

CALIFORNIA HIGH-SPEED TRAIN

Project Environmental Impact Report /
Environmental Impact Statement

Working Draft

Fresno to Bakersfield

Supplemental Alternatives Analysis Report

December 2011



Fresno to Bakersfield

Supplemental Alternatives Analysis Report

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URS/HMM/Arup Joint Venture

December 2011

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Executive Summary

Executive Summary

ES.1 Background and Purpose of this Supplemental Alternatives Analysis

This December 2011 Fresno to Bakersfield Supplemental Alternatives Analysis (AA) Report updates the Preliminary AA Report that the California High-Speed Rail Authority (Authority) issued for the Fresno to Bakersfield High-Speed Train (HST) section in June 2010, as well as two Supplemental Alternatives Analysis Reports issued in September 2010 and May 2011. It presents documentation and analysis of a recommended new alignment and station location west of Hanford in Kings County. The previous AA reports served as the basis for the alternatives contained in the Fresno to Bakersfield Draft Environmental Impact Report / Environmental Impact Statement (DEIR/EIS) that was published in August 2011.

In response to stakeholder, agency, and public feedback on the high-speed train alignment that bypasses Hanford to the east, the Authority is re-introducing an alternative route that bypasses Hanford to the west, along with an alternative station location to serve the Kings/Tulare region on that portion of the Fresno to Bakersfield section. This alternative route – the Hanford West Bypass Alternative – was previously identified in the 2005 Statewide Program EIR/EIS; including this alternative is consistent with input from regulatory agencies. Potentially feasible alignments that pass west of Hanford have been studied in order to identify the most viable alignment and station location that both minimize environmental impacts and provide a feasible and cost-effective option for the Authority.

The alignment alternative and station location recommended in this Supplemental AA Report will be included in a Revised Draft Environmental Impact Report / Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) that is expected to be ready for public release in the spring of 2012.

ES.2 Recommendations

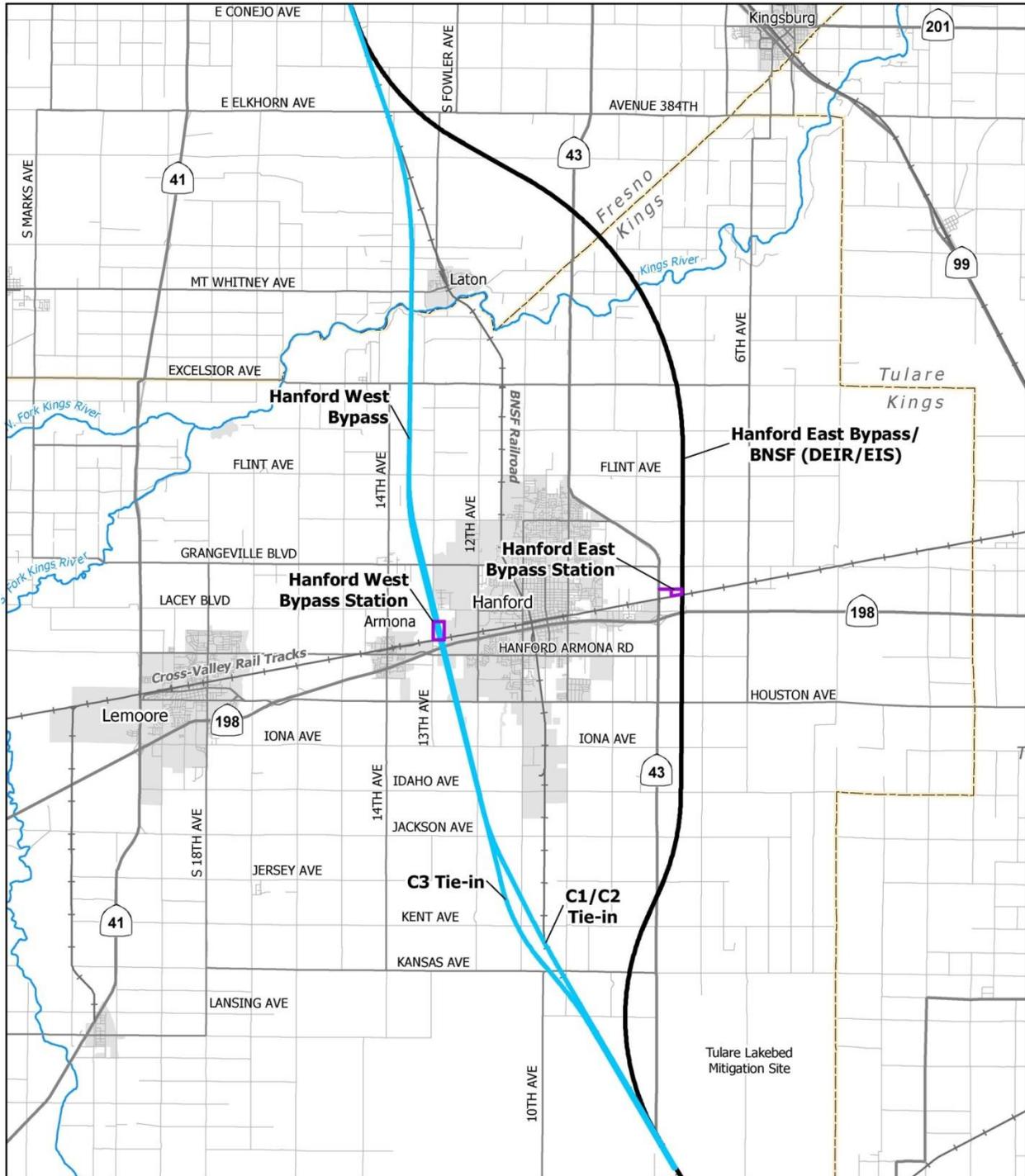
The staff recommends Board approval of the following actions (see Figure ES-1):

New Alignment Alternative

- **Add a new Hanford West Bypass Alternative (HW) to the current set of alignment alternatives (including the current Hanford East Bypass Alternative) to be evaluated in the Fresno to Bakersfield Revised DEIR / Supplemental DEIS.** This alignment provides a viable HST route west of Hanford that meets the project purpose and need, is cost-efficient, and minimizes potential impacts to natural resources, communities, and agriculture. In particular, this alignment offers several advantages over the Hanford West Bypass Option (HW Option): (1) the alignment avoids the existing Laton Community as well as an area designated by that community for future growth; (2) the alignment is more than a quarter of a mile farther away from the existing Kingston Park, a potential 4(f) property; (3) the alignment is located farther from key existing roads (e.g., 13th Avenue), minimizing reconstruction of those roads; (4) the alignment impacts fewer acres of agricultural and natural resources (including wetlands) than other alignments considered; and (5) the alignment potentially affects fewer residential noise and vibration sensitive receptors, and is located farther from two existing schools than other alignments considered.

