

1 of Idaho. We evaluated crossing accidents, railroad and highway geometrics, existing traffic
2 control devices, and developed projects to implement safety enhancements at various
3 crossings in our district. While the projects were being constructed, we administered the
4 contract. Once the project was completed, we continued to review accidents to evaluate
5 benefits captured by the project.

6 **Q. DID UNION PACIFIC ASK YOU TO LOOK AT THE CITY OF KENNEWICK'S**
7 **PROPOSED EXTENSION OF CENTER PARKWAY ACROSS UP'S TRACKS IN**
8 **RICHLAND JCT?**

9 Yes, I was asked to review the testimony and exhibits submitted by the city of
10 Kennewick in support of its request for an extension of Center Parkway across UP's
11 tracks. In particular, I was asked to scrutinize the necessity for the proposed crossing, to
12 review the city's design for the crossing, and to evaluate and comment on the
13 practicability of constructing a grade separation at this location. Together with other
14 members of my firm, I have reviewed the city of Kennewick's petition to the WUTC for
15 the crossing, the written prepared testimony of witnesses on behalf of the city, the N.
16 Center Parkway Extension Design Report of SCM Consultants, Inc., and various other
17 documents furnished by the city of Kennewick to Union Pacific Railroad Company. I
18 consulted with others at HNTB on this project, including Gary Gushwa, (railroad design
19 engineer), David Rosen, (civil engineer) and Randall Hammond, P.E., (traffic engineer),
20 who made a site visit to the crossing and vicinity on October 19 to 21, 2005 to observe
21 railroad operations on UP's tracks and the nearby tracks of the Port of Benton, and
22 measure travel times over current and proposed routes.

23 **Q. HAS YOUR FIRM REACHED ANY CONCLUSIONS ABOUT THE NECESSITY**
24 **FOR AND IMPACTS OF THE PROPOSED EXTENSION OF CENTER**
25 **PARKWAY ACROSS UP'S TRACKS?**

26 Yes, our analysis of the city of Kennewick's proposed roadway extension and its

1 impact on railroad operations is detailed in the attached report, but my conclusions are as
2 follows. First, it is my opinion that the traffic evidence presented by the city is inadequate
3 to justify any substantial need for this crossing. Second, the city's conceptual design for
4 improvements at the proposed crossing, by ignoring the presence of four railroad tracks,
5 does not address serious design and safety defects with constructing a road over the
6 existing rails. Third, although the city has claimed that it considered safety when making
7 its proposal, there is no quantitative data supplied to substantiate the safety of the city's
8 proposal; to the contrary, I find that this proposal is less safe than the status quo. Finally,
9 the city's contention that a grade separation is not feasible is not supported by the facts.
10 My testimony will demonstrate that a grade separation would not necessarily cost more
11 than the total costs of realigning and reconstructing tracks and installing signals to
12 accommodate a grade crossing at this location.

13 **Q. COULD YOU SUMMARIZE YOUR CONCLUSIONS ABOUT THE LACK OF**
14 **NECESSITY OF THE ROAD EXTENSION?**

15 It is my conclusion that the roadway extension would not reduce travel time for
16 existing motorists. Most particularly, it would not, as alleged by the city, save any time
17 for motorists traveling between Hwy 240 and the commercial area south of the railroad
18 tracks. Our analysis of trip origins and destinations shows that the road extension would
19 be of most use and benefit to a business park in Richland that has not yet been built.
20 Even for such future users, the roadway's usefulness and utility will be diminished by
21 because of the uneven roadway surface created in crossing four sets of tracks of different
22 elevations and blockages of the road during railroad switching operations.

23 **Q. PLEASE ELABORATE ON THE ROADWAY SURFACE ISSUES.**

24 The two UP tracks and the two Port of Benton tracks are all at different
25 elevations. The Port's tracks are on a curve and super-elevated. Extending Center
26 Parkway without changing the elevation of the four railroad tracks would result in six up,

1 then down changes of grade across the four tracks, creating a very uneven roadway
2 surface, and violating several roadway engineering standards. There is over a four-foot
3 difference in elevation between the closest UP and Port of Benton tracks, creating over a
4 9% grade between the two. A 7% grade is the maximum allowed for urban arterial streets
5 by Washington State Department of Transportation.

