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Railroad Grade Crossing Quiet Zone Assessment

DRAFT REPORT



FELSBURG
HOLT &
ULLEVIG



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I. INTRODUCTION

Felsburg Holt and Ullevig (FHU) was contracted by the City of Boulder to complete a railroad grade crossing quiet zone assessment and recommend improvements at 9 highway-rail grade crossings located within the City of Boulder, Colorado. This Railroad Grade Crossing Quiet Zone Assessment will review and evaluate these crossings of the BNSF Railway to determine possible improvements for quiet zone that satisfy the minimum Federal Railroad Administration (FRA) requirements to establish a railroad Quiet Zone, as stated in the *Final Rule on the Use of Locomotive Horns at Highway-Rail Grade Crossings*, as amended on August 17, 2006.

The analyses of the proposed improvements are addressed in the following sections within this report:

- Existing Conditions
- Quiet Zone Requirements
- Development of Quiet Zone Improvements
- Evaluation of Quiet Zone Concept Improvements
- Implementation Plan

The crossings that are the subject of this study are along the BNSF Railway corridor beginning at North 63rd Street running generally southwest through the crossing at Pearl Parkway, then following the line east to 63rd Street on the south end. This portion includes 9 crossings as follows:

- 63rd Street
- 55th Street
- Jay Road
- Independence Road
- 47th Street
- Valmont Road
- Pearl Parkway
- 55th Street (South)
- 63rd Street (South)

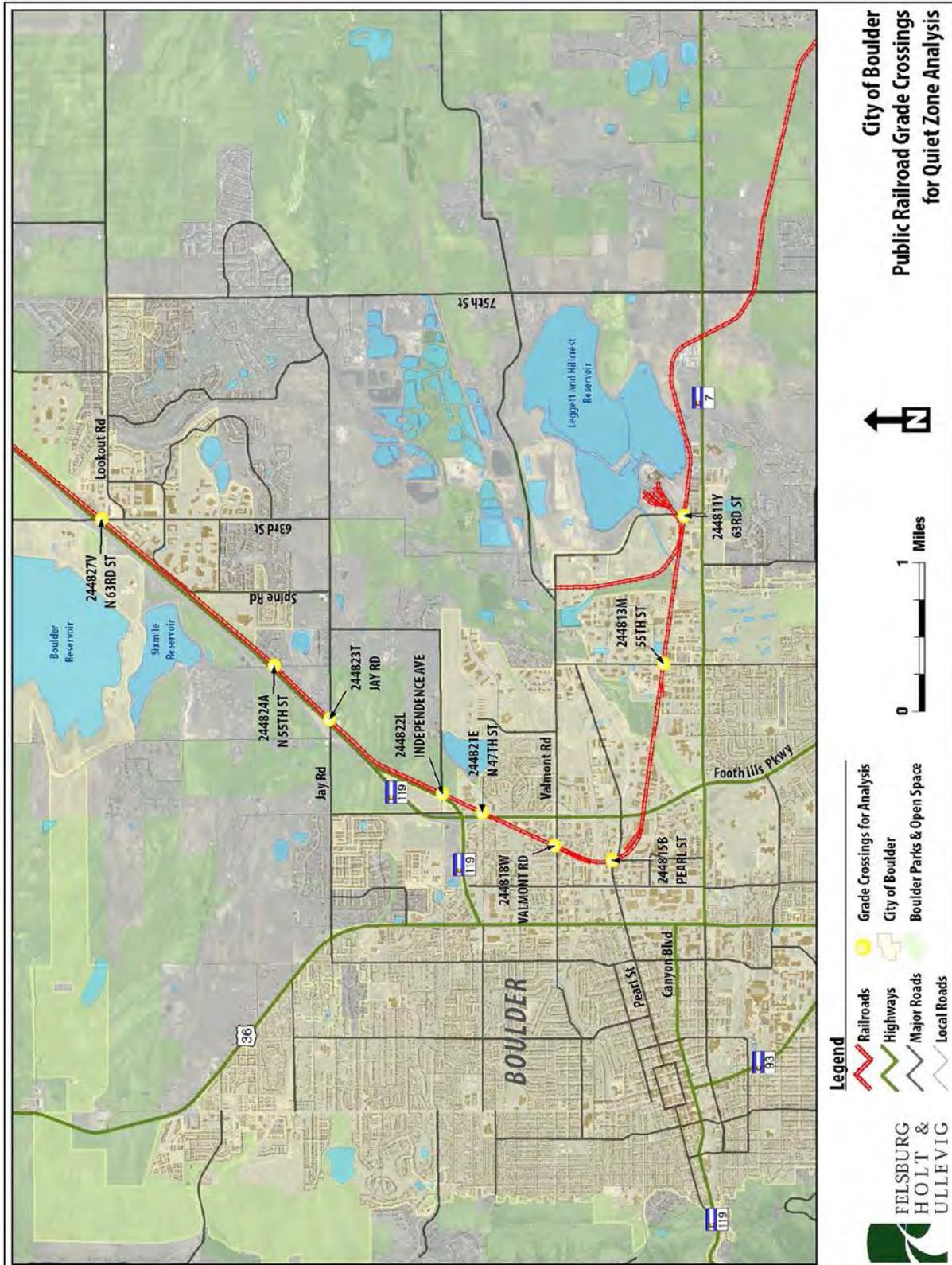
It is noted that these crossings are within the corridor identified by the Regional Transportation District (RTD) as the Northwest Rail Corridor, and were evaluated as part of that effort. For information regarding the evaluation conducted by RTD, the reader is referenced to the RTD Northwest Rail Corridor Final Environmental Evaluation, May 2010.

It is also noted that 3 of the above listed crossings: 55th Street, Jay Road and Independence Road, are also being reviewed by Boulder County for quiet zone establishment.

The City is seeking input regarding recommended improvements for these 9 crossings, and this report will identify logical groups of crossings for quiet zone establishment.

The study corridor, indicating the limits of the study area along with the 9 at-grade railroad crossings located within the study area, are shown in **Figure 1**.

Figure 1. Railroad Quiet Zone Study Area



II. EXISTING CONDITIONS

The BNSF runs as many as 9 thru trains per day and 9 thru trains at night along this track, with a maximum train speed of 49 MPH through the corridor. All of the crossings along this corridor have active railroad crossing warning devices. Many of the crossings have been upgraded to Constant Warning Time (CWT) circuitry, per the current U.S. DOT Crossing Inventory forms. Several crossings are likely to have CWT circuitry, but it is not reflected on the current Crossing Inventory form. Ultimately, railroad confirmation of circuitry will be needed for design. The U.S. DOT Crossing Inventory forms for each crossing can be found in **Appendix A**.

A. Data Collection

Base study information for this railroad corridor was obtained from the Federal Railroad Administration (FRA) Crossing Inventory database, which include current train movements, average train speed, crossing warning devices in place, crossing circuitry and documented incident reports. Current traffic counts were also available from Boulder County for the crossings being studied by both agencies.

B. Highway-Rail Grade Crossings

Table 1 summarizes the existing conditions present at each of the highway-railroad crossings within the study area, including crossing and equipment information. The highway-rail crossings are listed from north to south along the BNSF Line from North 63rd Street through 63rd Street on the south end.

In addition to the roadway name, the Department of Transportation (DOT) identification number is provided, along with the type of circuitry identified in the FRA Crossing Inventory Reports, and whether or not the crossing is currently equipped with gates and railroad flashing lights.

Table 1. Existing Crossing Conditions

BNSF Crossings in Study	DOT #	MP	Active Devices	Circuitry	ADT
North 63rd Street	244827V	35.29	Gates/ Flashers	DC ⁽²⁾	1,700
55th Street (north end)	244824A	33.77	Gates/ Flashers	CWT	249 ⁽¹⁾
Jay Road	244823T	33.25	Gates / Flashers	CWT	12,833 ⁽¹⁾
Independence Road	244822L	32.33	Gates/ Flashers	CWT	5052 ⁽¹⁾
47th Street	244821E	32.04	Gates/ Flashers	CWT	1,000
Valmont Road	244818W	31.45	Gates/ Flashers	DC ⁽²⁾	7,500
Pearl Parkway	244815B	27.83	Gates/ Flashers	DC ⁽²⁾	1,200
55th Street (south end)	244813M	26.38	Gates/ Flashers	DC ⁽²⁾	7,800
63rd Street (south end)	244811Y	25.37	Gates/ Flashers	CWT	1,700

(1) Traffic data is from more recent traffic counts conducted by Boulder County.

(2) Circuitry shown is as listed in the current FRA Inventory Report, but requires confirmation.

The following pages summarize the existing conditions at each railroad crossing along with surrounding land use. Number of residential units that may be affected by train horn noise may be included in the final report.

63rd Street Crossing Summary
US DOT Crossing #244827V
BNSF Main Line

The 63rd Street crossing is equipped with mast mounted flashers, gates, cross bucks and bells. One set of tracks are crossed. The roadway is configured to provide two lanes of travel in each direction, with an additional turn lane for the northbound direction. The section includes a raised median. The total roadway width is approximately 80'. Each direction has striped bike lanes, curb, gutter and sidewalks. The roadway surface is paved with hot mix asphalt. The speed limit on 63rd Street is 40 MPH. The picture shown in **Figure 2** is the current aerial view of the existing roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 2**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD, and also has railroad pavement markings on the south approach.

Fig. 2. 63rd Street

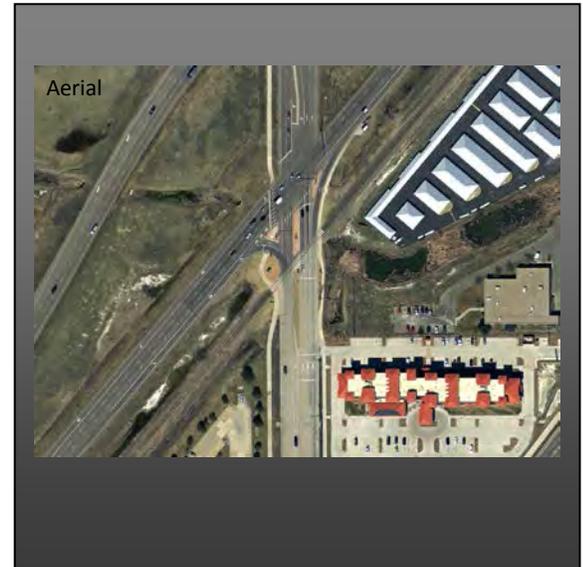


Table 2. 63rd Street Crossing Information

Adjacent Land Use	Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	1.01 miles
Current Warning Protection	Signs, flashers, gates
Train Detection	DC/AFO circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Rural/Major Collector /6,650 (1989)
# of Lanes	5
Exposure Factor = ADT x Trains per Day	18 x 6,650 = 119,700
Total Train/Vehicle Accidents (5 Years)	0

55th Street Crossing Summary
US DOT Crossing #244824A
BNSF Main Line

The 55th Street crossing is equipped with mast mounted flashers, cross bucks and bells. One set of tracks are crossed on a skew to the roadway. The roadway is configured to provide two lanes of travel for a total paved width of approximately 20'. Each direction has gravel shoulders along the outer edge of the roadway. The roadway surface is paved with hot mix asphalt. Posted speed limit on 55th Street is 30 MPH. The picture shown in **Figure 3** is the current existing aerial view of the roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 3**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD. This crossing does not have railroad pavement markings on either approach.

Fig. 3. 55th Street

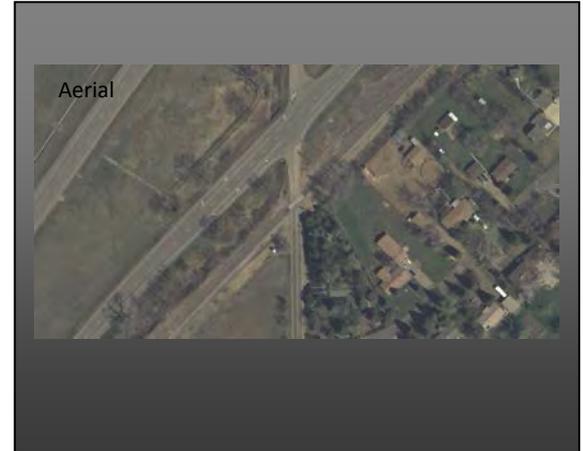


Table 3. 55th Street Crossing Information

Adjacent Land Use	Residential
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	0.45 miles
Current Warning Protection	Signs, flashers and gates
Train Detection	CWT circuitry
Crossing Material	Concrete
Roadway classification/ADT	Rural local/249 (2016)
# of Lanes	2
Exposure Factor = ADT x Trains per Day	18 x 249 = 4,482
Total Train/Vehicle Accidents (5 Years)	0

Jay Road Crossing Summary
US DOT Crossing #244823T
BNSF Main Line

The Jay Road crossing is equipped with mast mounted flashers, gates, cross bucks and bells. One set of tracks are crossed. The roadway is configured to provide three lanes of travel with two lanes in the westbound direction and one lane in the eastbound direction with a raised median for a total roadway width of approximately 53'. Each direction has 4' to 6' paved shoulders along the outer edge of the roadway. The roadway surface is paved with hot mix asphalt. Posted speed limit on Jay Road is 45 MPH. The picture shown in **Figure 4** is the current existing aerial view of the roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 4**.

Figure 4. Jay Road



This crossing is equipped with a minimum of one cross buck on each approach per MUTCD, and has railroad pavement markings on the east approach.

Table 4. Jay Road Crossing Information

Adjacent Land Use	Agricultural/Farming
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	0.52 miles
Current Warning Protection	Signs, flashers and gates
Train Detection	CWT circuitry
Crossing Material	Concrete
Roadway classification/ADT	Rural Minor Arterial/12,833 (2016)
# of Lanes	3
Exposure Factor = ADT x Trains per Day	18x 12,833 = 230,994
Total Train/Vehicle Accidents (5 Years)	0

Independence Road Crossing Summary
US DOT Crossing #244822L
BNSF Main Line

The Independence Road crossing is equipped with mast mounted flashers, gates, cross bucks and bells. One set of tracks are crossed. The roadway is configured to provide two lanes of travel with narrow paved shoulders for a total roadway width of approximately 24'. The roadway surface is paved with hot mix asphalt. Posted speed limit on Independence Road is 35 MPH in the vicinity of the tracks. The picture shown in **Figure 5** is the current existing aerial view of the roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 5**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD. This crossing does not have railroad pavement markings on either approach.