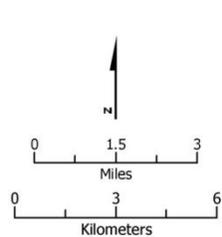
New Station Location

- **Add a new Hanford West station location to the current set of station locations (including the Hanford East Bypass location) to be evaluated in the Fresno to Bakersfield Revised DEIR/Supplemental DEIS.** Of the two station location alternatives considered (one each north and south of SR-198), the location north of SR-198 is recommended because: (1) it affords the best opportunity for intermodal connections, including regional bus service, Amtrak service (via shuttle), and potential future commuter rail service utilizing the Cross-Valley Rail (SJVR); and (2) it provides the best opportunity for Transit Oriented Development, particularly due to its superior access to Downtown Hanford and Hanford's principal retail and office corridor (Lacey Boulevard). In the RDEIR/SDEIS and elsewhere, the station will be referred to as the "Hanford West Bypass Station."



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 Data source: URS, 2011

December 5, 2011



- | | |
|---|------------------------------|
| Alignment Alternatives | Station Location Alternative |
| Hanford West Bypass | Existing Railroad |
| Hanford East Bypass/
BNSF (DEIR/EIS) | River |
| | County Boundary |

Figure ES-1
 Recommended Alignment and Station Alternatives

Section 1.0
Supplemental Alternatives Analysis

1.0 Supplemental Alternatives Analysis

This December 2011 Fresno to Bakersfield Supplemental Alternatives Analysis (AA) Report updates the Preliminary AA Report that the California High-Speed Rail Authority (Authority) issued for the Fresno to Bakersfield High-Speed Train (HST) section in June 2010, as well as two Supplemental Alternatives Analysis Reports issued in September 2010 and May 2011. It presents documentation and analysis of a recommended new alignment and station location west of Hanford in Kings County. The previous AA reports served as the basis for the alternatives contained in the Fresno to Bakersfield Draft Environmental Impact Report / Environmental Impact Statement (DEIR/EIS) that was published in August 2011.

In response to stakeholder, agency, and public feedback on the high-speed train alignment that bypasses Hanford to the east, the Authority is re-introducing an alternative route that bypasses Hanford to the west, along with an alternative station location to serve the Kings/Tulare region on that portion of the Fresno to Bakersfield section. This alternative route – the Hanford West Bypass Alternative – was previously identified in the 2005 Statewide Program EIR/EIS; including this alternative is consistent with input from regulatory agencies. Potentially feasible alignments that pass west of Hanford have been studied in order to identify the most viable alignment and station location that both minimize environmental impacts and provide a feasible and cost-effective option for the Authority.

The alignment alternative and station location recommended in this Supplemental AA will be included in a Revised Draft Environmental Impact Report / Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS) that is expected to be ready for public release in the spring of 2012.

1.1 Community Outreach

Consistent with its ongoing policy of comprehensive community outreach, the Authority continued to meet with and receive input from a variety of community members and stakeholders regarding the Fresno to Bakersfield section of the High-Speed Train project, and the subject of this Supplemental Alternatives Analysis in particular. The Chair of the Kings County Board of Supervisors was contacted to request County involvement at the 11/17/11 Technical Working Group (TWG) meeting and the 11/21/11 discussion with Caltrans on SR-198/13th Avenue Interchange. Though Kings County staff did attend these meetings, they did not provide any input. City of Hanford staff provided a map and noted concerns during the TWG meeting. Meetings held after the decision to re-investigate alignments west of Hanford (October 5, 2011) include:

- 10/11/11 Fresno County Board of Supervisors
- 10/26/11 Fresno County Planning Department
- 10/26/11 Kings County Office of Education
- 10/26/11 Koinonia Christian Fellowship Church – Hanford
- 10/26/11 Hanford Joint Union High School District
- 10/26/11 College of the Sequoias - Hanford
- 10/27/11 Premier Collision Center – Hanford
- 11/2/11 Last Chance Ditch Company – Hanford
- 11/2/11 City of Visalia Assistant City Manager Mike Olmos
- 11/2/11 Pioneer Union Elementary School District*
- 11/2/11 Laton Community representatives
- 11/8/11 Golden State Feed and Grain – Hanford
- 11/9/11 Fresno County Supervisor Judy Case
- 11/15/11 Hanford City Council Study Session*
- 11/17/11 Technical Working Group Meeting – Hanford*
- 11/17/11 Public Information Meeting – Hanford*
- 11/21/11 Fresno County Public Works

- 11/21/11 Caltrans, City of Hanford, Kings CAG*
- 11/21/11 Laton Community Service District*
- 12/5/11 College of the Sequoias - Hanford

*Kings County Supervisor(s) or staff in attendance.

Particular attention was paid to noise, safety, and visual quality concerns raised by K-12 school districts and College of the Sequoias, as well as potential impacts on churches, residential areas, and dairy farms.

A description of the community outreach process and a list of meetings held before release of the Fresno to Bakersfield DEIR/EIS can be found in that document.

