The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being or have been carried out by the State of California pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated July 23, 2019, and executed by the Federal Railroad Administration and the State of California.
**GENERAL SHEETS**

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<tr>
<th>DRAWING NO.</th>
<th>DRAWING DESCRIPTION</th>
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<tr>
<td>TP-B0001</td>
<td>GENERAL - INDEX OF DRAWINGS</td>
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<tr>
<td>TP-B0002</td>
<td>GENERAL - ABBREVIATIONS</td>
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<tr>
<td>TP-B0003</td>
<td>GENERAL - ABBREVIATIONS AND LEGEND</td>
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**ALIGNMENT "REFINED SR14" RAILWAY SYSTEMS AND FACILITIES**

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<td>TP-D0001-S14</td>
<td>TRACTION POWER FACILITIES - LOCATION LAYOUT</td>
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<tr>
<td>TP-B6001-S14</td>
<td>RAILWAY SYSTEMS - KEY MAP 1 OF 2</td>
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<tr>
<td>TP-B6002-S14</td>
<td>RAILWAY SYSTEMS - KEY MAP 2 OF 2</td>
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<tr>
<td>TP-F4001-S14</td>
<td>TRACTION POWER FACILITIES - TRACTION POWER SUBSTATION 17A - VINCENT SUBSTATION 1 OF 2</td>
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<tr>
<td>TP-F4002-S14</td>
<td>TRACTION POWER FACILITIES - TRACTION POWER SUBSTATION 17A - VINCENT SUBSTATION 2 OF 2</td>
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<tr>
<td>TP-F4003-S14</td>
<td>TRACTION POWER FACILITIES - TRACTION POWER SUBSTATION 18A - INTERSTATE 210 AREA</td>
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<td>TP-P0002-S14</td>
<td>TRACTION POWER FACILITIES - PARALLELING STATION 2</td>
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<td>TP-P0003-S14</td>
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<td>TRACTION POWER FACILITIES - PARALLELING STATION 5</td>
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<td>TP-P0006-S14</td>
<td>TRACTION POWER FACILITIES - PARALLELING STATION 6</td>
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<td>TRACTION POWER FACILITIES - PARALLELING STATION 7</td>
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**ALIGNMENT "E1" RAILWAY SYSTEMS AND FACILITIES**

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<tr>
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<td>TP-O0006-E1</td>
<td>TRACTION POWER FACILITIES - PARALLELING STATION 2</td>
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**ALIGNMENT "E2" RAILWAY SYSTEMS AND FACILITIES**

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<td>TP-O0005-E2</td>
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<td>TP-O0006-E2</td>
<td>TRACTION POWER FACILITIES - PARALLELING STATION 2</td>
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**UNDERGROUND TRACTION POWER FACILITIES DETAIL**

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<td>TP-D5002</td>
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<td>TP-D5003</td>
<td>UNDERGROUND TRACTION POWER FACILITIES - DETAIL 3</td>
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**TRAIN CONTROL SYSTEM**

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<td>ALIGNMENT &quot;REFINED SR14&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - SITE D LOCATIONS</td>
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<tr>
<td>TC-E6003</td>
<td>ALIGNMENT &quot;E1&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - SITE D LOCATIONS</td>
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<td>TC-E6004</td>
<td>ALIGNMENT &quot;E2&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - BURBANK STATION</td>
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<tr>
<td>TC-B6001-S14</td>
<td>ALIGNMENT &quot;REFINED SR14&quot; - TRAIN CONTROL SYSTEM - RAILWAY SYSTEMS - KEY MAP</td>
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<td>ALIGNMENT &quot;E1&quot; - TRAIN CONTROL SYSTEM - RAILWAY SYSTEMS - KEY MAP</td>
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<td>TC-B6003-E1</td>
<td>ALIGNMENT &quot;E1&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 2125+00 TO STA 2137+00</td>
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<td>TC-B6004-E2</td>
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<tr>
<td>TC-B6005-E2</td>
<td>ALIGNMENT &quot;E2&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 1923+00 TO STA 1935+00</td>
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<tr>
<td>TC-F5002</td>
<td>ALIGNMENT &quot;REFINED SR14&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 2233+00 TO STA 2245+00</td>
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<td>TC-F5003</td>
<td>ALIGNMENT &quot;E1&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 2125+00 TO STA 2137+00</td>
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<td>TC-F5004</td>
<td>ALIGNMENT &quot;E2&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 1923+00 TO STA 1935+00</td>
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<td>TC-F5005</td>
<td>ALIGNMENT &quot;REFINED SR14/E1/E2&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 2233+00 TO STA 2245+00</td>
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<td>TC-F5006</td>
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<td>TC-F5007</td>
<td>ALIGNMENT &quot;E2&quot; - TRAIN CONTROL SYSTEM - INTERLOCKING SITES - STA 1923+00 TO STA 1935+00</td>
<td></td>
</tr>
</tbody>
</table>