Fig. 5. Independence Road

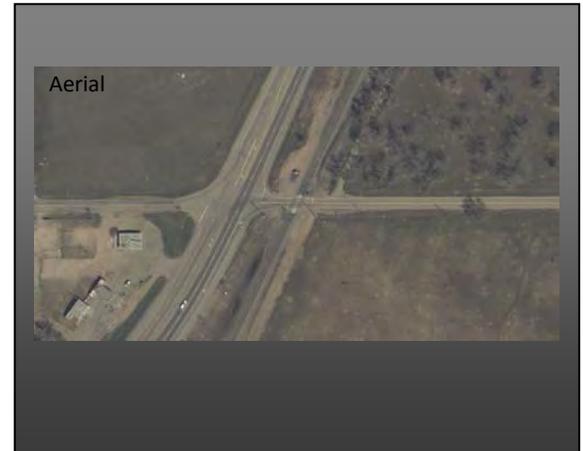


Table 5. Independence Road Crossing Information

Adjacent Land Use	Open Space/ Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	0.29 miles
Current Warning Protection	Signs, flashers and gates
Train Detection	CWT circuitry
Crossing Material	Concrete
Roadway classification/ADT	Urban Major Collector/5,052 (2016)
# of Lanes	2
Exposure Factor = ADT x Trains per Day	18 x 5,052 = 90,936
Total Train/Vehicle Accidents (5 Years)	0

47th Street Crossing Summary
US DOT Crossing #244821E
BNSF Main Line

The 47th Street crossing is equipped with mast mounted flashers, gates, cross bucks and bells. One set of tracks are crossed. The roadway is configured to provide one lane of travel in each direction, with detached, striped bike lanes on each side of the roadway, and a raised median. The total roadway width is approximately 47'. On approach to the crossing, each direction has paved shoulders. The roadway surface is paved with hot mix asphalt. The speed limit on 47th Street is 30 MPH. The picture shown in **Figure 6** is the current aerial view of the existing roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 6**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD, and also has railroad pavement markings on each approach.

Fig. 6. 47th Street

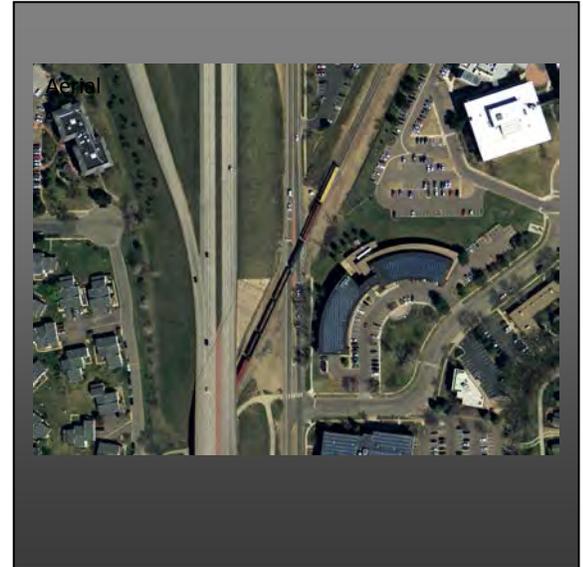


Table 6. 47th Street Crossing Information

Adjacent Land Use	Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	0.29 miles
Current Warning Protection	Signs, flashers, gates
Train Detection	CWT circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Urban/Local Road /1,000 (1989)
# of Lanes	2
Exposure Factor = ADT x Trains per Day	18 x 1,000 = 18,000
Total Train/Vehicle Accidents (5 Years)	0

Valmont Road Crossing Summary
US DOT Crossing #244818W
BNSF Main Line

The Valmont Road crossing is equipped with flashers, gates, cross bucks and bells. One set of tracks are crossed. The roadway is configured to provide two lanes of travel with a raised median and striping bike lanes in each direction for a roadway width of approximately 64'. Curb, gutter and sidewalks exist along the outer edge of the roadway on both approaches. The roadway surface is paved with hot mix asphalt. Posted speed limit on Valmont Road is 35 MPH. The picture shown in **Figure 7** is the current aerial view of the existing roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 7**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD and also has railroad pavement markings on each approach.

Fig. 7. Valmont Road

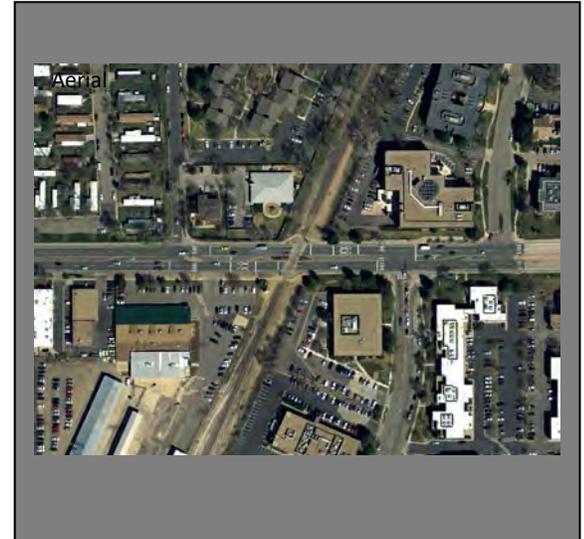


Table 7. Valmont Road Crossing Information

Adjacent Land Use	Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	0.59 miles
Current Warning Protection	Signs, flashers, gates
Train Detection	DC/AFO circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Urban/Minor Arterial /7,500 (1989)
# of Lanes	4
Exposure Factor = ADT x Trains per Day	18 x 7,500 = 135,000
Total Train/Vehicle Accidents (5 Years)	0

Pearl Parkway Crossing Summary
US DOT Crossing #244815B
BNSF Main Line

The Pearl Parkway crossing is equipped with mast mounted flashers, gates, cross bucks and bells, with additional mast mounted flashers in the raised medians. One set of tracks are crossed. The roadway is configured to provide two lanes of travel with a raised median for a total roadway width of approximately 52'. Concrete curb, gutter and sidewalk exists along the both sides of the roadway. The roadway surface is paved with concrete. Posted speed limit on Pearl Parkway is 35 MPH. The picture shown in **Figure 8** is the current aerial view of the existing roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 8**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD. It has railroad pavement markings on each approach.

Fig. 8. Pearl Parkway



Table 8. Pearl Parkway Crossing Information

Adjacent Land Use	Residential/Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	1.45 miles
Current Warning Protection	Signs, flashers, gates
Train Detection	DC/AFO circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Urban Major Collector/ 1,200 (1989)
# of Lanes	4
Exposure Factor = ADT x Trains per Day	18 x 1,200 = 21,600
Total Train/Vehicle Accidents (5 Years)	0

55th Street (South) Crossing Summary
US DOT Crossing #244813M
BNSF Main Line

The 55th Street crossing is equipped with mast mounted flashers, gates, cross bucks and bells, with additional mast mounted flashers in the raised medians. One set of tracks are crossed. The roadway is configured to provide two lanes of travel with a raised median, and striped bike lanes, for a total roadway width of approximately 70'. Concrete curb, gutter and sidewalk exists along both sides of the roadway. The roadway surface is paved with concrete. Posted speed limit on 55th Street is 40 MPH. The picture shown in **Figure 9** is the current aerial view of the existing roadway and railroad at the crossing. Existing, available crossing information is shown in **Table 9**.

This crossing is equipped with a minimum of one cross buck on each approach per MUTCD. It has railroad pavement markings on each approach.

Fig. 9. 55th Street

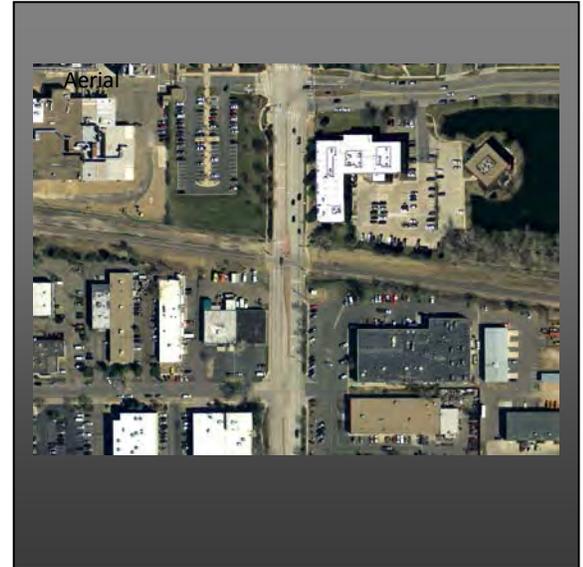


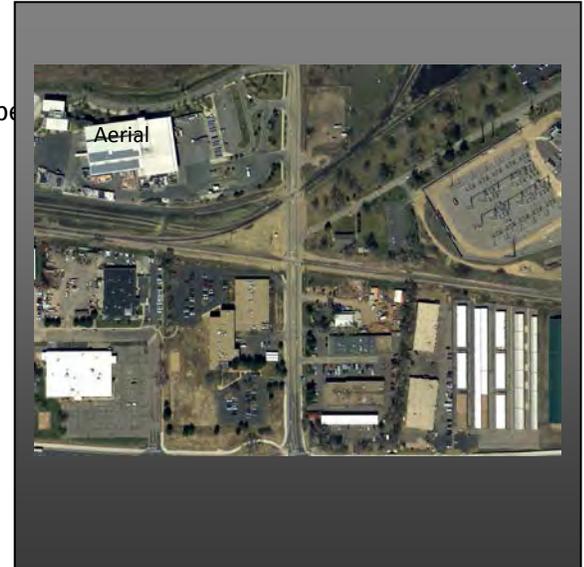
Table 9. 55th Street Crossing Information

Adjacent Land Use	Commercial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	1.01 miles
Current Warning Protection	Signs, flashers and gates
Train Detection	DC/AFO circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Urban Major Collector/ 7,800 (1989)
# of Lanes	4
Exposure Factor = ADT x Trains per Day	18 x 7,800 = 140,400
Total Train/Vehicle Accidents (5 Years)	0

63rd Street (South) Crossing Summary
US DOT Crossing #244811Y
BNSF Main Line

The 63rd Street crossing has a mainline and industry spur track both controlled by one railroad signal bungalow. Both crossings are equipped with mast mounted flashers, gates, cross bucks and be with additional mast mounted flashers in the raised medians. One set of tracks is crossed at each location. The roadway is configured to provide one lane of travel with a raised median and paved shoulders, for a total roadway width of approximately 44'. Concrete curb and gutter exists along both sides of the roadway. The roadway surface is paved with hot mix asphalt. Posted speed limit on 63rd Street is 30 MPH. The picture shown in **Figure 10** is the current aerial view of the existing roadway and railroad at the mainline and industry spur track crossings. Existing, available crossing information is shown in **Table 10**.

Fig. 10. 63rd Street



Both of these crossings are equipped with a minimum of one cross buck on each approach per MUTCD. Railroad pavement markings are present on each approach to the combined track crossing.

Table 10. 63rd Street Crossing Information

Adjacent Land Use	Commercial/Industrial
Residential Units within ¼ mile	TBD
Residential Units within ½ mile	TBD
Minimum Distance to next crossing	1.01 miles
Current Warning Protection	Signs, flashers and gates
Train Detection	CWT circuitry
Crossing Material	Concrete
Roadway classification/ADT (Source: FRA Inventory Report)	Rural Local/ 1,700 (1989)
# of Lanes	2
Exposure Factor = ADT x Trains per Day	18 x 1,700 = 30,600
Total Train/Vehicle Accidents (5 Years)	0

III. QUIET ZONE REQUIREMENTS

The City of Boulder is interested in establishing a Quiet Zone along a portion of the BNSF Railway track corridor. This section of the report will identify the requirements necessary at the study crossings to satisfy the requirements for the establishment of a Quiet Zone.

This portion of the study is based on the criteria for the establishment of Quiet Zones as outlined in the *Final Rule on Use of Locomotive Horns at Highway-Rail Grade Crossings (Final Rule)*, which was made effective on June 24, 2005 by the Federal Railroad Administration (FRA). The *Final Rule* was last amended on August 17, 2006. On December 18, 2003, the FRA published an interim final rule that required the locomotive horn to be sounded while trains approach and enter public highway-rail crossings. The interim final rule provided exceptions to the above requirement, which enabled local communities to improve quality of life by creating “Quiet Zones” where the locomotive horn would not need to be routinely sounded if highway-rail crossings met certain conditions. The *Final Rule* facilitates the development of these Quiet Zones, requiring the implementation of Supplemental Safety Measures (SSMs) or Alternative Safety Measures (ASMs), so as to maintain safety at highway-rail crossings where locomotive horns have been silenced.

A Quiet Zone is a section of rail line that contains one or more consecutive public crossings at which locomotive horns are not routinely sounded. The *Final Rule* contains guidelines and minimum requirements for the establishment of a Quiet Zone. For the purposes of this study, all potential crossings qualify in the New Quiet Zone category, as train horns are currently being sounded at the crossings, and the Quiet Zone would be established after the effective date of the *Final Rule*. These minimum requirements for a New Quiet Zone are as follows:

1. A New Quiet Zone must have a minimum length of ½ mile along the railroad right-of-way.
2. Each public highway-rail grade crossing within a New Quiet Zone must be equipped with active grade crossing warning devices. These devices are comprised of both flashing lights and gates which control traffic over the crossing, and must be equipped with constant warning time (CWT) circuitry, if reasonably practical, and power-out indicators. Any necessary upgrades to or installation of active grade crossing warning devices must be completed before the New Quiet Zone implementation date.
3. Each highway approach to every public and private highway-rail grade crossing within a New Quiet Zone shall be equipped with a Manual on Uniform Traffic Control Devices (MUTCD) compliant advanced warning sign that advises motorists that train horns are not sounded at the crossing.
4. Each public highway-rail grade crossing within a New Quiet Zone that is subjected to pedestrian traffic and is equipped with automatic bells shall retain those bells in working condition.
5. Each pedestrian grade crossing within a New Quiet Zone shall be equipped with an MUTCD compliant advanced warning sign that advises pedestrians that train horns are not sounded at the crossing.

A. Quiet Zone Alternatives

The public authority that is responsible for the safety and maintenance of the roadway that crosses the rail corridor is the only entity that can apply for the establishment of a Quiet Zone. Private companies, citizens, or

neighborhood associations cannot create or apply for the establishment of a Quiet Zone independent of local roadway authorities.