1.2 Alignment Alternatives

1.2.1 Alignment Alternatives Previously Considered

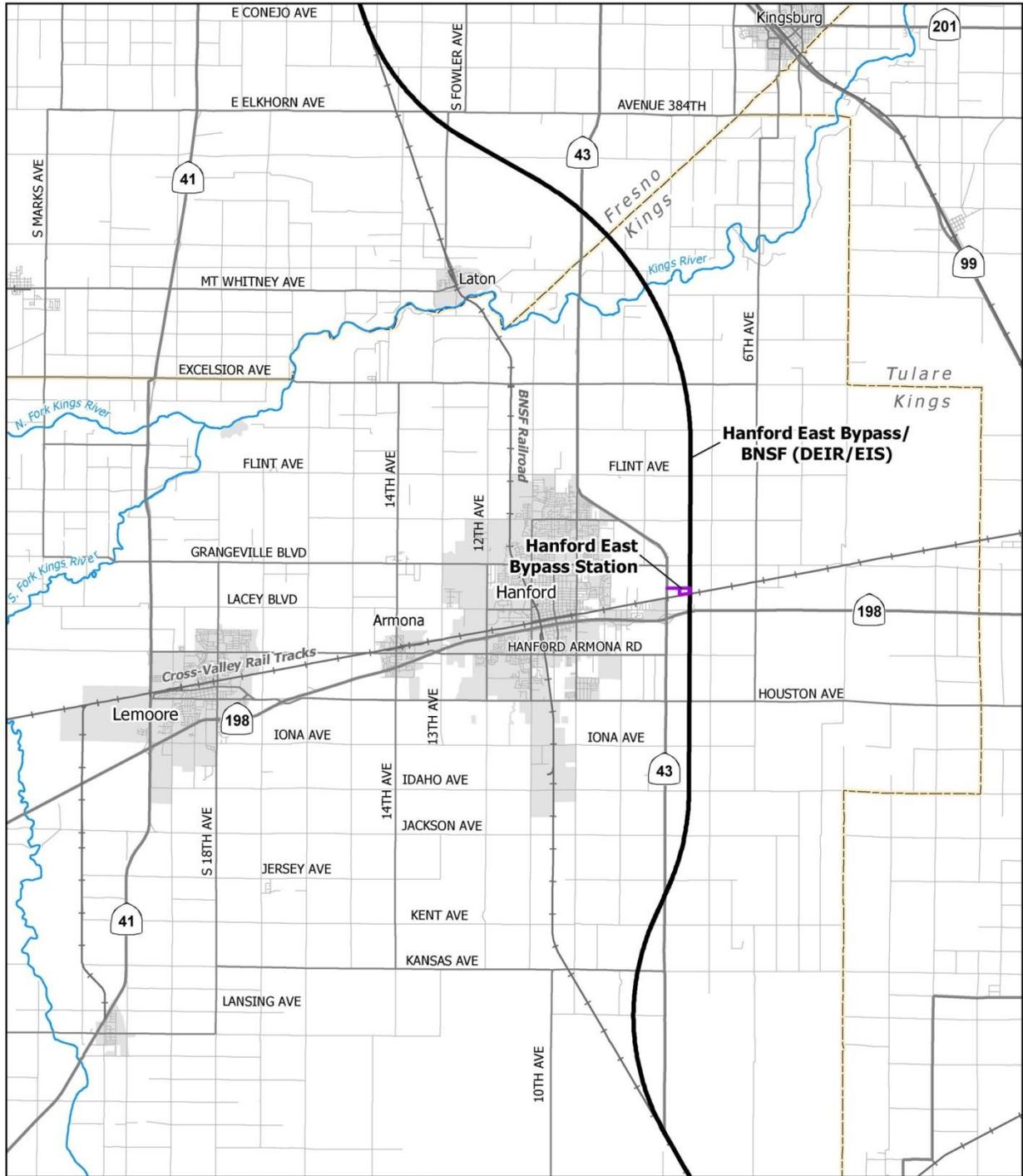
As described in the Fresno-Bakersfield Preliminary AA Report (June 2010), a single alignment alternative through Kings County east of Hanford (part of the BNSF Alternative) was selected for analysis in the Environmental Impact Report/Environmental Impact Statement (EIR/EIS) process (see **Figure 1-1**). This alignment generally paralleled the BNSF Railway south from the city of Fresno, departed from the BNSF corridor near the Fresno County community of Conejo, and passed to the east of Hanford before rejoining the BNSF right-of-way immediately north of the City of Corcoran. The alignment was seen as a variation of the Statewide Program EIR/EIS Preferred Alternative ("Programmatic Alternative"), which followed the BNSF Railway south through the community of Laton, after which it diverged to pass to the west of Hanford. It did not provide for a station in the Hanford area. Among other reasons, the east alignment was chosen over the west alternative to provide the best station location to serve the nearby San Joaquin Valley communities of Visalia, Tulare, and Hanford. The DEIR/EIS refers to the entire alignment between Fresno and Bakersfield that passes east of Hanford as the BNSF Alternative; this report refers to that portion of the BNSF Alternative within south Fresno County and Kings County as the Hanford East Bypass.

1.2.2 New Alignment Alternatives Considered

At the outset of this Supplemental Alternatives Analysis, general characteristics of the new Hanford West Bypass Alternative were defined as follows:

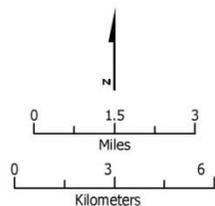
- Between Conejo and Corcoran, it remains adjacent to the BNSF Railway to the greatest extent possible.
- It runs primarily at-grade, though other profiles in the general area of SR-198 and the San Joaquin Valley Railroad (SJVR – Cross-Valley Rail) are possible.
- It has two variations at the south end to join with either the Corcoran C1 and C2 alignments (east side of BNSF) or the Corcoran C3 alignment (west side of BNSF).
- It is defined to minimize impacts on dairies, wetlands, other agricultural lands, housing, and community facilities, while providing a feasible, cost-effective option for the Authority.

Opportunities for alignments and station locations lying within an approximately three mile wide corridor were then identified (see **Figure 1-2**). The 2005 Programmatic Alternative, located at the eastern edge of this corridor, was briefly considered but not carried forward because, most importantly, it passes through two residential subdivisions constructed since the alignment was set in 2004, displacing approximately 100 homes. The 2005 Programmatic Alternative also (1) provides only one limited location for a station; (2) passes through the center of Laton, exacerbating the division of the community caused by the BNSF tracks; (3) passes directly through two operating dairy facilities and the Golden State Feed and Grain facility; and (4) passes immediately adjacent to the Kings Evangelical Free Church and Koinonia Church. The alignment was judged to be infeasible from the perspectives of impact and utility.



