CALIFORNIA HIGH-SPEED TRAIN
TRACTION POWER

RECORD SET PEPD
DESIGN SUBMISSION
Bakersfield to Palmdale
Traction Power

October 2017
NOTES:

1. FOR STRUCTURAL DIMENSIONS
   SEE STRUCTURAL CROSS SECTIONS

2. TRACKFORM SHOWN IS INDICATIVE

3. SUPERELEVATION IS NOT SHOWN;
   THE AMOUNT OF APPLIED
   SUPERELEVATION IS SHOWN IN THE
   CURVE TABLES

4. SECTION IS REPRESENTATIVE;
   DOES NOT ACCURATELY PORTRAY
   TRACK PROFILE RELATIVE TO
   EXISTING GROUND.

SECTION A

STA 17824+37.24 SWITCHING STATION (ALT 2)
STA 17825+96.42 SUPPLY STATION (ALT 1,3,5)
STA 19449+75.18 PARALLELING STATION (ALT 1,2,5)
NOTES:

1. FOR STRUCTURAL DIMENSIONS
   SEE STRUCTURAL CROSS SECTIONS

2. TRACKFORM SHOWN IS INDICATIVE

3. SUPERELEVATION IS NOT SHOWN,
   THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE TABLES

4. SECTION IS REPRESENTATIVE;
   DOES NOT ACCURATELY PORTRAY
   TRACK PROFILE RELATIVE TO
   EXISTING GROUND.

SECTION B

STA 21134+69.88 PARALLELING STATION (ALT 1,2,3 )
STA 19050+36.56 SUPPLY STATION (ALT 1,2,3,5 )
NOTES:

1. FOR STRUCTURAL DIMENSIONS
   SEE STRUCTURAL CROSS SECTIONS

2. TRACKFORM SHOWN IS INDICATIVE

3. SUPERELEVATION IS NOT SHOWN.
   THE AMOUNT OF APPLIED
   SUPERELEVATION IS SHOWN IN THE
   CURVE TABLES

4. SECTION IS REPRESENTATIVE;
   DOES NOT ACCURATELY PORTRAY
   TRACK PROFILE RELATIVE TO
   EXISTING GROUND.

SECTION C

STA 17592+09.87 PARALLELING STATION (ALT 1,3,5 )
STA 19238+05.78 PARALLELING STATION (ALT 1,2,3,5 )
STA 19449+75.18 PARALLELING STATION (ALT 1,2,5 )
STA 19925+06.76 PARALLELING STATION (ALT 1,2,5 )
STA 20607+06.58 PARALLELING STATION (ALT 1,2,3,5 )
STA 19766+30.11 PARALLELING STATION (ALT 1,2,3,5 )
STA 19639+00.81 SWITCHING STATION (ALT 3 )
STA 20077+00.00 SUPPLY STATION (ALT 1,2,3,5 )
NOTES:

1. FOR STRUCTURAL DIMENSIONS SEE STRUCTURAL CROSS SECTIONS
2. TRACKFORM SHOWN IS INDICATIVE
3. SUPERELEVATION IS NOT SHOWN, THE AMOUNT OF APPLIED SUPERELEVATION IS SHOWN IN THE CURVE TABLES
4. SECTION IS REPRESENTATIVE; DOES NOT ACCURATELY PORTRAY TRACK PROFILE RELATIVE TO EXISTING GROUND.

SECTION D

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NOTES:

1. FOR STRUCTURAL DIMENSIONS
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   THE AMOUNT OF APPLIED
   SUPERELEVATION IS SHOWN IN THE
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   TRACK PROFILE RELATIVE TO
   EXISTING GROUND.

SECTION I

STA 17369+07.86 PARALLELING STATION (ALT 1,3,5)
STA 17369+43.65 PARALLELING STATION (ALT 2)
Note: All train control A sites have radio antennas. 2 TP (tunnel portal) sites have radio antennas.
**Traction Power Facility Layout**

**Alternative 3**

**Bakersfield to Palmdale**

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**NOTE:**
- Train Control- A sites have radio antennas.
- TP tunnel portal sites have radio antennas.