The focus of this study is to determine if Supplemental Safety Measures (SSMs), or Wayside Horns should be used to fully compensate for the absence of the train horn.

The SSMs to be considered, as identified in the *Final Rule*, include the following:

- Temporary Closure (used with a nighttime-only quiet zone)
- Four-Quadrant Gate System
- Gates with Raised Medians or Channelization Devices
- Conversion to One-Way Street with Gates across the roadway
- Permanent Crossing Closure

SSMs are recognized measures that do not require further FRA review or approval prior to implementation. Use of SSM installations is the more efficient way to achieve Quiet Zone establishment.

Alternative Safety Measures (ASMs) consist of improvements that fall outside the scope of SSMs, and may be proposed to FRA for consideration and approval. ASMs include Modified SSMs, Non-engineering ASMs, and Engineering ASMs. If used, the effectiveness rate of ASMs must be determined prior to FRA approval. It should also be noted that the implementation of several ASMs may be required in order to reduce the risk below the threshold for the silencing of train horns. For these reasons, this study does not include analysis of ASM installations on this rail corridor.

Wayside Horns are FRA approved devices that may be used in lieu of locomotive horns at individual or multiple highway-rail grade crossings, including those within Quiet Zones. The wayside horn is a stationary horn located at a highway-rail grade crossing, designed to provide audible warning to oncoming motorists of the approach of a train. As per the *Final Rule*, a highway-rail grade crossing with a wayside horn shall be considered in the same manner as a crossing treated with an SSM. A comparison of train horn and wayside horn noise footprints are depicted in **Figure 11**. A highway-rail crossing with a wayside horn installation is shown in **Figure 12**.

Figure 11. Comparison of Train Horn vs. Wayside Horn Noise Footprint

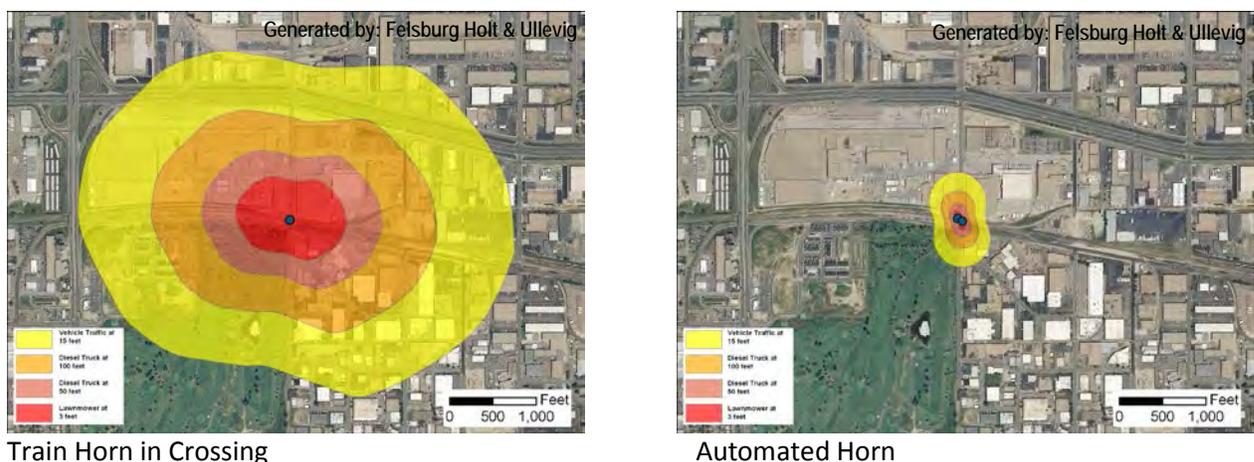


Figure 12. Highway-Rail Crossing Equipped with Wayside Horns



B. Quiet Zone Establishment

Per the *Final Rule*, there are two different methods for establishing Quiet Zones; public authority designation and FRA approval. In the public authority designation method, an SSM is applied at every public grade crossing within the proposed Quiet Zone. In this method, the governmental entity establishing the Quiet Zone would be required to designate the perimeters of the Quiet Zone, install the SSMs, and comply with various notice and information requirements set forth in the rule.

The FRA approval method provides a governmental entity greater flexibility in using SSMs and ASMs to address problem crossings. This method allows FRA to consider Quiet Zones that do not have SSMs at every crossing, as long as implementation of the proposed SSMs and ASMs in the Quiet Zone as a whole would cause a reduction in risk to compensate for the absence of routine sounding of the locomotive horn. This process includes an application to the FRA for approval of the proposed improvements, and supporting calculations to show that the proposed treatment reduces the risk below the allowable nationwide threshold at the crossing.

In either method, a series of notices must be sent out to interested parties. These notices include the Notice of Intent to Create a Quiet Zone, and the Notice of Quiet Zone Establishment. Flowcharts depicting the procedure for the establishment of Quiet Zones as well as sample FRA forms can also be found in **Appendix B**.

C. Quiet Zone Improvements

Each highway-rail grade crossing within the study area of the City of Boulder was evaluated for the implementation of a Quiet Zone. It may be advantageous to divide the Quiet Zone into phases along the BNSF Line for implementation. In order to be compliant with the FRA Final Rule, all crossings in a Quiet Zone need to be contiguous. A Quiet Zone may be implemented in segments; however, to be included in the original Quiet

Zone, each subsequent segment must be adjacent to a portion of the existing Quiet Zone. As a general recommendation, any roadway improvements to crossings within a potential Quiet Zone should be made compliant with Quiet Zone requirements.

The concept evaluation of Supplemental Safety Measures (SSMs) focused initially on the construction of raised medians on the roadway approaches to the crossing. Other than permanent or temporary closure, this is typically the most cost effective SSM for the establishment of a Quiet Zone. For those locations where the construction of raised medians caused roadway widening and/or the need for additional crossing surface material, consideration of channelizing devices is also shown. Where medians or channelizing devices are not practical or feasible, wayside horns were identified as an alternative solution. Where other options are either not feasible or not desired by the community, a 4-quadrant gate installation is a viable, but costlier, option.

In order to meet the requirements of a Quiet Zone, the installation of raised medians needs to meet several criteria. The median must extend 100' from the gate arm unless there is a driveway or intersection, in which case the median must extend at least 60' from the gate arm. The median should be at least 3' wide to provide for signing (4' is desirable), with a 6" barrier curb.

IV. DEVELOPMENT OF QUIET ZONE CONCEPT IMPROVEMENTS

A. Development Procedure

The development of the various concepts identified in this report started with a review of each crossing for its existing roadway and railroad features and equipment. As part of this evaluation, a desktop review was conducted to review existing conditions at each crossing. Conditions reviewed include presence/absence of existing railroad crossing warning devices, roadway and/or sidewalk pavement and widths, signing, striping, and general physical features.

All of the public crossings that are part of this evaluation can be treated with an SSM option. There are no locations where SSMs do not fit or unduly penalized operations.

The ability to treat all crossings with an SSM feature is advantageous to the City in that upon completion of installation or construction of the improvements, a Quiet Zone can be established by public authority designation, without application to or approval from the FRA. It should be noted that Modified SSMs are treated as Engineering ASMs by the FRA. Unlike the process for SSMs, where the local public authority can designate a quiet zone using the pre-approved measures, ASMs follow a separate procedure whereby an application is made to the FRA for consideration and approval before a Quiet Zone can be implemented.

Following is a brief description of each of the measures proposed for the public highway-railroad crossings along the study corridor in Boulder:

Active Controls - For each crossing area certain basic active warning devices must be in place to establish a Quiet Zone. These include flashing lights and gates with cross bucks and constant warning circuitry to provide a consistent message to drivers on the through roadway, as shown in **Figure 13**.

Raised Medians- Raised medians are the lowest cost measure for preventing higher risk behavior of drivers going around the gate arms. Medians should be used wherever possible. Medians can be 60 feet from the gate arm where a parallel street or commercial access intersects the approach roadway. Streets or accesses within 60 feet of the gate arm must be closed or relocated. The preferred length of the raised median is 100 feet from the gate arm. Raised medians must have 6" barrier curb, as shown in **Figure 14**.

Channelizing Devices- Where roadway width or close proximity adjacent development precludes roadway widening to allow for a raised median, channelizing devices are allowed. Channelizing devices are, by FRA definition, 'a traffic separation system made up of a



Figure 13. Active Controls

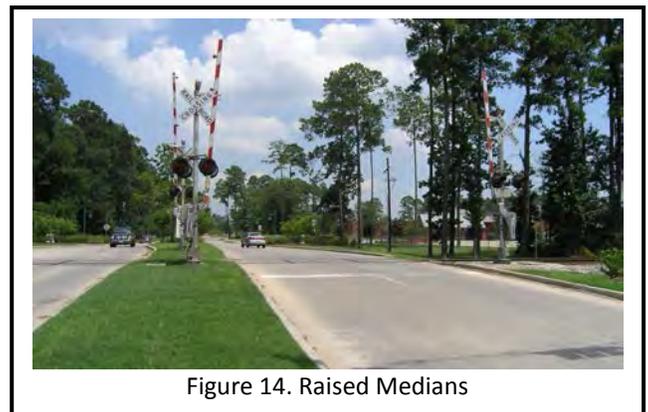
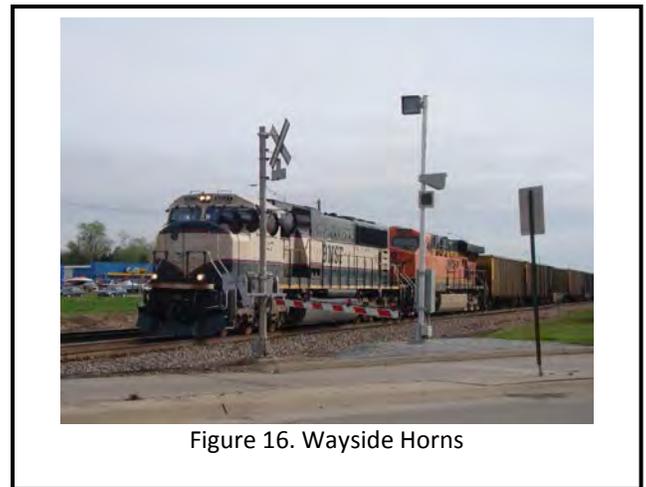


Figure 14. Raised Medians

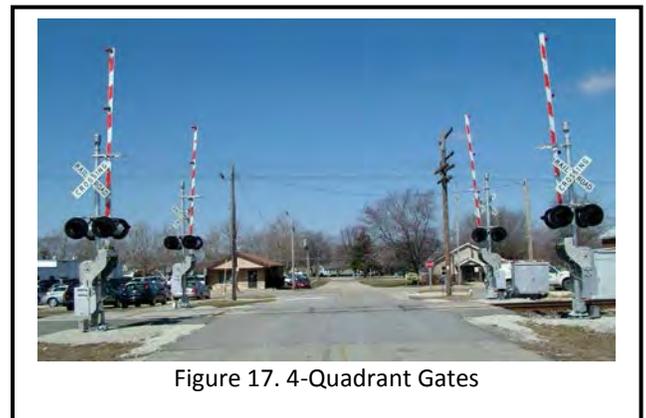
raised longitudinal channelizer, with vertical panels or tubular delineators, that is placed between opposing highway lanes designed to alert or guide traffic around an obstacle or to direct traffic in a particular direction. “Tubular markers” and “vertical panels”, as described in the MUTCD, are acceptable channelization devices for the purposes of this part.’ Readily available prefabricated channelizing devices are available, as shown in **Figure 15**.



Wayside Horns- The wayside horns are considered a one for one replacement for the locomotive horn without application to FRA for approval. Wayside horns provide a sharp cut-off beyond the immediate approaches to the crossing thus reducing (86-98%) the distribution of noise near the railroad corridor within a community. These are shown where other SSMs are not deemed feasible and where residential land uses are not in proximity of the crossing. Wayside horns have a square megaphone shape, and are installed on separate posts on each approach to the highway-rail crossing, as shown in **Figure 16**.



4-Quadrant Gates- This installation includes a railroad gate on both the approach and exit sides of the tracks to prevent vehicles from either intentionally or unintentionally entering the track area while a train is approaching. This configuration completely isolates the railroad corridor, and is characteristically the most expensive option. Typically, a mechanism is provided to detect trapped vehicles between the gates, such as vehicle detection loops within the pavement between the two sets of gates. Detection of a vehicle during approach of a train would trigger an exit gate to open, or remain upright, allowing the vehicle to exit the crossing. The need for vehicle detection is ultimately determined by the Colorado Public Utilities Commission. An installation of 4-quadrant gates is shown in **Figure 17**.



Closed Crossing- The safest and least costly treatment is to physically close a crossing whenever possible and where adequate alternate routes are available for circulation. These are generally proposed on cross streets having the lowest through traffic volumes and least continuity across the community. Where crossings can be consolidated and still provide adequate circulation and emergency access, closure should be considered.

Table 11 shows the concept level options considered for each crossing within the study area.

Table 11. Quiet Zone Concept Improvement Options

BNSF CROSSING	FRA DOT NO.	M.P.	DIST BTWN XINGS	RR CIRCUITRY (1)	GATES/ LIGHTS	ADT	Adjacent Land Use	SSM Options			
								Raised Medians	Channelizing Devices	4-Quadrant Gates	Wayside Horns
North 63rd Street	244827V	35.29	1.52	DC ⁽¹⁾	YES	1,700	Comm.			X	X
55th Street (north end)	244824A	33.77	0.52	CWT	YES	249 ⁽²⁾	Resid.	X	X	X	X
Jay Road	244823T	33.25	0.52	CWT	YES	12,833 ⁽²⁾	Agricul.			X	X
Independence Road	244822L	32.33	0.29	CWT	YES	5052 ⁽²⁾	Open/Comm.	X	X	X	X
47th Street	244821E	32.04	0.29	CWT	YES	1,000	Comm.	X			
Valmont Road	244818W	31.45	0.59	DC ⁽¹⁾	YES	7,500	Comm.	X		X	
Pearl Parkway	244815B	27.83	1.45	DC ⁽¹⁾	YES	1,200	Resid./Comm.			X	
55th Street (south end)	244813M	26.38	1.01	DC ⁽¹⁾	YES	7,800	Comm.	X			X
63rd Street (south end)	244811Y	25.37	1.01	CWT	YES	1,700	Comm./ Indus.	X		X	X

(1) Circuitry shown is as listed in the current FRA Inventory Report, but requires confirmation.
 (2) Traffic data is from more recent traffic counts conducted by Boulder County.