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**INDEX OF DRAWINGS**

**DRAWN BY:** R. RODRIGUEZ

**DRAWN BY:** FJ. DOMINGUEZ

**CHECKED BY:** J. LEMA

**IN CHARGE:** A. RELANO

**DATE:** 04/30/2021

**CONTRACT NO.:** HSR14-42

**DRAWING NO.:** TP-B0001

**SCALE:** NO SCALE

**SHEET NO.:** 1
LEGEND

RAILWAY SYSTEMS FACILITY 5.0
SPACING (MILES)
AT- GRADE / ELEVATED
UNDERGROUND

ABBREVIATIONS:

TPSS: TRACTION POWER SUBSTATION
PS: PARALLELING STATION
SWS: SWITCHING STATION
TUNP: TUNNEL PORTAL FACILITIES
SRS: STANDALONE RADIO SITE
ATC D: TRAIN CONTROL FACILITY

NOTE:

1. SITE STATIONING GIVEN IS APPROXIMATE AND WILL BE FINALIZED IN FUTURE DESIGN PHASE.

2. IN UNDERGROUND SECTIONS, RF COMMUNICATION WILL BE USING DIRECTIONAL ANTENNAS OR RADIANT CABLES.

3. TRACTION POWER FACILITIES HAVE RADIO ANTENNAS.

4. ALL TUNNEL PORTALS (TUNP) REQUIRE SPACE FOR RADIO MASTS AS WELL AS ANTENNAS, PLUS AN ASSOCIATED CABIN TO HOUSE RADIO EQUIPMENT. ATC EQUIPMENT CABINS WILL BE LOCATED AT THESE LOCATIONS TOO.

5. RADIO EQUIPMENT WITHIN TUNNELS WILL BE INSTALLED IN CROSS PASSAGES EQUIPMENT ROOMS AND AT PARALLELING STATIONS.

6. SYSTEMS FACILITIES IN PALMDALE SUBSECTION ARE INCLUDED FOR REFERENCE ONLY, SINCE THEY ARE PART OF THE PALMDALE SUBSECTION RECORD SET INCLUDED IN THE ENVIRONMENTAL DOCUMENT.
EXIST HIGH VOLTAGE OVERHEAD POWER LINE

POWER CONNECTION TO EXIST HIGH VOLTAGE OVERHEAD POWER LINE

SUPPLY POWER UTILILITY BY SWITCHING STATION

TRACTION POWER SUBSTATION 18A

TRACTION POWER FACILITIES

INTERSTATE 210 AREA

CONTRACT NO.

HSR14-42

DRAWING NO.

TP-F4003-S14

SCALE

AS SHOWN

SHEET NO.

1

DATE

04/30/2021

CHECKED BY

R. RODRIGUEZ

DESIGNED BY

J. LEMAY

DRAWN BY

A. MILLER

CONSTRUCTION

NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT

PALMDALE TO BURBANK

ALIGNMENT "REFINED SR14"

TRACTION POWER FACILITIES

TRACTION POWER SUBSTATION 18A

INTERSTATE 210 AREA

IN TRAFFIC STATE 210

FOOTHILL BLVD

OVERHEAD POWER LINE

EXIST HIGH VOLTAGE OVERHEAD POWER LINE

POWER CONNECTION TO CHSR NB ALIGNMENT "REFINED SR14"

POWER CONNECTION TO CHSR SB ALIGNMENT "REFINED SR14"

CONSTRUCTION NOT FOR REV 02

PEPD RECORD SET

04/30/2021

A. MILLER

N. RODRIGUEZ

PPW RECORD SET REV 08

04/30/2021

A. MILLER

REV

DATE

9:49 AM

5/26/2021

2:00 PM

SET NO.

