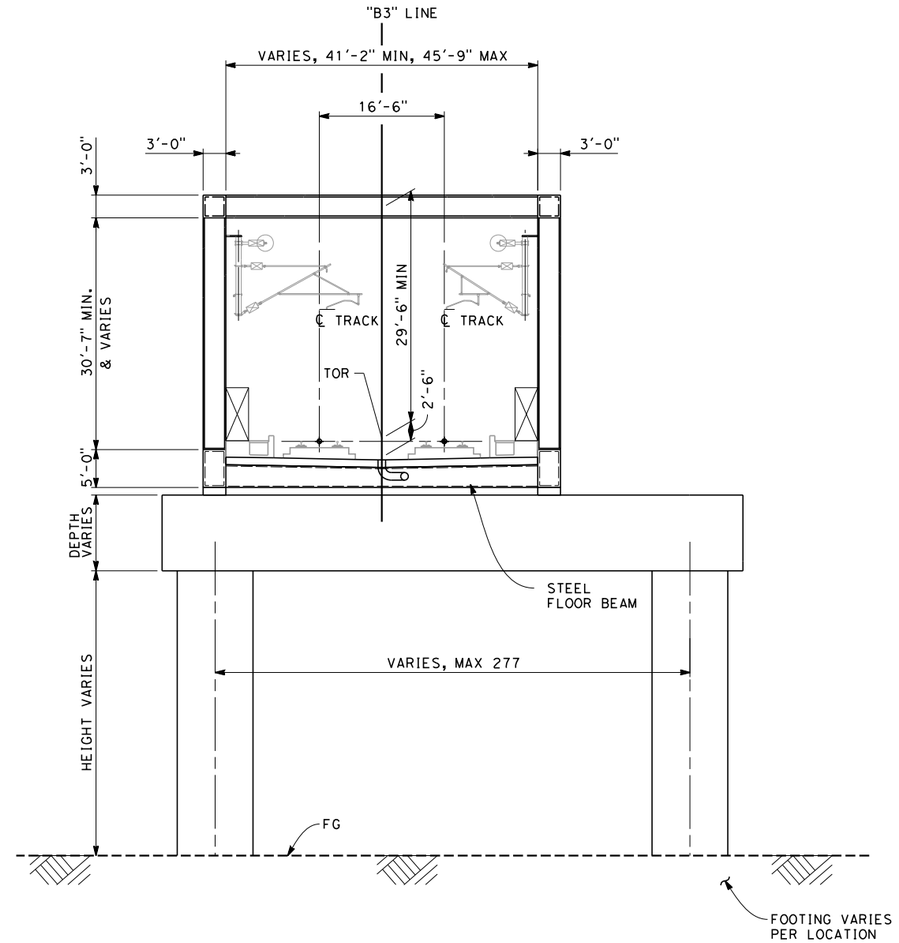
CONTRACT NO. HSR 06-0003
DRAWING NO. SV2854
SCALE AS SHOWN
SHEET NO. 55 OF 57



SECTION H

SCALE: 1"=10'

STA 7250+77.50 THROUGH 7262+77.50
STA 7277+47.50 THROUGH 7301+07.50



SECTION I

SCALE: 1"=10'