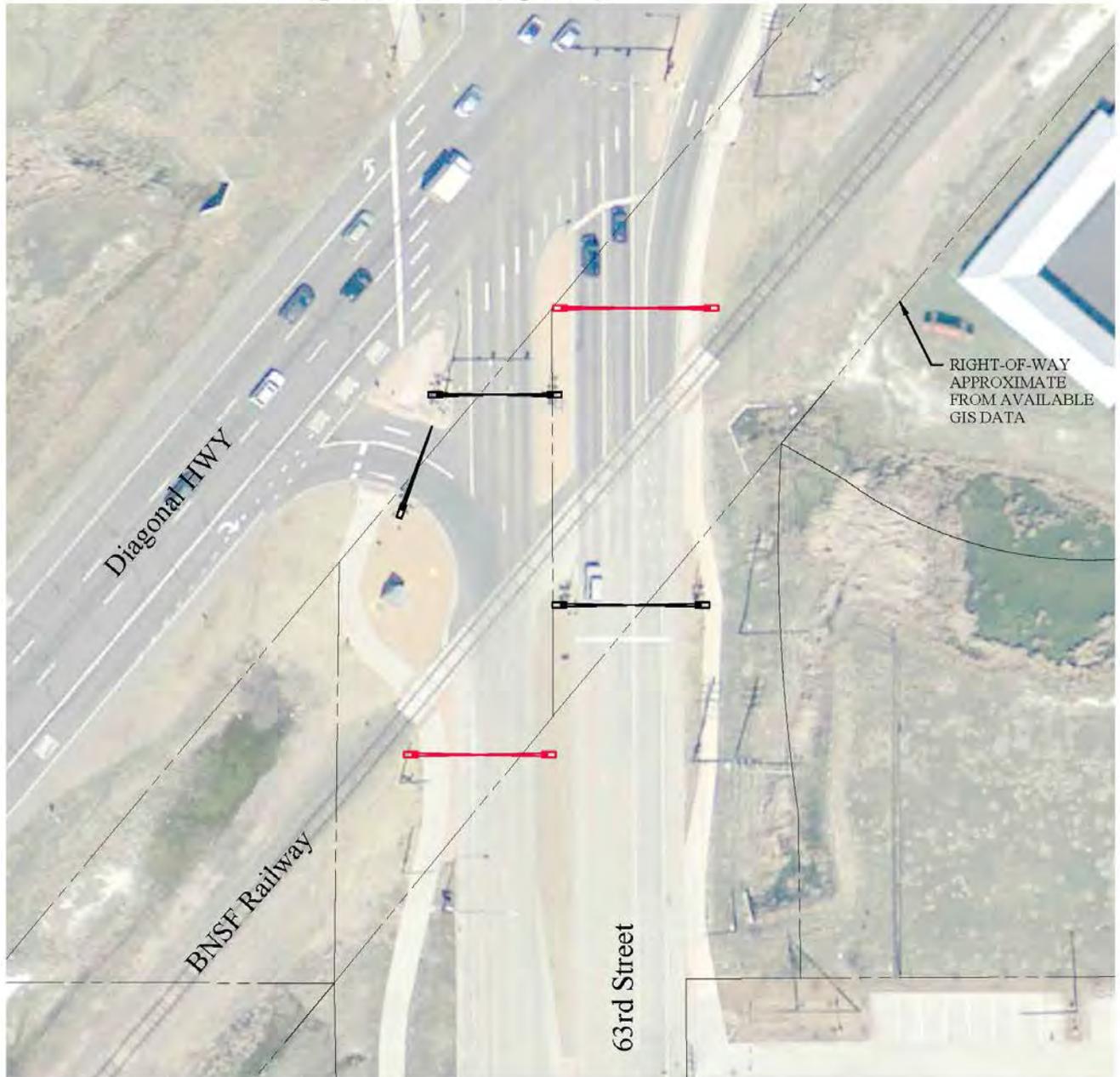
B. Concept Crossing Improvements

The following pages show one or more possible crossing improvement options for each public roadway-railroad crossing in the study area for the City of Boulder.



63rd Street
US DOT #244827V
Main Line
SSM: 4-Quadrant Gates (Option 1)

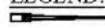
Concept Crossing Improvements

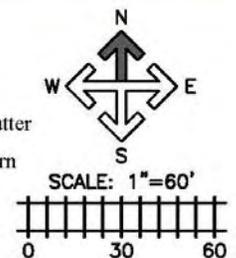


NOTES:

1. Confirm CWT Circuitry.
2. Add railroad exit gates.
3. Railroad signal bungalow may require upgrade to accommodate exit gate operation.
4. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





63rd Street
US DOT #244827V
Main Line
SSM: Wayside Horns (Option 2)

Concept Crossing Improvements

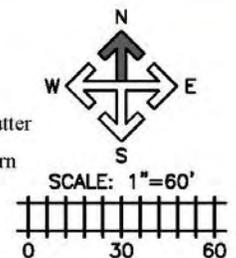


NOTES:

1. Upgrade to CWT Circuitry; requires new bungalow.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





55th Street
US DOT #244824A
Main Line
SSM: 4-Quadrant Gates (Option 1)

Concept Crossing Improvements

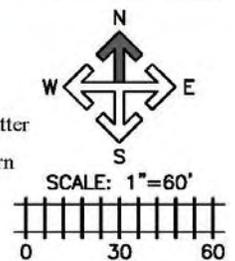


NOTES:

1. Has CWT Circuitry.
2. Add railroad exit gates.
3. Place exit gates parallel to track to close gap between gates in down position (or place gates perpendicular to roadway with stub channelizing devices).
4. Railroad bungalow may require upgrade to accommodate exit gate operation.
5. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





55th Street
US DOT #244824A
Main Line
SSM: Wayside Horns (Option 2)

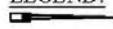
Concept Crossing Improvements

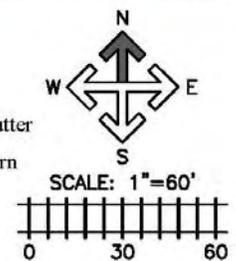


NOTES:

1. Has CWT Circuitry.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





55th Street
US DOT #244824A
Main Line

Concept Crossing Improvements

SSM: Approach Gates with Channelizing Devices (Option 3)

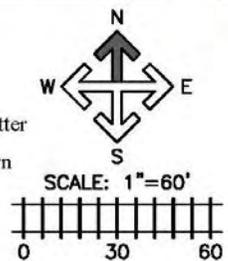


NOTES:

1. Has CWT Circuitry.
2. Add channelizing devices on each approach for length shown (measured from railroad gate).
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |

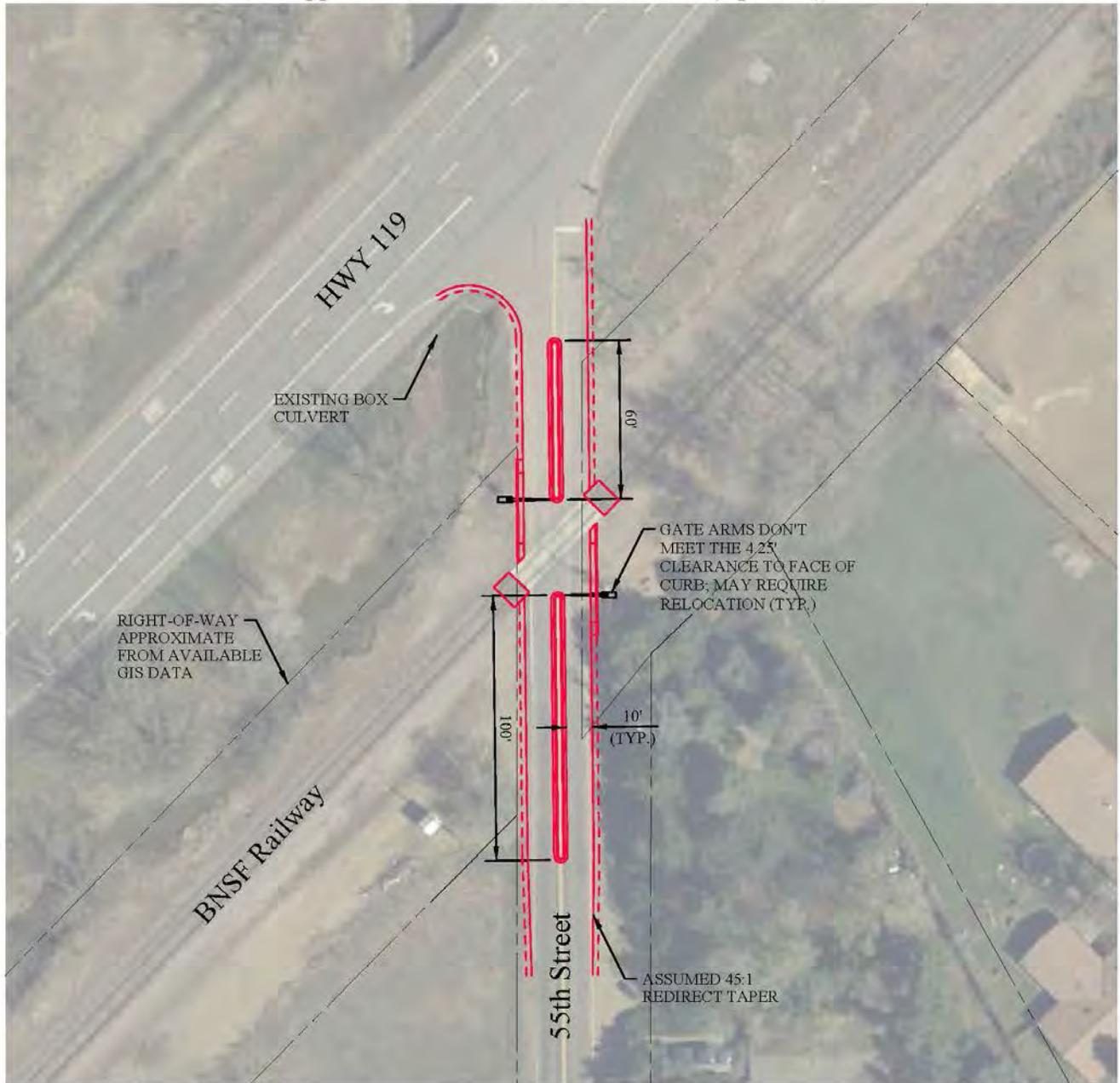




55th Street
US DOT #244824A
Main Line

Concept Crossing Improvements

SSM: Approach Gates with Raised Medians (Option 4)

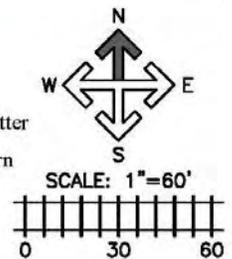


NOTES:

1. Has CWT Circuitry.
2. Add medians on each approach for length shown (measured from railroad gate and along median front face of curb to face of curb).
3. Add signing/stripping per MUTCD.
4. Requires roadway widening and additional crossing material to accommodate median.

LEGEND:

- | | | | |
|--|--|--|--------------------------|
| | Existing Gate | | Proposed Gate |
| | Existing Median | | Proposed Median |
| | Existing Stop Bar | | Proposed Curb and Gutter |
| | Existing Cantilever | | Proposed Wayside Horn |
| | Existing Sign | | Proposed Sign |
| | Approximate centerline of road or railway (where needed for reference) | | |





Jay Road
US DOT #244823T
Main Line
SSM: 4-Quadrant Gates (Option 1)

Concept Crossing Improvements

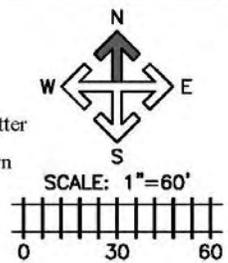


NOTES:

1. Has CWT Circuitry.
2. Add railroad exit gates. two (2) WB exit gates installed parallel to track for allowable gate length and to also close accel lane to HWY 119.
3. Railroad signal bungalow may require upgrade to accommodate exit gate operation.
4. Add signing/stripping per MUTCD.

LEGEND:

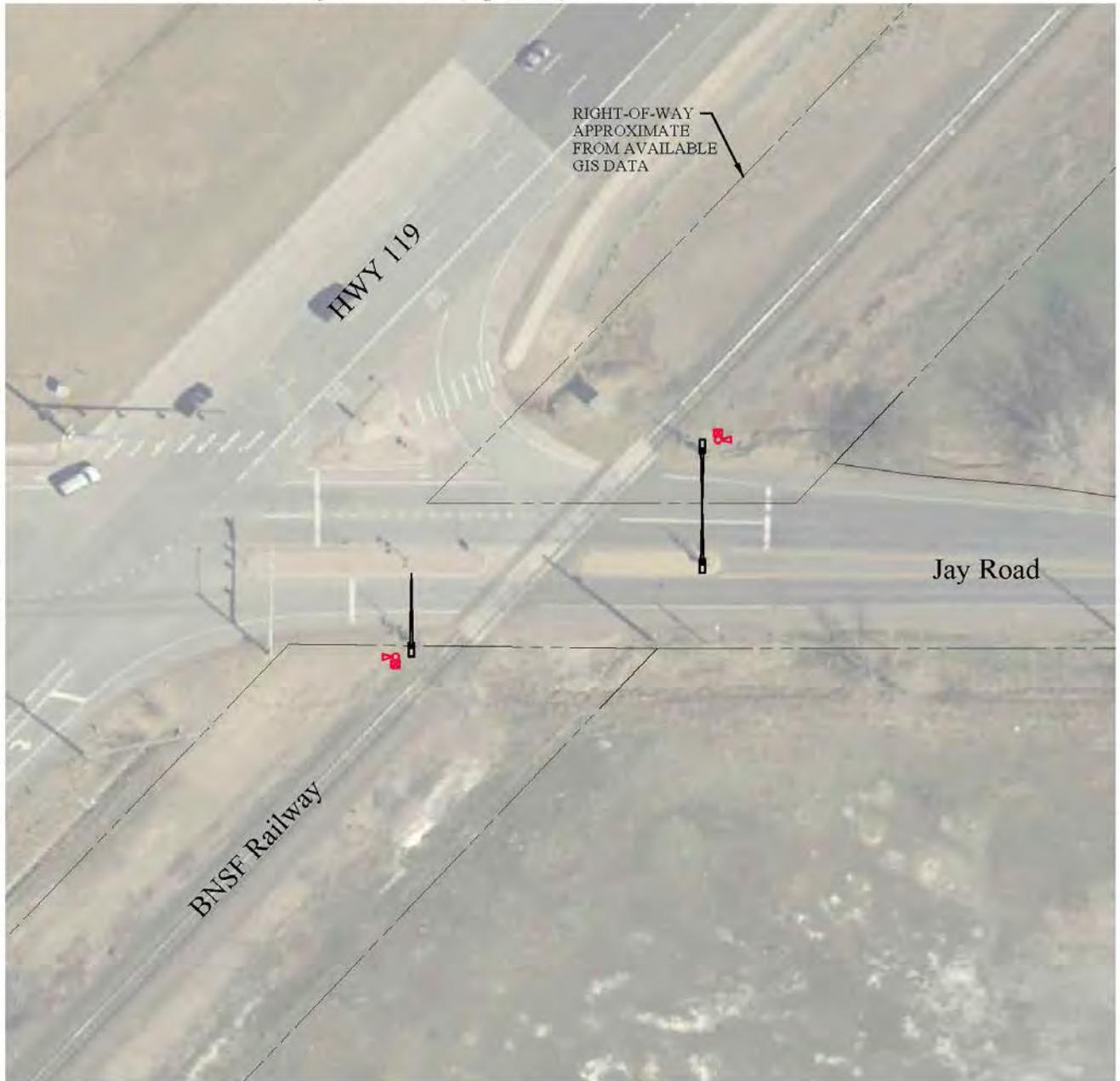
- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