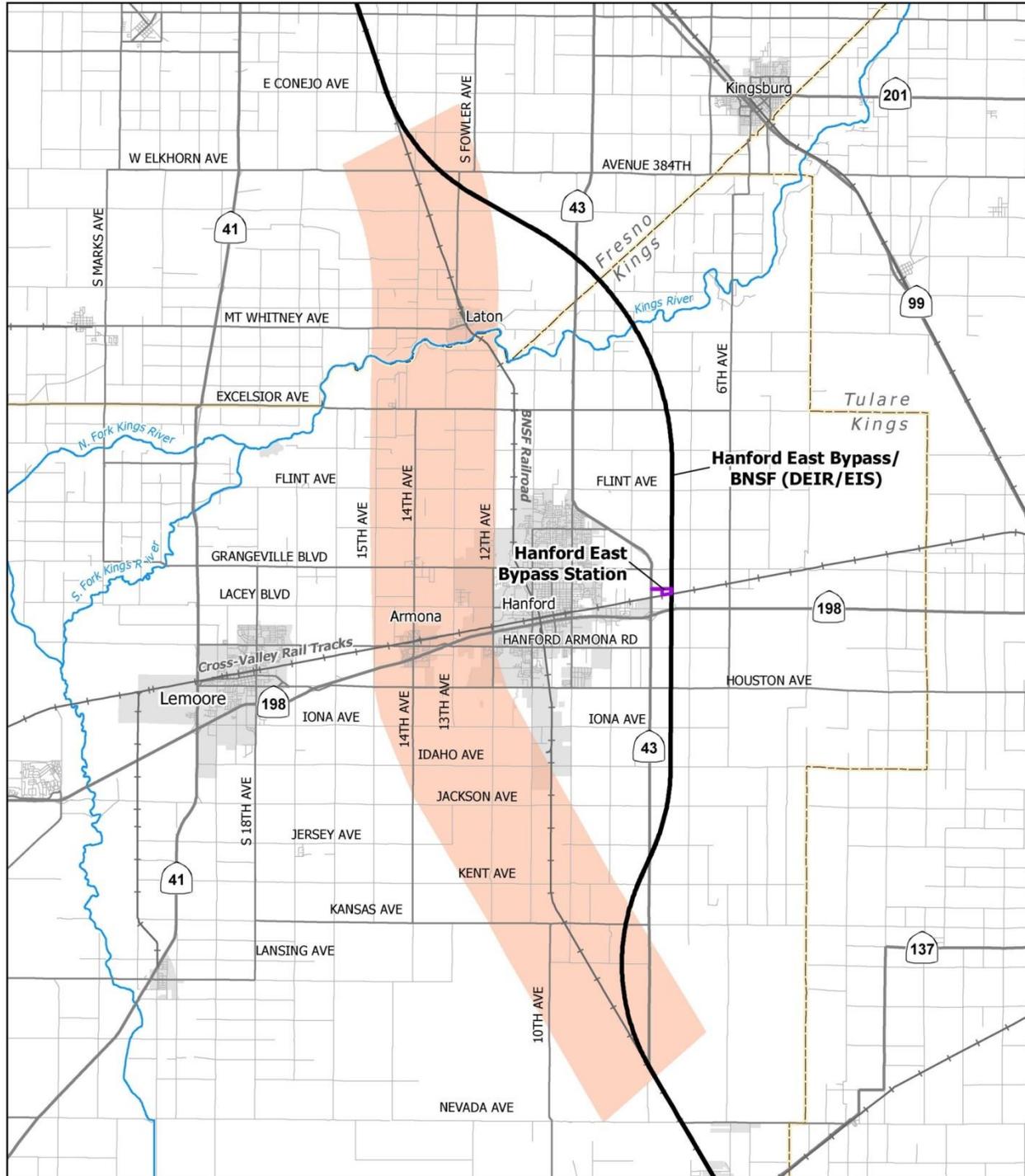
PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
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December 5, 2011



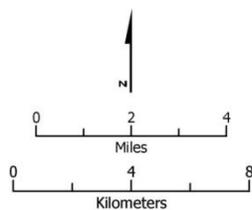
- Hanford East Bypass/
BNSF (DEIR/EIS)
- Station Location Alternative
- Existing Railroad
- River
- County Boundary

Figure 1-1
 Hanford East Bypass/BNSF (DEIR/EIS) Alternative



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
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December 5, 2011



- Hanford East Bypass/
BNSF (DEIR/EIS)
- Station Location Alternative
- Hanford West Bypass
Study Corridor
- Existing Railroad
- River
- County Boundary

Figure 1-2
 Hanford West Bypass Study Corridor

Alignments in the western portion of the corridor (west of Armona) were also considered but found to be infeasible, given that they (1) would deviate too far from the BNSF transportation corridor; (2) would not support a station location within or near the Hanford urban area; and (3) would have greater impacts on agricultural lands than other alternatives considered.

Potential alignments in the center of the three-mile corridor were then considered. Two alignment alternatives were defined (see **Figure 1-3**): the Hanford West Bypass (HW) and the Hanford West Bypass Option (HW Option). Note that the HW Option alignment is identical with the HW alignment from Lacey Boulevard south to Corcoran. The two alternatives differ, therefore, only north of Lacey Boulevard.

1.2.3 Evaluation of New Alignment Alternatives Considered

The Preliminary AA Report used the five categories of evaluation measures established by the Authority for review of alternatives throughout the entire HST system. This same set of measures was used to compare the HW and HW Option Alignment Alternatives. **Table 1-1** summarizes the comparison of these two alternatives. Note that the alternatives were compared using their full lengths from Conejo to Corcoran.