STA 7095+66.50 THROUGH 7118+97.50
STA 7207+20.50 THROUGH 7210+77.50

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

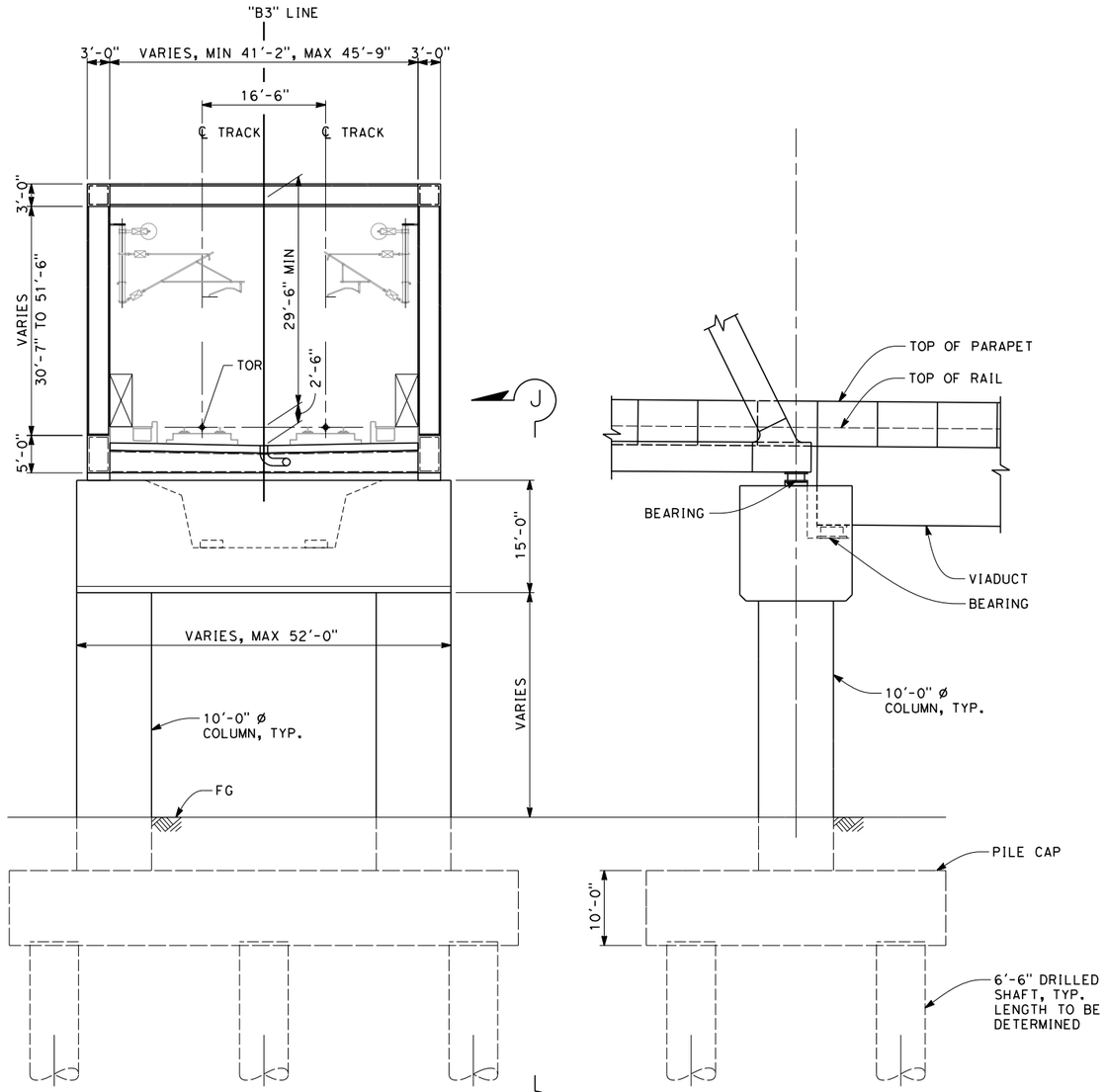
URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2855
SCALE AS SHOWN
SHEET NO. 56 OF 57

frank.palermo 12/20/2013 5:54:51 PM c:\pwworking\hmm\external\frank.palermo01-arup.com\dms71888\FB-SV-2855-B3.dgn



SECTION J
SCALE: 1"=10'

SECTION J-J
SCALE: 1"=10'

STA 6943+71.50 (BENT 12)
STA 7095+66.50 (BENT 141)
STA 7118+97.50 (BENT 149)
STA 7207+20.50 (BENT 225)

10 0 10 20
1"=10'

REV	DATE	BY	CHK	APP	DESCRIPTION

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

RECORD SET 15% DESIGN SUBMISSION - NOT FOR CONSTRUCTION

URS | HMM | ARUP
CALIFORNIA HIGH-SPEED TRAIN

CALIFORNIA
HIGH-SPEED RAIL AUTHORITY

CALIFORNIA HIGH-SPEED TRAIN PROJECT
FRESNO TO BAKERSFIELD
BAKERSFIELD URBAN SUBSECTION
ALIGNMENT B3
BAKERSFIELD VIADUCT
TYPICAL SECTIONS

CONTRACT NO. HSR 06-0003
DRAWING NO. SV2856
SCALE AS SHOWN
SHEET NO. 57 OF 57