Jay Road
US DOT #244823T
Main Line
SSM: Wayside Horns (Option 2)

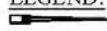
Concept Crossing Improvements

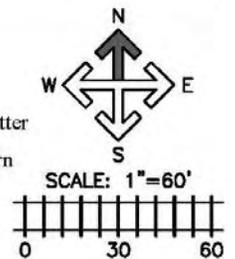


NOTES:

1. Has CWT Circuitry.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





Independence Road
US DOT #244822L
Main Line

Concept Crossing Improvements

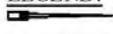
SSM: 4-Quadrant Gates (Option 1)

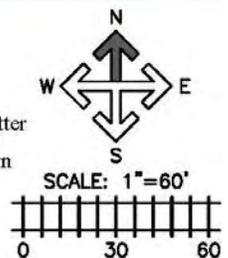


NOTES:

1. Has CWT Circuitry.
2. Stub channelizing devices required to close gap between gates in the down position due to skew.
3. Railroad signal bungalow may require upgrade to accomodate exit gate operation.
4. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |

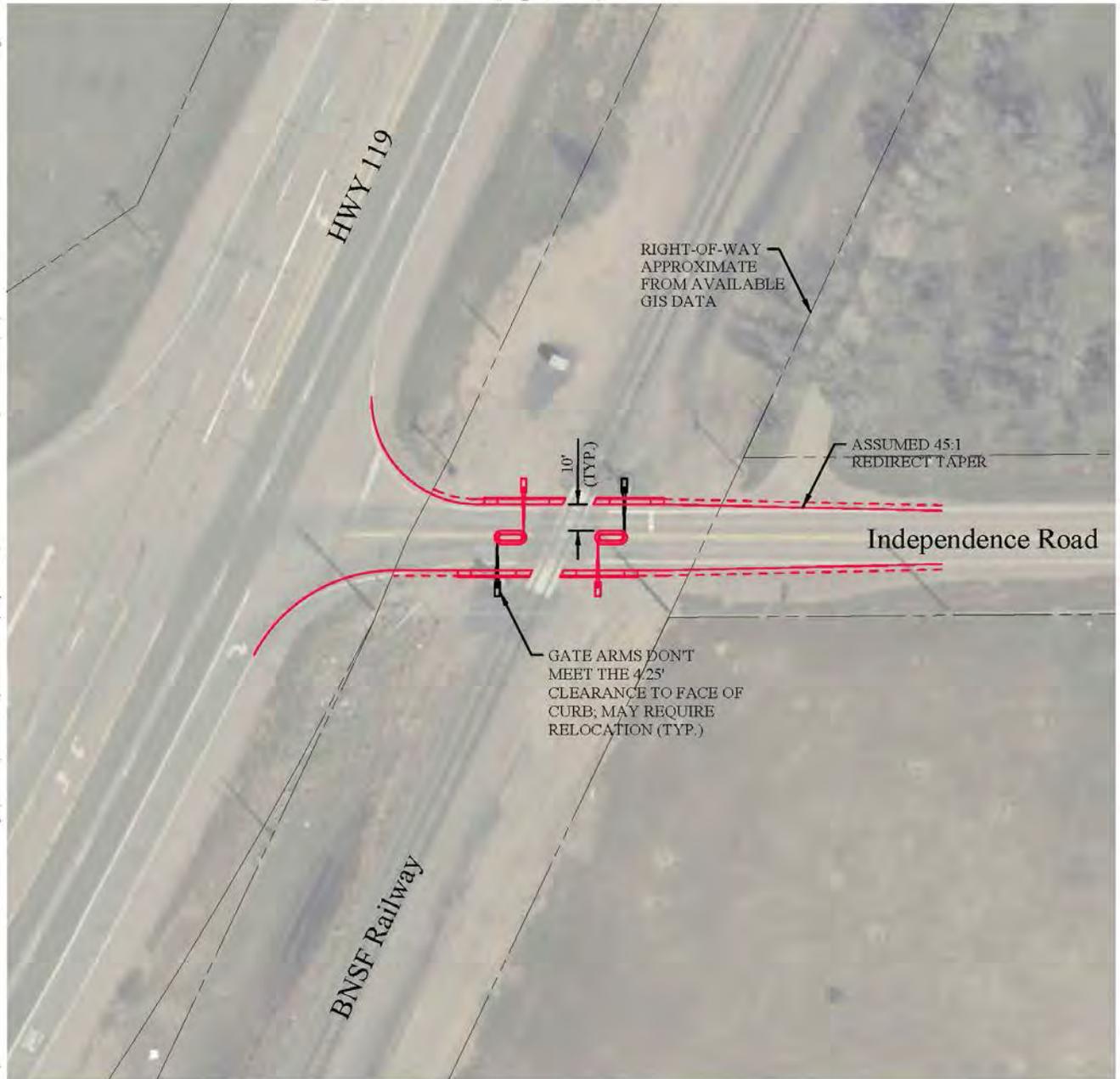




Independence Road
US DOT #244822L
Main Line

Concept Crossing Improvements

SSM: 4-Quadrant Gates (Option 2)

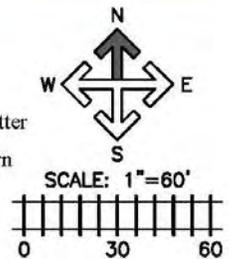


NOTES:

1. Has CWT Circuitry.
2. Stub medians required to close gap between gates in the down position due to skew.
3. Railroad signal bungalow may require upgrade to accommodate exit gate operation.
4. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





Independence Road
US DOT #244822L
Main Line
SSM: Wayside Horn (Option 3)

Concept Crossing Improvements

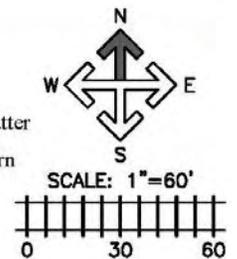


NOTES:

1. Has CWT Circuitry.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |

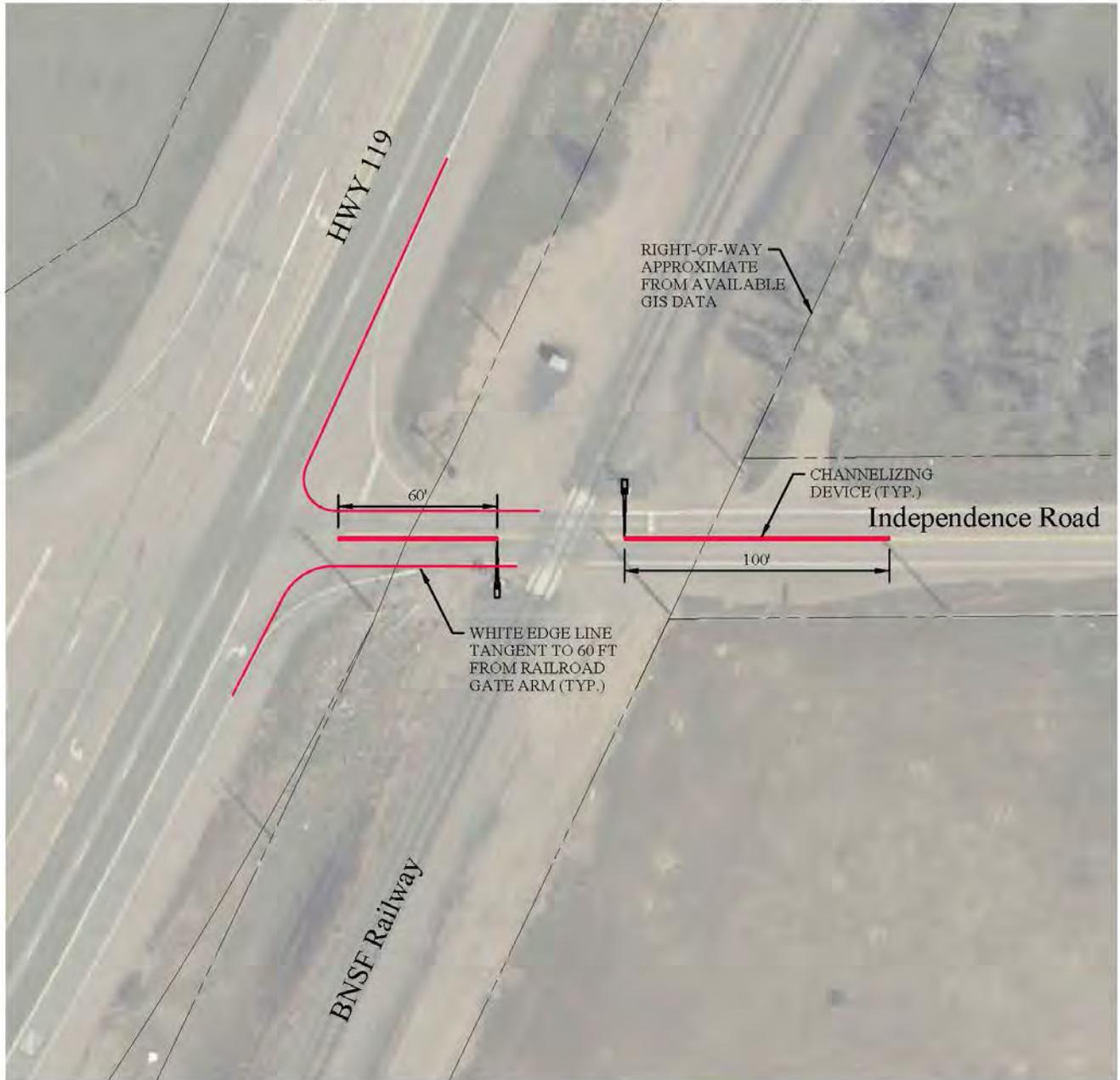




Independence Road
US DOT #244822L
Main Line

Concept Crossing Improvements

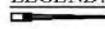
SSM: Approach Gates with Channelizing Devices (Option 4)

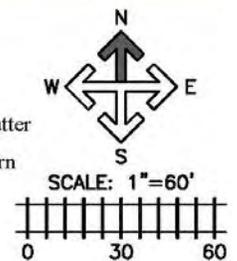


NOTES:

1. Has CWT Circuitry.
2. Add channelizing devices on each approach for length shown (measured from railroad gate).
3. White edge line west of crossing must be tangent for 60 ft from railroad gate arm.
4. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |

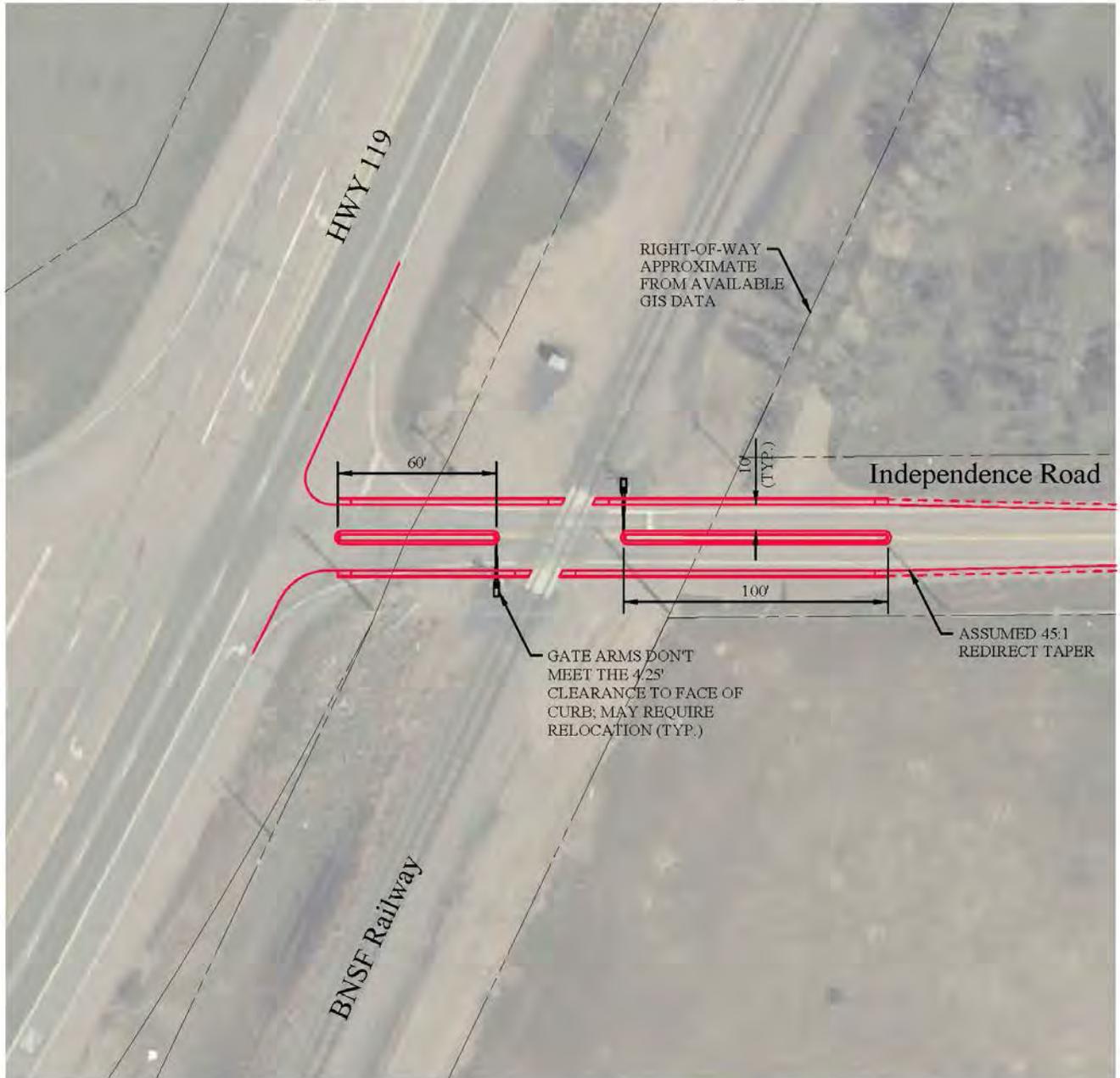




Independence Road
US DOT #244822L
Main Line

Concept Crossing Improvements

SSM: Approach Gates with Raised Medians (Option 5)

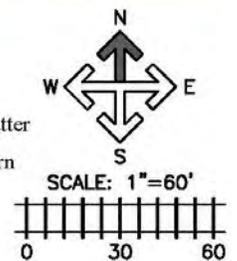


NOTES:

1. Has CWT Circuitry.
2. Add medians on each approach for length shown (measured from railroad gate along median face of curb to face of curb).
3. Add signing/stripping per MUTCD.
4. Requires roadway widening and additional crossing material to accommodate median.