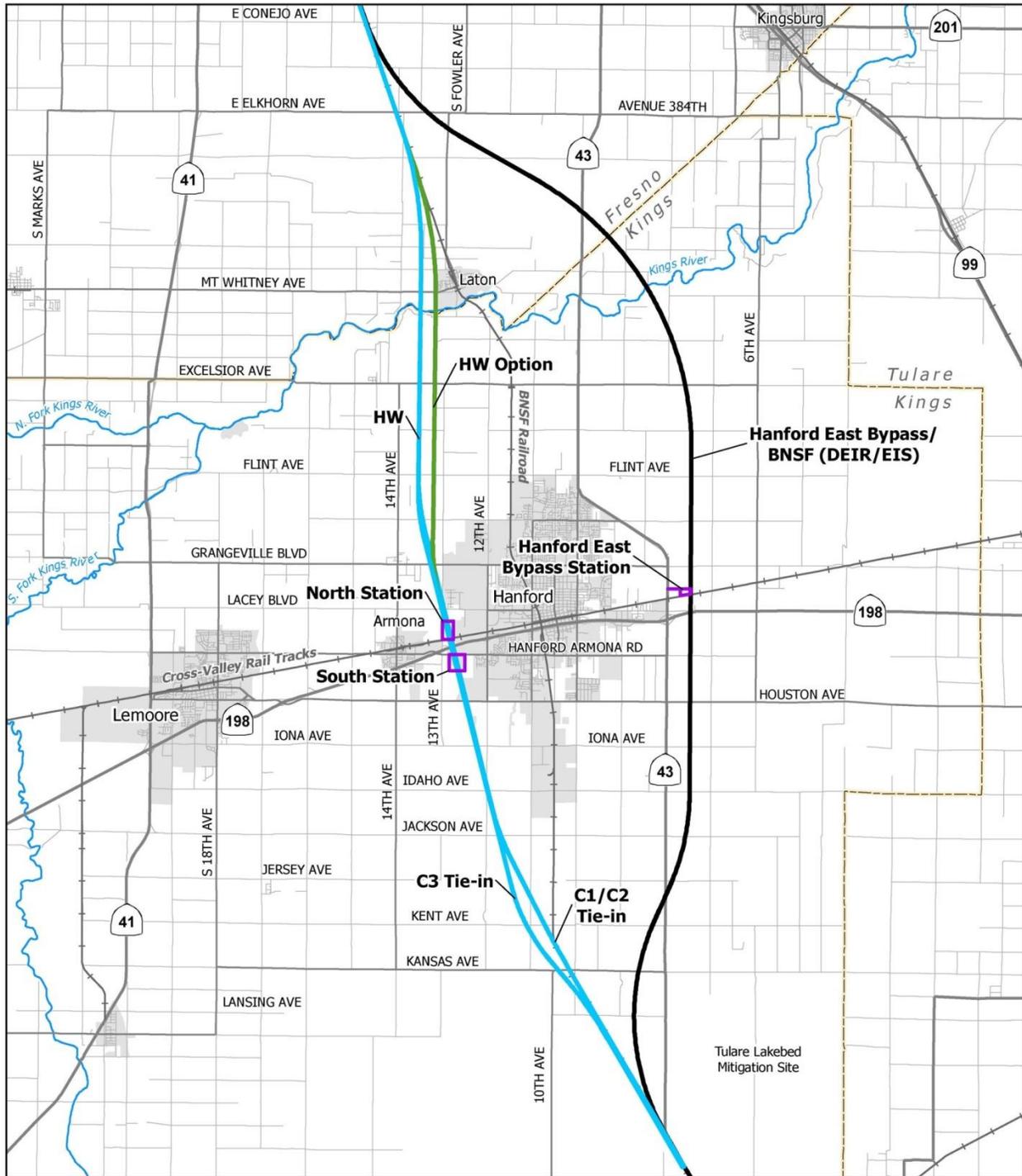
While the two alternatives were found to be similar in many respects, the evaluation of the HW and HW Option Alternatives revealed a number of discriminators that favor the HW Alternative, including the following:

- The HW Alternative avoids an area designated by the Laton Community for future growth.
- The HW Alternative is more than a quarter of a mile farther away from the existing Kingston Park, a potential 4(f) property. The HW Option Alternative lies within 100 feet of that park.
- Between the Kings River and Lacey Boulevard, the HW Option alignment is located closer to 13th Avenue than the HW alignment and would require more substantial reconstruction of 13th Avenue due to the roadway grade separations required to protect the HST tracks.
- The HW Alternative would impact fewer acres of agricultural and natural resources (including wetlands), as well as three fewer residential parcels.
- The HW Alternative would affect fewer residential noise and vibration sensitive receptors, and would be located farther from two existing schools.

Therefore, based on the information developed and presented in **Table 1-1**, it is recommended that only the Hanford West Alternative (HW) be carried forward for impact analysis and inclusion in the RDEIR/SDEIS.

1.2.4 Profile Options for Alignment Alternatives Considered

As mentioned under Section 1.2.2, the HW and HW Option Alternatives would be largely at-grade. Locations where an elevated profile would be necessary are (1) the Kings River crossing and (2) the BNSF Railway crossing between Kent and Kansas Avenues (to match the C1 and C2 Corcoran Alternatives). The HST profile near the San Joaquin Valley Railroad (SJVR) and SR-198 crossings will be an at-grade alignment with the appropriate undercrossings or overcrossings of local roads, SJVR, and SR-198.



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 Data source: URS, 2011

December 5, 2011

- Hanford West Bypass (HW)
- Hanford West Bypass Option (HW Option)
- Hanford East Bypass/BNSF (DEIR/EIS)
- Station Location Alternative
- Existing Railroad
- ~ River
- County Boundary

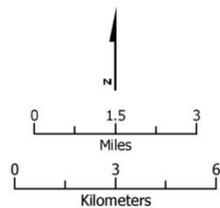


Figure 1-3
 Alignment Alternatives Considered

Table 1-1: Comparative Evaluation of HW and HW Option Alignment Alternatives

- Superior Results Shown in **Bold**
- Equal or Similar Results Shown with Underline

Category/Measure	HW Hanford West	HW Option Hanford West Option
General	<ul style="list-style-type: none"> ▪ Where parallel, the alignments are 1/3 mile apart. ▪ Alternatives are identical south of Lacey Boulevard. ▪ Each alternative has two variations for connecting to the Corcoran options. 	
1. Disruption to Communities <ul style="list-style-type: none"> ▪ ROW Acquisition/ Displacement (Parcels crossed/acres affected) ▪ Properties with access affected ▪ Local traffic effects around stations ▪ Local traffic effects at grade separations 	<ul style="list-style-type: none"> ▪ Avoids Laton future growth area ▪ Passes adjacent to or through existing rural subdivision (north of SR-198). ▪ Acquisition/Displacement: 97 agricultural parcels (382.1 acres) 11 residential parcels (7.3 acres) <u>1</u> commercial parcels (7.3 acres) <u>2</u> industrial parcels (1.2 acres) ▪ Grade separations between Kings River and Grangeville have less impact on 13th Avenue. ▪ No distinct differences in property access. ▪ Local traffic effects around stations described in Table 1-2. 	<ul style="list-style-type: none"> ▪ <u>Passes through</u> Laton future growth area ▪ Passes adjacent to or through existing rural subdivision (north of SR-198). ▪ Acquisition/Displacement: 101 agricultural parcels (381.9 acres) 14 residential parcels (11.7 acres) <u>1</u> commercial parcel (3.3 acres) <u>2</u> industrial parcels (1.0 acres) ▪ Grade separations between Kings River and Grangeville have greater impact on 13th Avenue. ▪ No distinct differences in property access. ▪ Local traffic effects around stations described in Table 1-2.
2. Design Objectives <ul style="list-style-type: none"> ▪ Travel time (220 mph) ▪ Route length ▪ Intermodal connections ▪ Capital costs ▪ Operating costs ▪ Maintenance costs 	<ul style="list-style-type: none"> ▪ The two alternatives are virtually identical at this level of analysis. 	
3. Land Use <ul style="list-style-type: none"> ▪ Potential for Transit-Oriented Development (TOD) ▪ Consistency with other planning efforts 	<ul style="list-style-type: none"> ▪ See Table 1-2 for comparison of station alternatives. 	
4. Constructability <ul style="list-style-type: none"> ▪ Constructability ▪ Disruption to existing railroads ▪ Disruption to and relocation of utilities 	<ul style="list-style-type: none"> ▪ Limited and manageable disruption to existing railroads and utilities during construction. ▪ Crossings: <u>1</u> electric line <u>1</u> natural gas line 0 telecommunications lines 	<ul style="list-style-type: none"> ▪ Limited and manageable disruption to existing railroads and utilities during construction. ▪ Crossings: <u>1</u> electric line <u>1</u> natural gas line 1 telecommunications line