6 If the elevation of the tracks were changed to conform to the city's proposed road
7 profile, the UP tracks would need to be lowered three to four feet. Because the tracks are
8 already on a grade and cannot exceed a 0.5% slope, the lowering of UP's tracks would
9 need to extend all the way to the end of the track near Steptoe Street. A four-foot
10 depression of the tracks would put them beneath the current subgrade, essentially
11 requiring that they be completely rebuilt. The cost would be substantial. In addition,
12 putting the tracks in a trench would introduce drainage problems or floodplain issues.

13 **Q. WHAT ARE THE SAFETY ISSUES POSED BY THIS CROSSING?**

14 While the risk of railroad/vehicle accidents is low, assuming that signals, lights,
15 gates and raised medians are installed, the risk is higher than with no crossing. Whenever
16 there is a mixing of railroad and vehicular traffic there is added risk of severe crashes that
17 result in injury or fatalities. The creation of any added risk is inappropriate in
18 circumstances where there appears to be no time savings associated with the proposed
19 crossing for most travel routes, the public benefit of the Center Parkway extension is
20 questionable, and the detriment to railroad operations is clear.

21 **Q. DO YOU CONCUR IN THE CITY'S ASSERTION THAT A GRADE
22 SEPARATED STRUCTURE IS NOT FEASIBLE?**

23 The City Design Report dismissed a possible overcrossing alternative based on
24 qualitative analysis. We believe an undercrossing would be feasible. It would be
25 expensive, but not necessarily more expensive than lowering UP's tracks 3-4 feet for a
26

1 distance of 3000 feet. An underpass would, however, cut off access to Center Parkway
2 from the Holiday Inn Express.

3 **Q. BRIEFLY DESCRIBE THE BENEFITS OF A GRADE SEPARATION.**

4 There would be enormous public safety benefits because you would eliminate
5 entirely the potential for a collision involving a train. You also avoid the potential for
6 crossing blockages and for people climbing through a stopped train. In addition you avoid
7 the need to blow the train whistle in a residential neighborhood, in the event the city is
8 unable to secure FRA approval for the quiet zone that it seeks. The city would avoid the
9 crossing signals and gates at the UP and Port tracks. Congestion on Columbia Center
10 Boulevard and Steptoe Street would be alleviated by a north/south arterial underpass.
11 Pedestrians would have a safe access across the tracks.

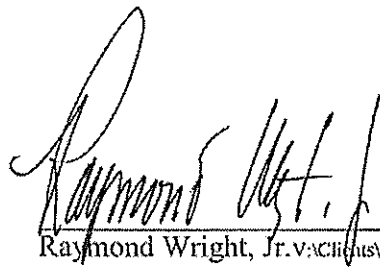
12 **Q. IN YOUR OPINION, DOES THE PUBLIC NECESSITY AND CONVENIENCE**
13 **REQUIRE AN AT-GRADE CROSSING OF CENTER PARKWAY ACROSS THE**
14 **TRACKS OF UP AND THE PORT OF BENTON?**

15 No. The benefit to the public that would be added by this additional north/south
16 route is minor. It is more than offset by the enormous financial costs to signalize the
17 crossings and rebuild tracks to make the road usable, by the loss to the railroad of use of
18 its tracks and by the safety issues presented by a new intersection between motor
19 vehicles, pedestrians and trains.

20 **DECLARATION**

21 I, Raymond Wright, Jr., declare under penalty of perjury under the laws of the State of
22 Washington that the foregoing TESTIMONY OF RAYMOND WRIGHT, JR., P.E., is true and
23 correct to the best of my knowledge and belief.

1 DATED this 7th day of November, 2005.

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5 Raymond Wright, Jr. v. ACI/hts/UPRR/Kennewick/Pleadings/Wright

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1 CERTIFICATE OF SERVICE

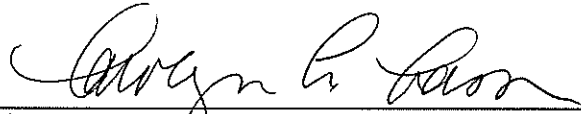
2 I certify that on this 7th day of November, 2005, the foregoing TESTIMONY OF
3 RAYMOND WRIGHT, JR., P.E. was served ELECTRONICALLY on the following persons at
4 the following email addresses:

5
6 Commission Records Center – records@wutc.wa.gov

7 Karen Caille - kcaille@wutc.wa.gov

8 Jonathan Thompson – jthompson@wutc.wa.gov

9 John Ziobro - john.ziobro@ci.kennewick.wa.us

10
11 

12 Carolyn L. Larson, OSB No. 77045 WSBA 29016
13 Of Attorneys for Respondent