LEGEND:

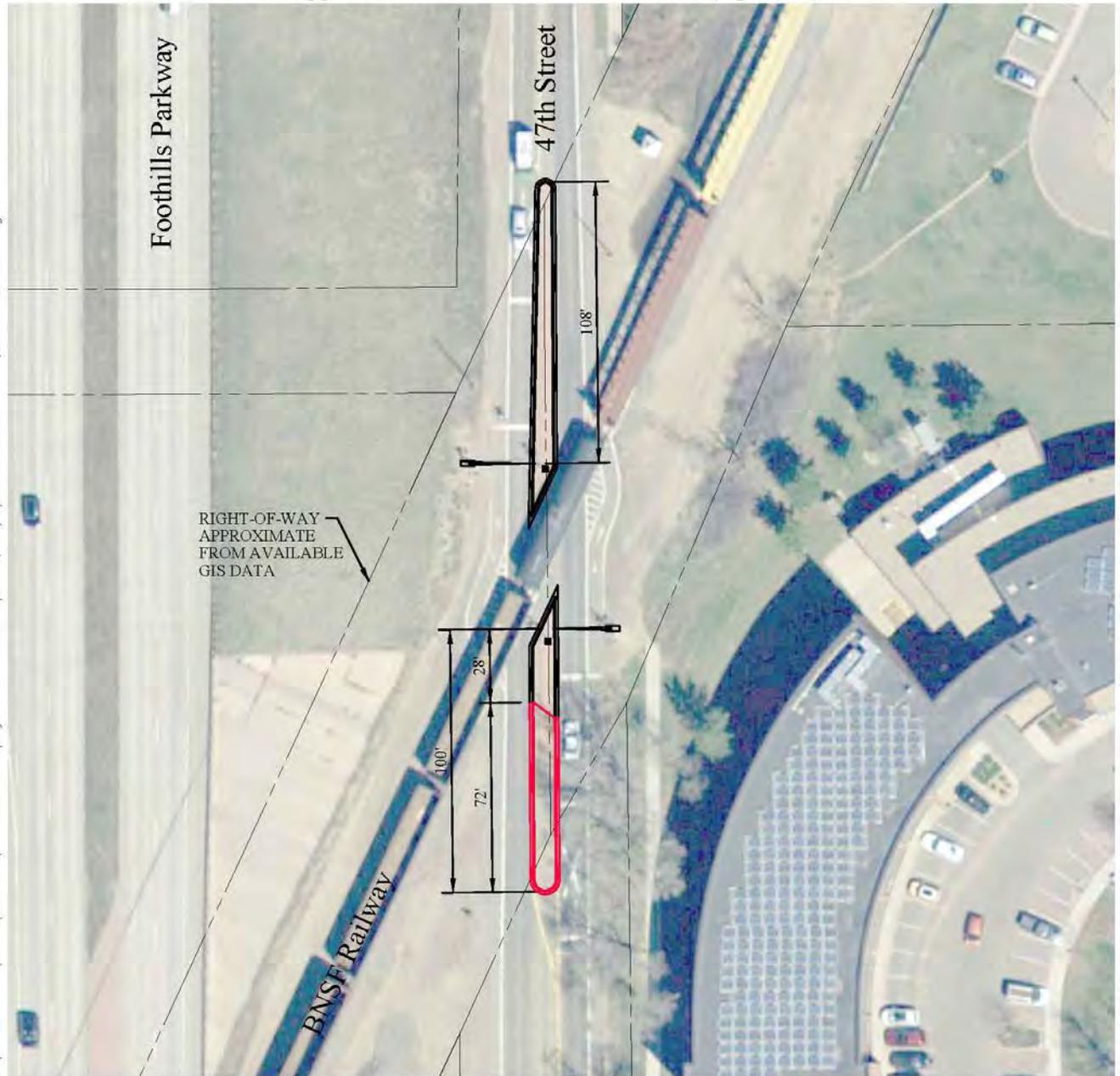
- | | | | |
|--|--|--|--------------------------|
| | Existing Gate | | Proposed Gate |
| | Existing Median | | Proposed Median |
| | Existing Stop Bar | | Proposed Curb and Gutter |
| | Existing Cantilever | | Proposed Wayside Horn |
| | Existing Sign | | Proposed Sign |
| | Approximate centerline of road or railway (where needed for reference) | | |





47th Street
US DOT #244821E
Main Line
SSM: Approach Gates with Raised Medians (Option 1)

Concept Crossing Improvements

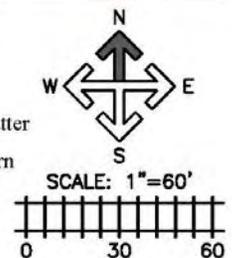


NOTES:

1. Has CWT Circuitry.
2. Has approach gates. Has raised medians.
3. North median is 100 ft (min.) from approach gate arm.
4. South median is 28 ft from approach gate arm. Extend median 72 ft to measure 100 ft (min.) from approach gate arm.
5. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|--|--|--|--------------------------|
| | Existing Gate | | Proposed Gate |
| | Existing Median | | Proposed Median |
| | Existing Stop Bar | | Proposed Curb and Gutter |
| | Existing Cantilever | | Proposed Wayside Horn |
| | Existing Sign | | Proposed Sign |
| | Approximate centerline of road or railway (where needed for reference) | | |

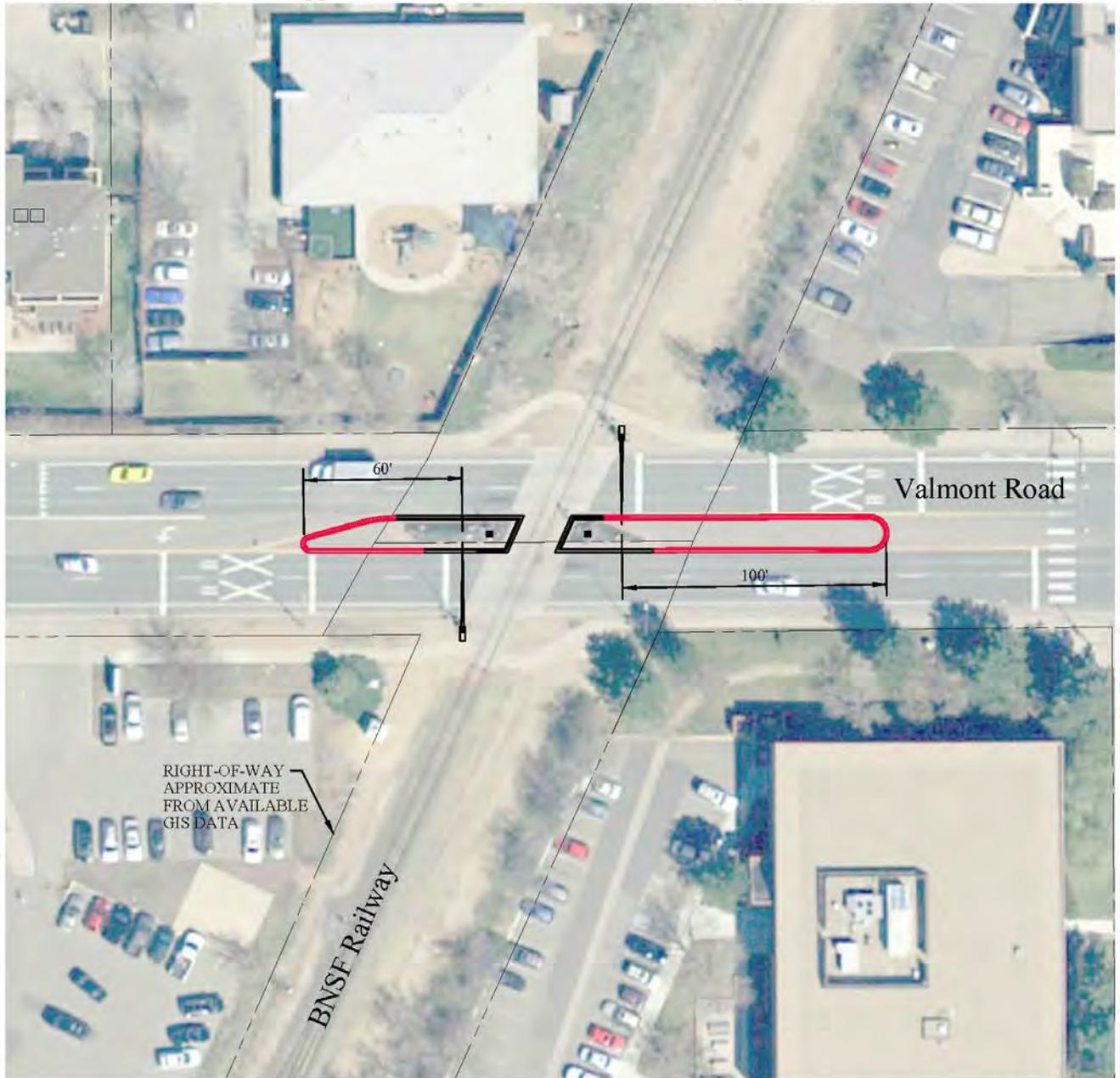




Valmont Road
US DOT #244818W
Main Line

Concept Crossing Improvements

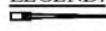
SSM: Approach Gates with Raised Medians (Option 1)

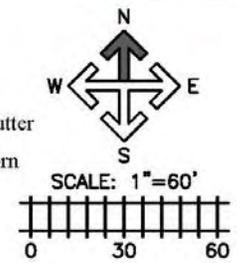


NOTES:

1. Upgrade to CWT Circuitry; requires new bungalow; may require new gates.
2. Has approach gates. Has raised medians.
3. Extend west median to 60 ft from approach gate arm. Extend east median 100 ft from approach gate arm.
4. Add signing/stripping per MUTCD.

LEGEND:

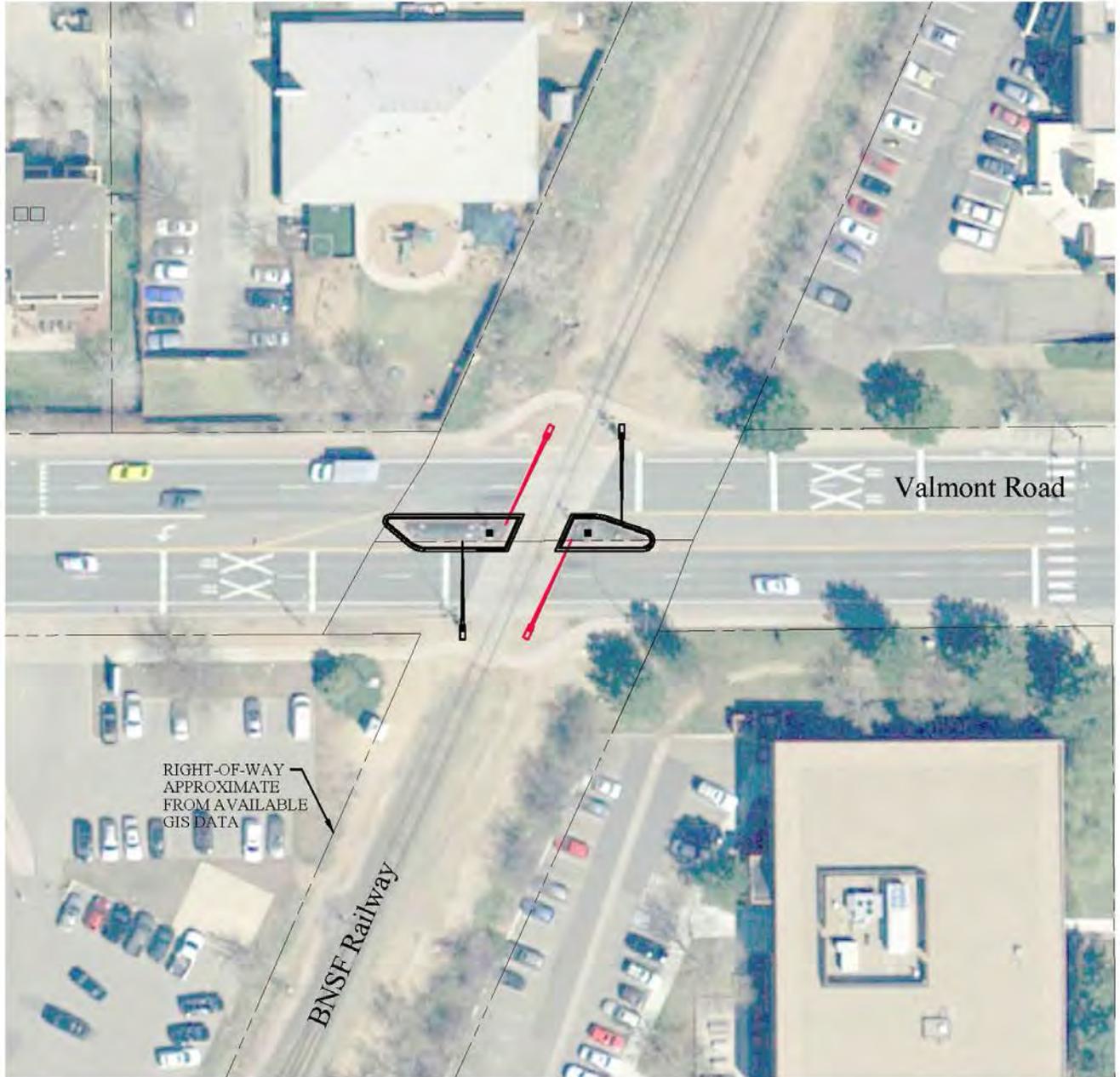
- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





Valmont Road
US DOT #244818W
Main Line
SSM: 4-Quadrant Gates (Option 2)

Concept Crossing Improvements

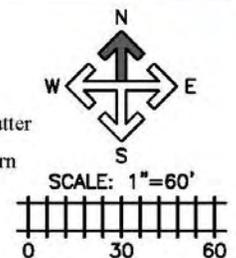


NOTES:

1. Upgrade to CWT Circuitry; requires new bungalow.
2. Add railroad exit gates parallel to tracks, to position gate base in available space.
3. Add signing/stripping per MUTCD.