Table 1-1: Comparative Evaluation of HW and HW Option Alignment Alternatives

- Superior Results Shown in **Bold**
- Equal or Similar Results Shown with Underline

Category/Measure	HW Hanford West	HW Option Hanford West Option
<p>5. Environmental Resources</p> <ul style="list-style-type: none"> ▪ Waterways/Sensitive Habitat Areas ▪ Cultural Resources ▪ Parklands ▪ Agricultural lands ▪ Noise and vibration ▪ Visual/scenic resources ▪ Geotechnical constraints ▪ Hazardous materials 	<ul style="list-style-type: none"> ▪ Crosses 32 waterways: Cross Creek Kings River Last Chance Ditch Melga Canal Murphy Slough West Branch Lakeland Canal 26 unnamed ▪ Crosses 2.2 ac of wetland habitat: No vernal pools Emergent Wetland: 0.0 ac Forested/Shrub Wetland 1.1 ac Ponds: <u>0.5</u> ac Riverine habitat: 0.6 ac ▪ Impacts 17.0 acres of Kit Fox habitat ▪ No impacts to National Register of Historic Places-listed or CHRIS database properties. ▪ 1 park within quarter-mile. ▪ Agricultural Lands: Farmland/Local Import: 4.0 ac Farmland/Statewide Import: 148.1 ac Prime Farmland: 181.7 ac Unique Farmland: 105.7 ac ▪ <u>No</u> dairy facilities (buildings) directly affected ▪ 47.7 ac of dairy lands affected ▪ 129 sensitive residential noise receptors within 700 feet in urban areas and 1,300 feet in suburban/rural areas ▪ 41 sensitive residential vibration receptors within 275 feet ▪ Farther from Pioneer Elementary School and Sierra Pacific High School 	<ul style="list-style-type: none"> ▪ Crosses 28 waterways: Cross Creek Kings River Last Chance Ditch Melga Canal Murphy Slough 23 unnamed ▪ Crosses 3.9 ac of wetland habitat: No vernal pools Emergent Wetland: 1.3 ac Forested/Shrub Wetland 1.4 ac Ponds: <u>0.5</u> ac Riverine habitat: 0.7 ac ▪ Impacts 16.8 acres of Kit Fox habitat ▪ No impacts to National Register of Historic Places-listed or CHRIS database properties. ▪ 1 park within <u>100 feet</u>. ▪ Agricultural Lands: Farmland/Local Import: 14.5 ac Farmland/Statewide Import: 126.0 ac Prime Farmland: 176.8 ac Unique Farmland: 120.6 ac ▪ <u>No</u> dairy facilities (buildings) directly affected ▪ 39.7 acres of dairy lands affected ▪ 245 sensitive residential noise receptors within 700 feet in urban areas and 1,300 feet in suburban/rural areas ▪ 95 sensitive residential vibration receptors within 275 feet ▪ Closer to Pioneer Elementary School and Sierra Pacific High School

Note: Quantified results reflect tabulations for the full length of the alignment alternatives from Conejo to Corcoran.

1.3 Station Location Alternatives

1.3.1 Station Location Alternatives Considered

Following evaluation of basic alignment alternatives, two potential alternative station locations were defined in the general vicinity of SR-198 and the SJVR:

- North – Located east of 13th Avenue and north of the SVJR, and
- South – Located east of 13th Avenue and south of SR-198.

These locations (depicted in **Figure 1-4**) were selected for comparison based on the following criteria:

- Accessibility for potential HST patrons;
- Compatibility with local plans and policies;
- Suitability for transit-oriented development (TOD) and future intermodal connections; and
- Minimization of adverse natural and socioeconomic impacts.

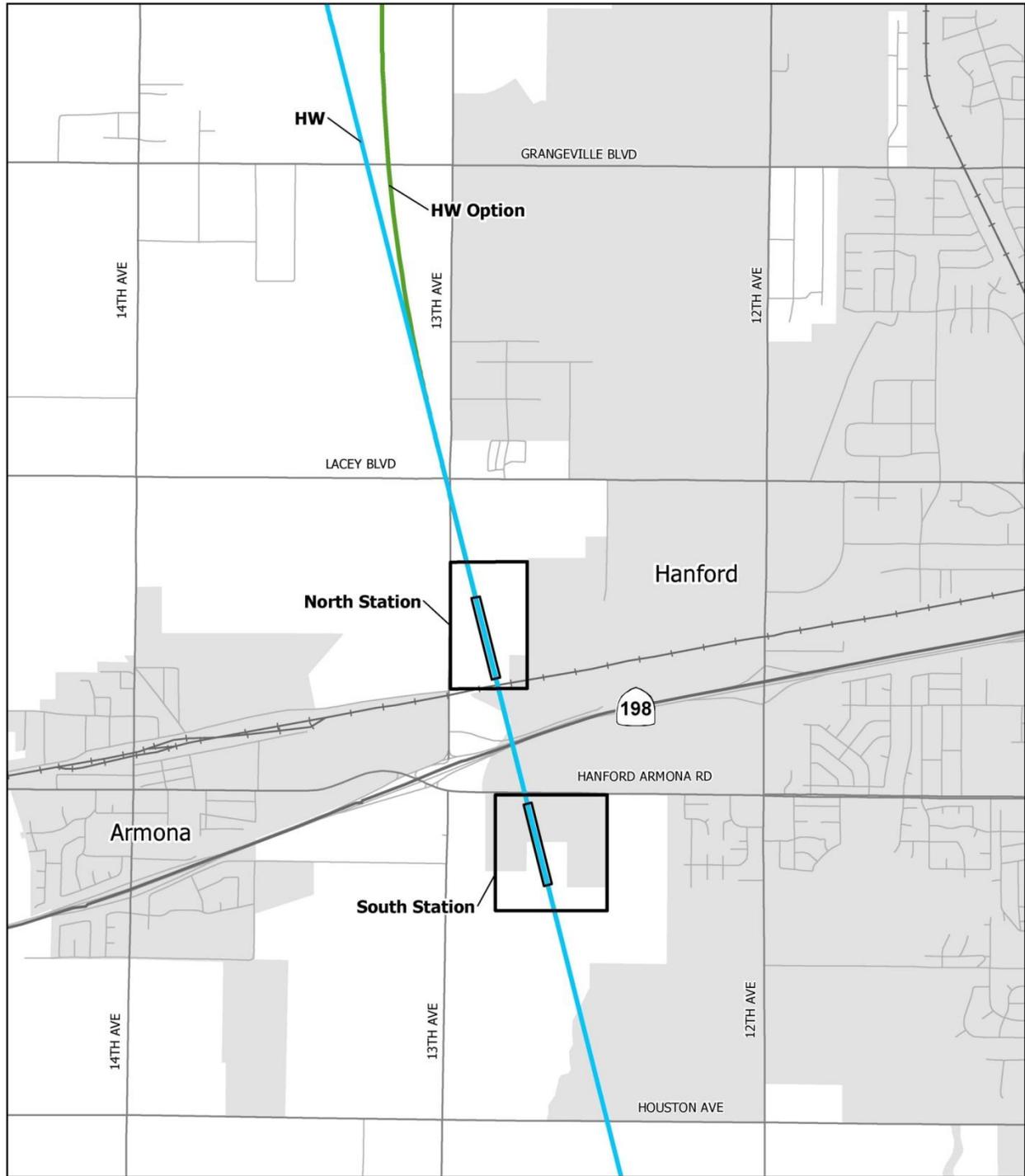
The station in this area would have the same general characteristics as other stations in the San Joaquin Valley, including station tracks for a distance of approximately 3,000 feet on either side of the station, platforms that would be at the same level as the tracks, and a terminal building and parking located at ground level.