TP-F4003-S14

CALIFORNIA HIGH-SPEED RAIL PROJECT

PALMDALE TO BURBANK

ALIGNMENT "REFINED SR14"

TRACTION POWER FACILITIES

TRACTION POWER SUBSTATION 18A

INTERSTATE 210 AREA

IN TRAFFIC STATE 210

FOOTHILL BLVD

OVERHEAD POWER LINE

EXIST HIGH VOLTAGE OVERHEAD POWER LINE

POWER CONNECTION TO CHSR NB ALIGNMENT "REFINED SR14"

POWER CONNECTION TO CHSR SB ALIGNMENT "REFINED SR14"

CONSTRUCTION NOT FOR REV 02

PEPD RECORD SET

04/30/2021

A. MILLER

PPW RECORD SET REV 08

04/30/2021

A. MILLER

REV

DATE

9:49 AM

5/26/2021

2:00 PM

SET NO.

TP-F4003-S14

CALIFORNIA HIGH-SPEED RAIL PROJECT

PALMDALE TO BURBANK
NOTE:

1. Site stationing given is approximate and will be finalized in future design phase.

2. In underground sections, RF communication will be using directional antennas or radiant cables.

3. Traction power facilities have radio antennas.

4. All tunnel portals (TUNP) require space for radio masts, as well as antennas. An associated cabin to house radio equipment, ATC equipment cabinets will be located at these locations too.

5. Radio equipment within tunnels will be installed in cross passages equipment rooms and at paralleling stations.

6. Systems facilities in Palmdale subsection are included for reference only, since they are part of the Palmdale subsection record set included in the Bakersfield - Palmdale environmental document.
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"

RAILWAY SYSTEMS
KEY MAP 1 OF 2

CONTRACT NO. HSR14-42
DRAWING NO. TP-B6001-E1
SCALE AS SHOWN
SHEET NO.

DATE
DRAWN BY
DESIGNED BY
CHECKED BY
IN CHARGE

0400074
A. RELANO
R. RODRIGUEZ
FJ. DOMINGUEZ
J.LEMA

CONSTRUCTION

NOT FOR
REV 02
PEPD RECORD SET

MATCH LINE SEE TP-B6002-E1, TP-B6001-E2

5/26/2021
4:03:45 PM

04/30/2021

SANTA CLARITA
BURBANK
GLENDALE
LOS ANGELES
VICINITY MAP

1"=3000'
3000 6000
3000

MATCH LINE SEE TP-B6002-E1, TP-B6001-E2

04/30/2021
PARALLELING STATION 4
STATION 982+00
UNDERGROUND FACILITY

PPEF

DATE
CHK
APP
REv
DESCRIPTION

DRAWN BY
DESIGNED BY
CHECKED BY
IN CHARGE

04/30/2021
A. RELANO
F. J. DOMINGUEZ
J. LE A MA
A. RILLARO
A. RILLARO

NOT FOR CONSTRUCTION

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"
TRACTION POWER FACILITIES
PARALLELING STATION 4

SCALE AS SHOWN

0' = 100'

PLAN
CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"
TRACTION POWER FACILITIES
SWITCHING STATION 1

PLAN

04/30/2021
R. RODRIGUEZ
F. J. DOMINGUEZ
J. LEMA

CONSTRUCTION
NOT FOR
RECORD SET

© 2021 California High-Speed Rail Authority
PPEF

CHSR SB ALIGNMENT "E1"

CHSR NB ALIGNMENT "E1"

CROSS-PASSAGE (TYP.)

PARALLELING STATION 6
STA 1693+00
UNDERGROUND FACILITY

PLAN

100 100 200
1"=100'

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"
TRACTION POWER FACILITIES
PARALLELING STATION 6

DRAWN BY
REVIEWED BY
CHECKED BY
IN CHARGE

04/30/2021

R. RODRIGUEZ
FJ. DOMINGUEZ
J. LEMA
CONSTRUCTION
NOTE: NOT FOR CONSTRUCTION

DATES
05/26/2021
04:07:47 PM

05/30/2021
04:07:47 PM
PARALLELING STATION 7
STA 2124+00
(SURFACE FACILITY)

• CHSR NB ALIGNMENT "E1"
• CHSR SB ALIGNMENT "E1"