LEGEND:

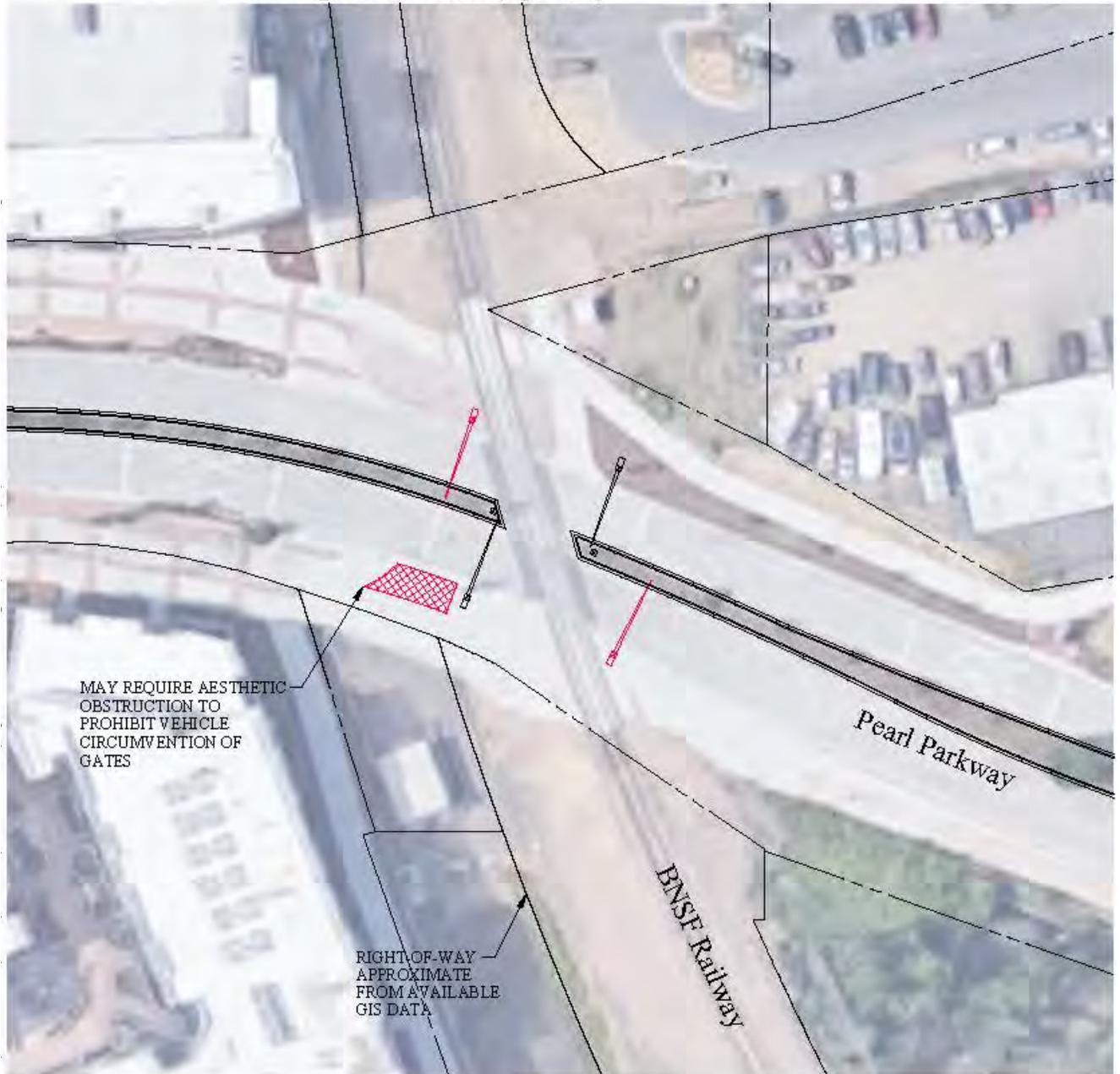
- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





Pearl Parkway
US DOT #244815B
Main Line
SSM: 4-Quadrant Gates (Option 1)

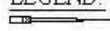
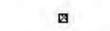
Concept Crossing Improvements

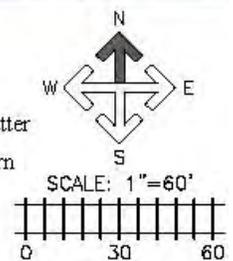


NOTES:

1. Confirm CWT Circuitry. Has approach gates.
2. Add railroad exit gates.
3. Add signing/stripping per MUTCD.

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |

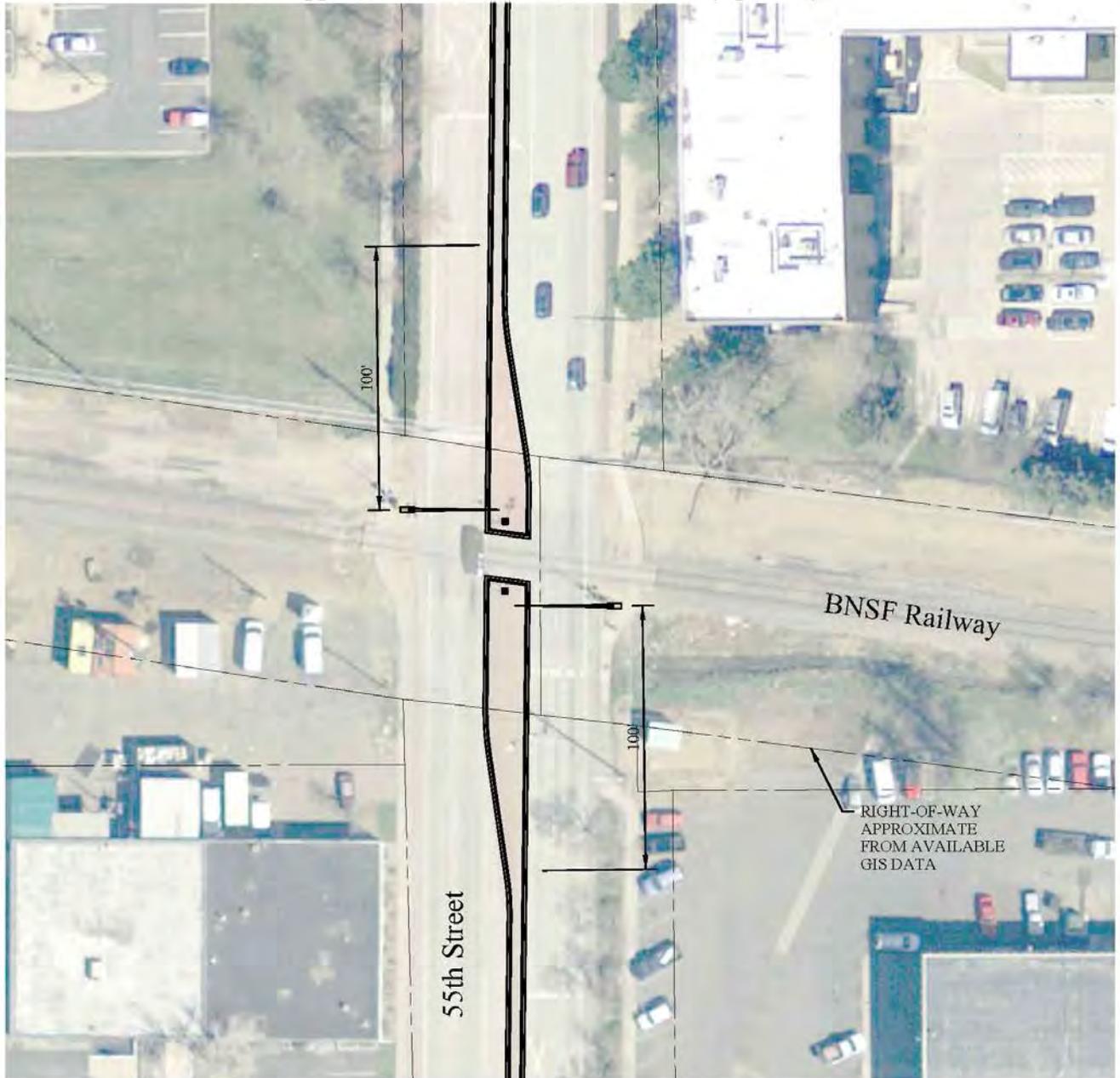




55th Street
US DOT #244813M
Main Line

Concept Crossing Improvements

SSM: Approach Gates with Raised Medians (Option 1)

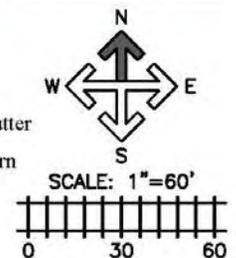


NOTES:

1. Upgrade to CWT Circuitry; requires new bungalow.
2. Has approach gates. Has raised medians.
3. Both approach medians are 100 ft. (min.) from the approach gate arms.
4. Add signing/stripping per MUTCD.
5. Note railroad gates may require upgrade for compatibility with CWT Circuitry.

LEGEND:

- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





55th Street
US DOT #244813M
Main Line
SSM: Wayside Horns (Option 2)

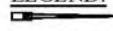
Concept Crossing Improvements

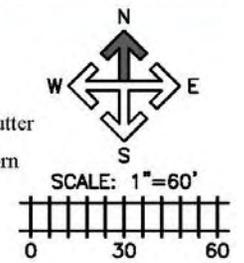


NOTES:

1. Upgrade to CWT Circuitry; requires new bungalow.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

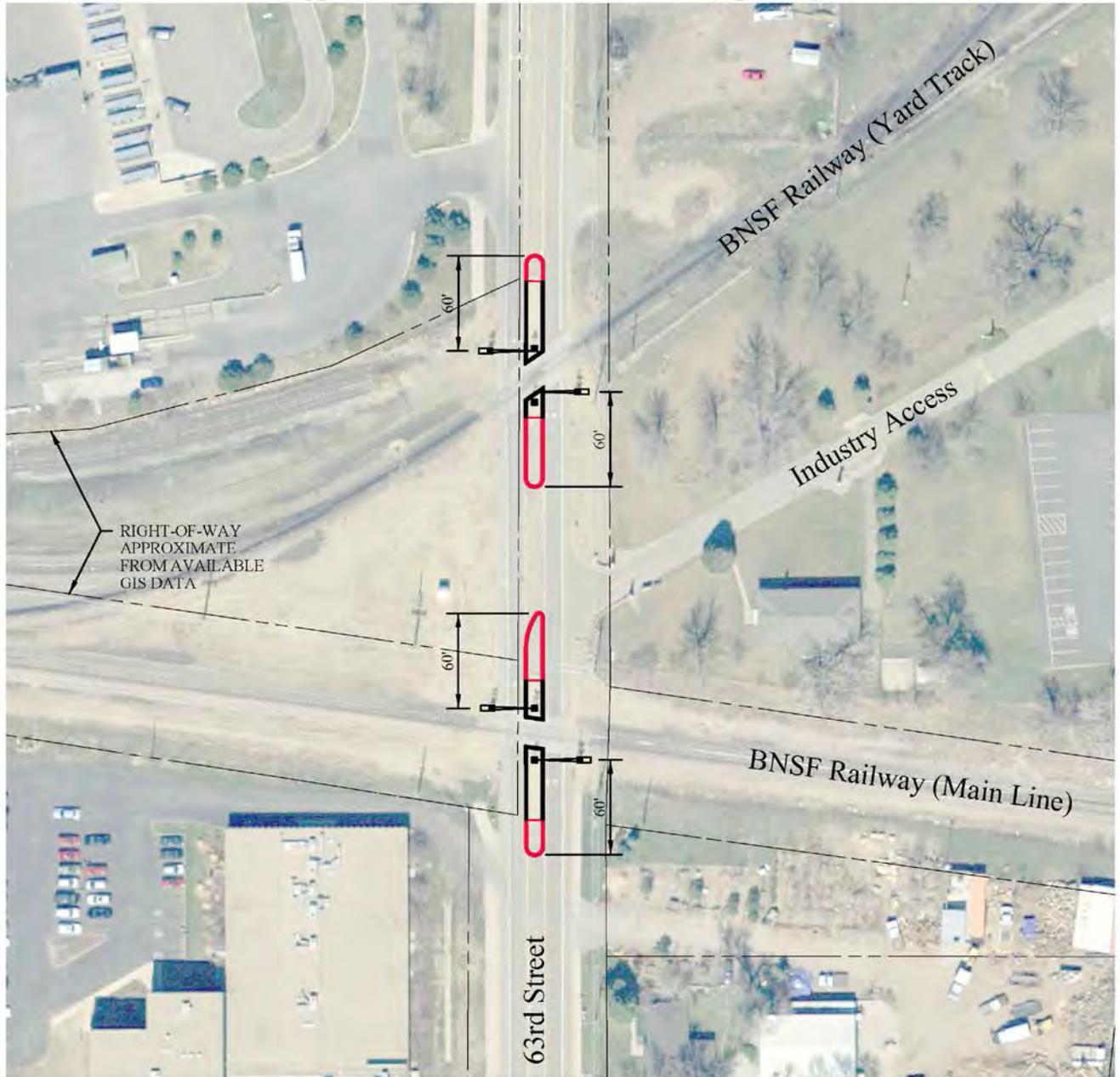
- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





63rd Street
US DOT #244811Y
Main Line/Yard Track
SSM: Approach Gates with Raised Medians (Option 1)

Concept Crossing Improvements

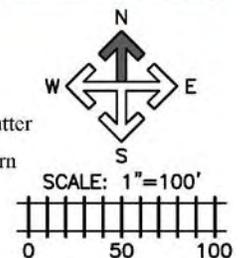


NOTES:

1. Has CWT Circuitry; single bungalow.
2. Extend existing raised medians to 60' from approach gate arms on all approaches.
3. Taper median north of Main Line to allow for SB turn movement from industry (east of 63rd).
4. Add signing/stripping per MUTCD.