1.3.2 Evaluation of Station Location Alternatives

The same set of measures used for the evaluation of the alignment alternatives was used to compare the two station location alternatives. **Table 1-2** summarizes the findings of a comparison of those two alternatives. As shown, the two station alternatives have a number of similar characteristics. On balance, however, the North location appears superior to the South location based on the following factors:

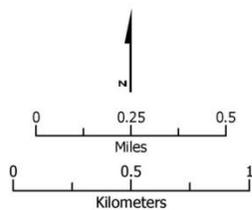
- The North location would afford the best opportunity for intermodal connections, including regional bus service, Amtrak service (via a shuttle to the Downtown Hanford station), and potential future commuter rail service utilizing the SJVR.
- The North location would also provide the best opportunity for TOD, particularly due to its superior access to Downtown and the City's principal retail and office corridor (Lacey Boulevard).

Therefore, based on the information developed and presented in **Table 1-2**, it is recommended that only the North station location be carried forward for impact analysis and inclusion in the RDEIR/SDEIS.



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Data source: URS, 2011

December 5, 2011



- | | | |
|-------------------------------|--|------------------------------|
| Alignment Alternatives | | Station Location Alternative |
| | Hanford West Bypass (HW) | Existing Railroad |
| | Hanford West Bypass Option (HW Option) | City Boundary |

Figure 1-4
 Station Location Alternatives Considered

Table 1-2: Comparative Evaluation of Station Location Alternatives

- Superior Results Shown in **Bold**
- Equal or Similar Results Shown with Underline

Category/Measure	HW North	HW South
<p>1. Disruption to Communities</p> <ul style="list-style-type: none"> ▪ ROW Acquisition/ Displacement (Parcels crossed/acres affected) ▪ Properties with access affected ▪ Local traffic effects around stations ▪ Local traffic effects at grade separations 	<ul style="list-style-type: none"> ▪ <u>Similar displacement</u> of agricultural production and processing. ▪ <u>Similar impact on local traffic</u>, particularly along Lacey Blvd. ▪ <u>Good regional traffic access</u> from SR-198 via 13th Ave. 	<ul style="list-style-type: none"> ▪ <u>Similar displacement</u> of agricultural production and processing. ▪ <u>Similar impact on local traffic</u> along Hanford-Armona Rd. ▪ <u>Good regional traffic access</u> from SR-198 via 13th Ave/Hanford Armona Rd.
<p>2. Design Objectives</p> <ul style="list-style-type: none"> ▪ Travel time (220 mph) ▪ Route length ▪ Intermodal connections ▪ Capital costs ▪ Operating costs ▪ Maintenance costs 	<ul style="list-style-type: none"> ▪ Best opportunity for regional intermodal connections (bus and rail). Direct connection with potential future commuter service on SJVR possible. ▪ Best opportunity for convenient shuttle connection with Amtrak station (via Lacey Blvd). 	<ul style="list-style-type: none"> ▪ Good opportunity for regional intermodal connections (bus and rail). Connection with potential future commuter service on SJVR would require shuttle. ▪ Good opportunity for shuttle connection with Amtrak station (via 12th Ave and Hanford-Armona Rd).
<p>3. Land Use</p> <ul style="list-style-type: none"> ▪ Potential for Transit-Oriented Development (TOD) ▪ Consistency with other planning efforts 	<ul style="list-style-type: none"> ▪ Best opportunity for TOD based on proximity to Hanford’s most intensive retail and office corridor (Lacey Blvd) and barrier-free relationship to Downtown. ▪ Mostly outside of current city limits, but enveloped by them to the north, east, and south. 	<ul style="list-style-type: none"> ▪ Limited opportunity for TOD based on (1) separation from Downtown and City’s retail and office corridor by SR-198 and SJVR and (2) proximity to existing low-density residential neighborhoods to the east. ▪ Partially within current city limits (northern edge of potential station campus).
<p>4. Constructability</p> <ul style="list-style-type: none"> ▪ Constructability ▪ Disruption to existing railroads ▪ Disruption to and relocation of utilities 	<ul style="list-style-type: none"> ▪ <u>No significant constructability issues.</u> ▪ <u>Good access to existing and planned utilities.</u> 	<ul style="list-style-type: none"> ▪ <u>No significant constructability issues.</u> ▪ <u>Good access to existing and planned utilities.</u>
<p>5. Environmental Resources</p> <ul style="list-style-type: none"> ▪ Waterways/Sensitive Habitat Areas ▪ Cultural Resources ▪ Parklands ▪ Agricultural lands ▪ Noise and vibration ▪ Visual/scenic resources ▪ Geotechnical constraints ▪ Hazardous materials 	<ul style="list-style-type: none"> ▪ <u>Similar displacement</u> of agricultural production, although land is proposed for conversion to urban uses. ▪ <u>No other impacts</u> noted at this level of analysis. 	<ul style="list-style-type: none"> ▪ <u>Similar displacement</u> of agricultural production, although land is proposed for conversion to urban uses. ▪ <u>No other impacts</u> noted at this level of analysis.