• CHSR NB REFUGE TRACK
• CHSR NB PLATFORM TRACK
• CHSR NB PLATFORM TRACK
• CHSR SB PLATFORM TRACK
• CHSR SB ALIGNMENT "E1"
• CHSR SB PLATFORM TRACK

PPEF

PLAN

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"
TRACTION POWER FACILITIES
PARALLELING STATION 7

DRAWN BY
R. RODRIGUEZ
FJ. DOMINGUEZ
J. LEMA

CONSTRUCTION
NOT FOR
PEPD RECORD SET

04/30/2021
LEGEND

Railway Systems Facility Spacing (Miles)
At-Grade / Elevated
Underground

ABBREVIATIONS:
TPSS: Traction Power Substation
PS: Paralleling Station
SWS: Switching Station
TUNP: Tunnel Portal Facilities
SRS: Standalone Radio Site
ATC D: Train Control Facility

NOTE:
1. Site stationing given is approximate and will be finalized in future design phase.
2. In underground sections, RF communication will be using directional antennas or radiant cables.
3. Traction power facilities have radio antennas.
4. All tunnel portals (TUNP) require space for radio masts as well as antennas, plus an associated cabin to house radio equipment. ATC equipment cabin will be located at these locations too.
5. Radio equipment within tunnels will be installed in cross passages equipment rooms and at paralleling stations.
6. Systems facilities in Palmdale subsection are included for reference only, since they are part of the Palmdale subsection record set included in the Bakersfield - Palmdale environmental document.
EXIST HIGH VOLTAGE OVERHEAD POWER LINE
SUPPLY POWER UTILITY HV SUBSTATION

POWER CONNECTION TO
EXIST HIGH VOLTAGE
OVERHEAD POWER LINE

HSR VIADUCT

CHSR NB ALIGNMENT "E2"
CHSR SB ALIGNMENT "E2"
PLAN

- CHSR SB ALIGNMENT "E2"
- CROSS-PASSAGE (TYP.)
- SWITCHING STATION 1
- STA 1216+00 (UNDERGROUND FACILITY)
- CHSR SB ALIGNMENT "E2"
PARALLELING STATION 5
STA 1448+00
UNDERGROUND FACILITY

CHAR SB ALIGNMENT "E2"

CROSS-PASSAGE (TYP.)

PLAN

SCALE AS SHOWN

CONTRACT NO. HSR14-42
DRAWING NO. TP-O4006-E2

DATE CHK APP
04/30/2021

DRAWN BY
DESIGNED BY
CHECKED BY
IN CHARGE

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E2"
TRACTION POWER FACILITIES
PARALLELING STATION 5

VERTICAL SHAFT

PPEF
REFINED SR14 ALIGNMENT
TO PALMDALE STATION

SITE D

TUN P 638 + 82
ALISO CANYON
TUN P 741 + 145

NB TRACK
SB TRACK

SITE D

TUN P 725 + 19

SITE D

SITE D

TO BURBANK STATION

E1 ALIGNMENT

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "E1"
TRAIN CONTROL SYSTEM INTERLOCKING SITES "SITE D" LOCATIONS

DRAWING NO. TC-E6003
SCALE NOT TO SCALE

NOT FOR CONSTRUCTION
NOTE:
1. THIS SCHEMATIC DIAGRAM IS APPLICABLE TO ALL ALTERNATIVES.
PLAN

• CHSR NB PLATFORM "REFINED SR14"
• CHSR NB REFUGE TRACK "REFINED SR14"
• CHSR NB PLATFORM "REFINED SR14"
• CHSR SB PLATFORM TRACK "REFINED SR14"
• CHSR SB ALIGNMENT "REFINED SR14"
• CHSR SB ALIGNMENT "REFINED SR14"

UNDERGROUND INTERLOCKING SITE ABOVE TRACKS
(SITE A)

HSR R/W

PROP RET WALL (TYPE)

CALIFORNIA HIGH-SPEED RAIL PROJECT
PALMDALE TO BURBANK
ALIGNMENT "REFINED SR14"
TRAIN CONTROL SYSTEM
INTERLOCKING SITES
STA 2233+00 TO STA 2245+00

DRAWN BY
DESIGNED BY
CHECKED BY
IN CHARGE

DRAWN BY
DESIGNED BY
CHECKED BY
IN CHARGE

5/26/2021