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**Construction Sheet No. TP-D0003**

**Submitter:** E. Revolorio

**Date:** 9/28/2017

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**Drawing No:** HSR13-44

**Contract No.:** 212012

**Scale:** 1" = 5,000'
NOTES:

1. THIS IS A TYPICAL LAYOUT AND THE ORIENTATION OF THE STATION WITH RESPECT TO TRACK, LOCATION OF UTILITY SUPPLY CIRCUITS, EQUIPMENT, AND ROAD ACCESS TO BE DETERMINED ON A SITE-BY-SITE BASIS.

2. THE MAIN GANTRY POSITION SHALL BE PARALLEL AND ADJACENT TO THE TRACK.

3. THERE WILL BE A STRAIN GANTRY LOCATED WITHIN THE RAILROAD R/W, PARALLEL TO AND ON THE OPPOSITE SIDE OF THE TRACK WITH FOOTPRINTS EXACTLY EQUAL TO THAT OF THE MAIN GANTRY.

4. IF THE TPF IS LOCATED AWAY FROM THE TRACK, THE MAIN GANTRY WILL BE LOCATED WITHIN THE RAILROAD R/W, PARALLEL TO AND TOWARDS TPF SIDE OF THE TRACK. IN THIS CASE AN ADDITIONAL 40' WIDE STRIP OF LAND WILL BE REQUIRED FROM THE TPF TO THE RAILROAD R/W FOR LAYING UNDERGROUND DUCT BANKS AND MANHOLES.

5. THE COMMUNICATION EQUIPMENT ROOM SHALL HOUSE COMMUNICATION INTERFACE EQUIPMENT FOR SCADA SYSTEM AND OTHER WAYSIDE COMMUNICATION EQUIPMENT.

6. THE GANTRIES SHALL BE 40' HIGH.

7. THIS LAYOUT IS PER TM 3.1.1.3-A AND SHOWN HERE FOR REFERENCE AND COMPLETENESS.
NOTES:

1. THIS IS A TYPICAL LAYOUT AND THE ORIENTATION OF THE STATION WITH RESPECT TO TRACK, LOCATION OF UTILITY SUPPLY CIRCUITS, EQUIPMENT, AND ROAD ACCESS TO BE DETERMINED ON A SITE-BY-SITE BASIS.

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5. THE COMMUNICATION EQUIPMENT ROOM SHALL HOUSE COMMUNICATION INTERFACE EQUIPMENT FOR SCADA SYSTEM AND OTHER WAYSIDE COMMUNICATION EQUIPMENT.

6. THE GANTRIES SHALL BE 40' HIGH.

7. THIS LAYOUT IS PER TM 5.1.1.5-C AND SHOWN HERE FOR REFERENCE AND COMPLETENESS.
NOTES:

1. THIS IS A TYPICAL LAYOUT AND THE ORIENTATION OF THE STATION WITH RESPECT TO TRACK, LOCATION OF UTILITY SUPPLY CIRCUITS, EQUIPMENT, AND ROAD ACCESS TO BE DETERMINED ON A SITE-BY-SITE BASIS.

2. THE MAIN GANTRY POSITION SHALL BE PARALLEL AND ADJACENT TO THE TRACK.

3. THERE WILL BE A STRAIN GANTRY LOCATED WITHIN THE RAILROAD R/W, PARALLEL TO AND ON THE OPPOSITE SIDE OF THE TRACK WITH FOOTPRINTS EXACTLY EQUAL TO THAT OF THE MAIN GANTRY.


5. THE COMMUNICATION EQUIPMENT ROOM SHALL HOUSE COMMUNICATION INTERFACE EQUIPMENT FOR SCADA SYSTEM AND OTHER RAILSIDE COMMUNICATION EQUIPMENT.

6. THE GANTRIES SHALL BE 40' HIGH.

7. THIS LAYOUT IS PER TM 3.1.1.3-D AND SHOWN HERE FOR REFERENCE AND COMPLETENESS.
ALTERNATIVE 1,3,5

TRACTION POWER SITE PLAN

PROPOSED TPSS #14

NOTES
1. PROPOSED TRACK GRADE THROUGH
PHASE BREAK IS 1.16%.