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Section 2.0

Recommendations

2.0 Recommendations

In light of the findings presented in Section 1.0 of this report, staff makes the following recommendations to the Board. The recommendations are reflected in **Figure 2-1**.

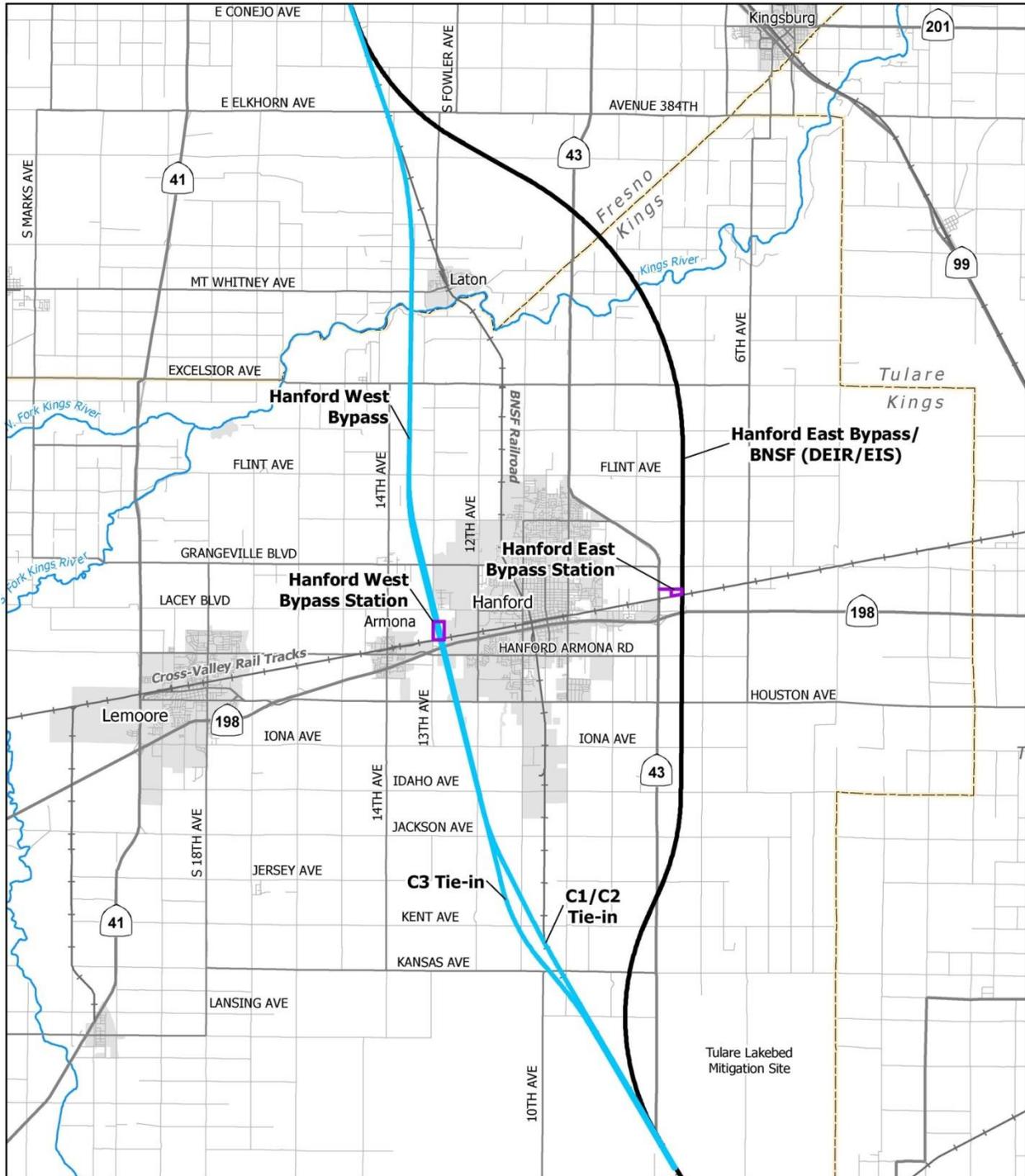
2.1 Alignment Alternatives

- Add the Hanford West Bypass Alternative (HW) to the current set of alignment alternatives (including the current Hanford East Bypass Alternative) to be evaluated in the Fresno to Bakersfield RDEIR/SDEIS, but do not carry forward the Hanford West Bypass Option Alternative (HW Option). The principal reasons are:
 - The HW Alternative avoids an area west of the Laton Community that is designated for future growth.
 - The HW Alternative is more than a quarter of a mile farther away from the existing Kingston Park, a potential 4(f) property. The HW Option Alternative lies within 100 feet of that park.
 - The HW Option alignment would require more substantial reconstruction of 13th Avenue due to roadway grade separations.
 - The HW Alternative would impact fewer acres of agricultural and natural resources (including wetlands).
 - The HW Alternative would affect fewer sensitive residential noise and vibration receptors and would lie farther from two existing schools.

2.2 Station Location Alternatives

- Add the North station location alternative to the current set of station locations (including the Hanford Bypass East location) to be evaluated in the Fresno to Bakersfield RDEIR/SDEIS, but do not carry forward the South station location. The principal reasons are:
 - The North location would afford the best opportunity for intermodal connections to regional bus service, Amtrak, and potential future commuter rail service on the SJVR.
 - The North location would provide the best opportunity for TOD.

In the RDEIR/SDEIS and elsewhere, the station will be referred to as the “Hanford West Bypass Station.”



PRELIMINARY DRAFT/SUBJECT TO CHANGE - HST ALIGNMENT IS NOT DETERMINED
 Data source: URS, 2011

December 5, 2011

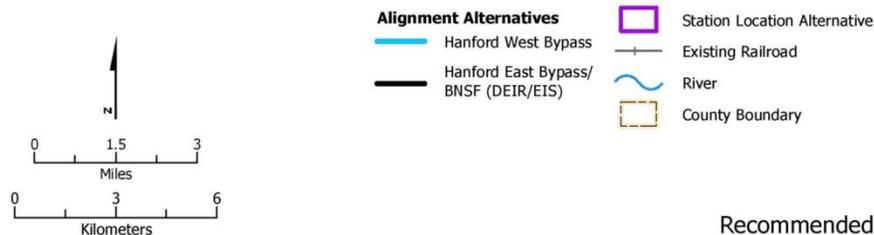


Figure 2-1
 Recommended Alignment and Station Alternatives