DESIGNED BY
S. LANDOLT

DRAWN BY
E. REVOLORIO

CHECKED BY
J. SIHOTA

IN CHARGE
S. SMITH

DATE
10/31/2017

RECORD
PEPD

SUBMITTAL

NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
CONTRACT NO.
HSR13-44

DRAWING NO.
TP-O4003

SCALE
AS SHOWN

SHEET NO.

DATE
CHK
APP

DESCRIPTION
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Projects\701206.00_CHSRBP\00 CADD\Sheet Files\TP\BP-TP-O4003

1"=100'

PLAN

STA 17832+71.42
END PHASE BREAK

• CHSR NB ALIGNMENT "ALT 1,3,5"

• CHSR SB ALIGNMENT "ALT 1,3,5"

BEG PHASE BREAK

STA 17819+21.42

TIE INTO MAINTENANCE ACCESS ROAD, SEE TYPICAL SECTION

SEE NOTE 1

PROP CHSR NB ALIGNMENT "ALT 1,3,5"

PROP 220'x160' UTILITY SWITCHING STATION

PROP TPSS #14
STN 17825+96.42

PROP PG&E TRACTION POWER SUPPLY LINE

PROP CHSR R/W

TIE INTO MAINTENANCE ACCESS ROAD, SEE TYPICAL SECTION

MAIN GANTRY

SEE TYPICAL SECTION

TIE INTO MAINTENANCE ACCESS ROAD, SEE TYPICAL SECTION

STRAIN GANTRY

SEE TYPICAL SECTION

TIE INTO MAINTENANCE ACCESS ROAD,

PROP CHSR R/W
NOTES
1. PROPOSED TRACK GRADE THROUGH PHASE BREAK IS 1.0%. 
NOTES

1. PROPOSED TRACK GRADE THROUGH PHASE BREAK IS 2.80%.

DESIGNED BY
S. LANDOLT

DRAWN BY
E. REVOLORIO

CHECKED BY
J. SIHOTA

IN CHARGE
S. SMITH

DATE
10/31/2017

RECORD
PEPD

SUBMITTAL

NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
ALTERNATIVE 1,2,3,5
TRACTION POWER SITE PLAN
PROPOSED SWITCHING STATION 2

PLAN
ALTERNATIVE 1, 2, 3, 5
TRACTION POWER SITE PLAN
PROPOSED PARALLELING STATION 4

PLAN

TAHACHAPI CREEK
FAULT ZONE

TEHACHAPI CREEK
RAILWAY

PS

MAIN CANTY

STRAIN GANTRY

PROP PARALLELING STATION 4
STA 18805+62.68

TIE INTO MAINTENANCE
ACCESS ROAD, SEE
TYPICAL SECTION

ACCESS ROAD

PROP SR 58 REALIGNMENT

PROP CHSR R/W

STA 18805+62.68

PROP SR 58 REALIGNMENT

DRAWING NO. TP-O4007
SCALE AS SHOWN
SHEET NO. NOT FOR CONSTRUCTION
DATE CHK APP BY REV
QIC.ARivera 9/28/2017 4:16:01 PM

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
CONTRACT NO. HSR13-44
ALTERNATIVE 1, 2, 3, 5
TRACTION POWER SITE PLAN
PROPOSED PARALLELING STATION 4

DESIGNED BY S. LANDOLT
DRAWN BY E. REVOLORIO
CHECKED BY J. SIHOTA
IN CHARGE S. SMITH
DATE 10/31/2017
RECORD PEPE
SUBMITTAL NOT FOR CONSTRUCTION

1"=100'
NOTES
1. PROPOSED TRACK GRADE THROUGH PHASE BREAK IS 0.99%.

DESIGNED BY S. LANDOLT
DRAWN BY E. REVOLORIO
CHECKED BY J. SIHOTA
IN CHARGE S. SMITH
DATE 10/31/2017

RECORD PEPD
SUBMITTAL
NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT
BAKERSFIELD TO PALMDALE
CONTRACT NO. HSR13-44

ALTERNATIVE 1,2,3,5
TRACTION POWER SITE PLAN
PROPOSED TPSS #15

PLAN

TENACAPRI CREEK FAULT ZONE
MAIN GANTRY
STRAIN GANTRY
SEE NOTE 1

PLAN

TENACAPRI CREEK FAULT ZONE

BASE SCALE 1"=100'