LEGEND:

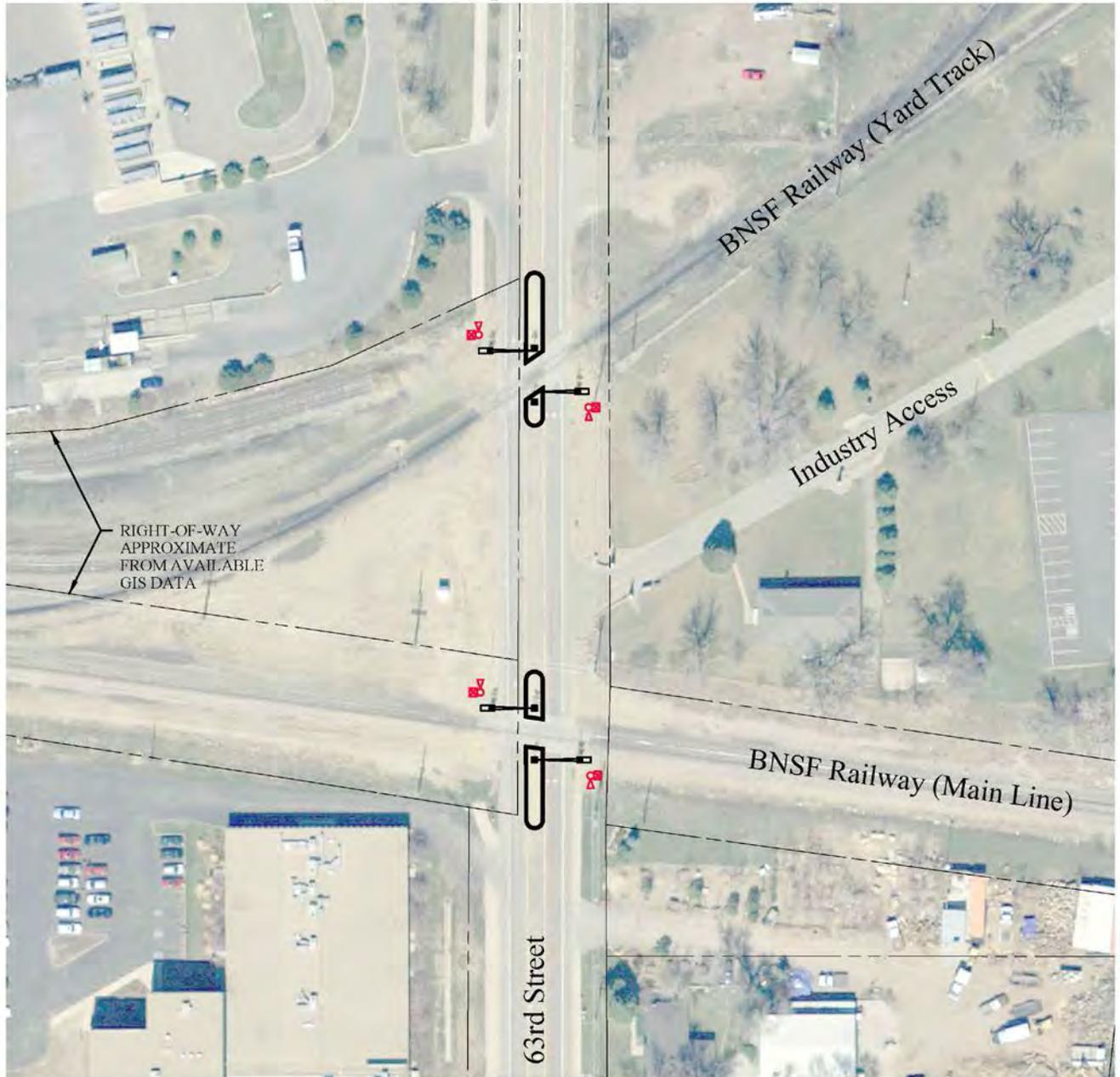
- | | | | |
|---|--|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway (where needed for reference) | | |





63rd Street
US DOT #244811Y
Main Line/Yard Track
SSM: Wayside Horns (Option 2)

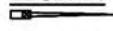
Concept Crossing Improvements

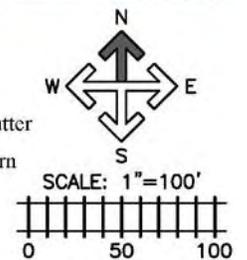


NOTES:

1. Has CWT Circuitry; single bungalow.
2. Add wayside horns on each approach.
3. Add signing/stripping per MUTCD.

LEGEND:

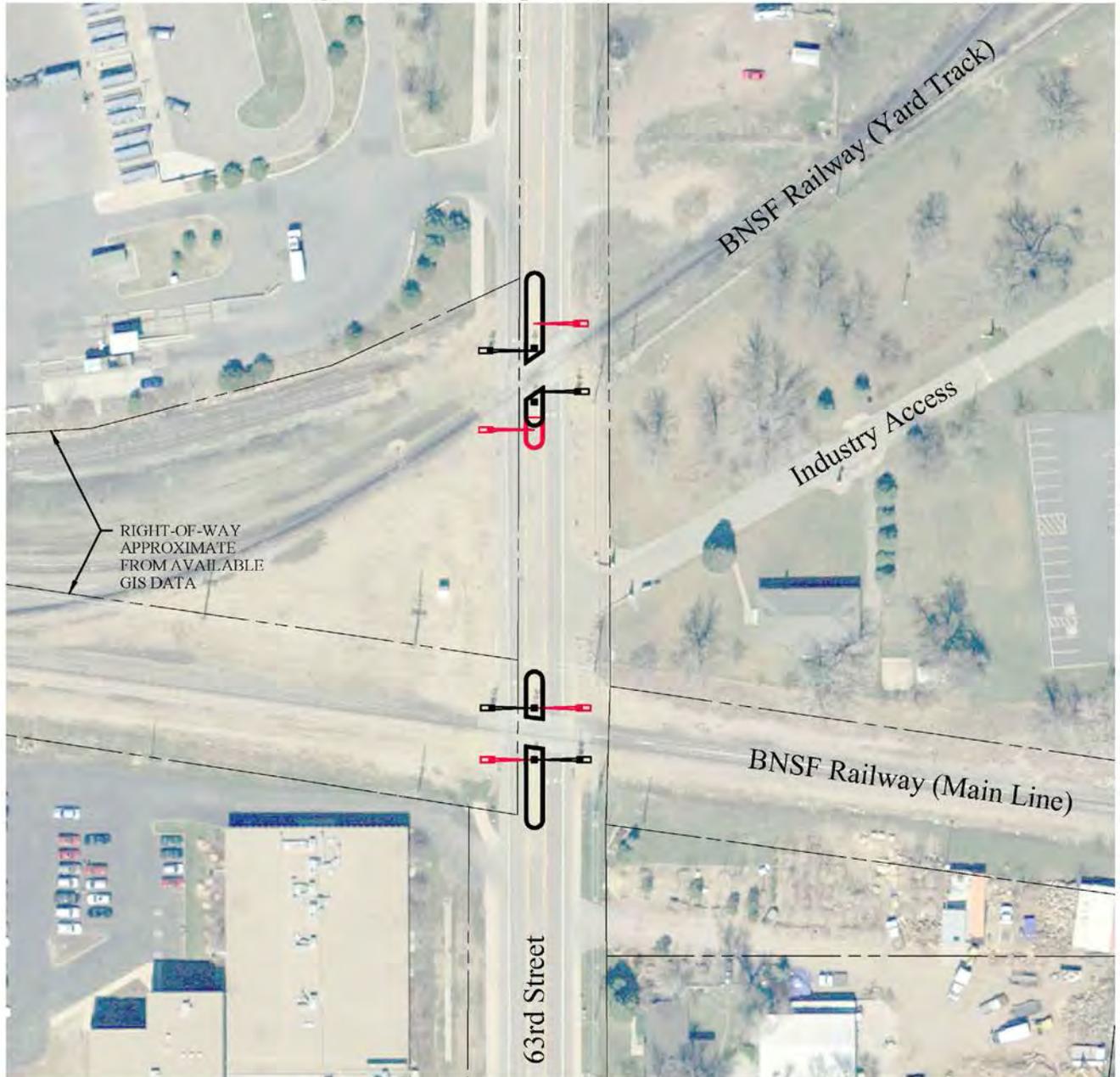
- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |





63rd Street
US DOT #244811Y
Main Line/Yard Track
SSM: 4-Quadrant Gates (Option 3)

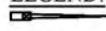
Concept Crossing Improvements

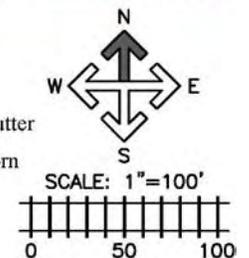


NOTES:

1. Has CWT Circuitry; single bungalow.
2. Add railroad exit gates.
3. Railroad signal bungalow may require upgrade to accommodate exit gate operation.
4. Add signing/stripping per MUTCD.
5. Extend median south of yard track to end of new exit gate (min.).

LEGEND:

- | | | | |
|---|---|--|--------------------------|
|  | Existing Gate |  | Proposed Gate |
|  | Existing Median |  | Proposed Median |
|  | Existing Stop Bar |  | Proposed Curb and Gutter |
|  | Existing Cantilever |  | Proposed Wayside Horn |
|  | Existing Sign |  | Proposed Sign |
|  | Approximate centerline of road or railway
(where needed for reference) | | |



V. Evaluation of Quiet Zone Concept Improvements

A. Safety Considerations

Northern Segment

The northern segment of BNSF track runs parallel and to the east of Highway 119 between Boulder and Longmont, Colorado. The crossings of North 63rd Street, North 55th Street, Jay Road and Independence Road are within the segment that is parallel to Hwy 119. The distance between the two corridors varies between 80 feet and 95 feet, measured from edge of pavement of Highway 119 to centerline of track of the BNSF Railway. The primary issue associated with this configuration for the crossing roadways, is the limited vehicle storage distance between the tracks and Hwy 119 for highway vehicles.

The four northern roadways cross the railroad tracks on a skew, which can create a significant gap between railroad approach gates for drivers to attempt to circumvent the gates, when in the down position. This can be a safety concern when considering crossings for quiet zone establishment.

Traffic control along this corridor varies by roadway crossing. At the northern crossings, there is a wide separation between the two directions of travel along Highway 119. This allows for vehicles entering the highway to wait for a gap in traffic, and maneuver crossing one direction of travel at a time. North 63rd Street and Jay Road have existing traffic signals at their respective intersections with Highway 119. North 55th and Independence Road are stop controlled at their respective intersections with Highway 119. At this time, neither of the stop-controlled roadways are slated for traffic signals at Highway 119.

Current traffic counts were obtained along the majority of these northern roadways being evaluated as part of this study. To date, there are no concerns regarding queuing traffic backing up over the tracks along any roadway, due to limited vehicle storage between Highway 119 and the railroad tracks, and vehicles waiting for a gap in traffic along Hwy 119 to enter the highway.

Southwest Segment

The next three crossings to the south and west across 47th Street, Valmont Road and Pearl Parkway, pass through more densely residential and commercial areas. All three roadways have bike lanes or adjacent parallel pathways for non-motorized use. A thorough public outreach program educating the community on safety awareness around railroad quiet zones should be conducted for the entirety of the corridor. Additional information should be provided to businesses and residents in close proximity to crossings where train horns are to be silenced. While active warning devices at the public vehicular at-grade crossings provide adequate warning for non-motorized sidewalks and paths within 25 feet of the travel way (per MUTCD), more awareness is needed for 'distracted users', who may be using a phone/tablet/surface while walking, or may be using headphones or ear buds, and may not see railroad gates descending, or hear crossing bells sounding.

East Segment

The remaining portion of the track to the east passes through predominantly commercial and industrial areas, with residential development south of Arapahoe Avenue, about ¼ mile south. Both 55th Street and 63rd Street on the south end are treated with gates, flashers, cross bucks and raised medians with additional post-mounted flashers. Consideration should be given to vehicle turning movements, particularly trucks, and property access and circulation relative to the crossings such that the improvement installations for quiet zone establishment are not unnecessarily damaged, or become long term maintenance issues for the City.

B. *Field Diagnostic Review*

A field diagnostic review was held in July of 2013 during the City's initial consideration of this corridor for quiet zone establishment. The concurrent study being completed for Boulder County is coordinating a possible field diagnostic review for the County's crossings, which may be a good opportunity to review the City's crossings as well, and confirm the circuitry at each of the crossings of interest. The field diagnostic may be conducted prior to publication of the final assessment report. If conducted, a diagnostic team will meet onsite, to include staff from the City of Boulder, BNSF Railway, Federal Railroad Administration, Colorado Public Utilities Commission, Boulder County (for crossings within the County's jurisdiction) and the Colorado Department of Transportation (due to proximity of Highway 119). The group will discuss existing conditions at each crossing, along with safety concerns, planned improvements (if any), and will review the concept level options presented for possible quiet zone establishment. BNSF staff will be asked to verify the type of circuitry at each crossing, to assist in identifying potential modifications or upgrades that may be needed for certain quiet zone treatment options.

Key results and recommendations of the Field Diagnostic Review, if held, will be included in the final version of the assessment report.

C. *Noise Contour Diagram*

A Noise Contour Diagram can be developed to show a generalized level of noise surrounding the BNSF corridor from North 63rd Street to 63rd Street on the south. Following development of the noise contours, they are typically turned over to the road authority staff, in this case the City of Boulder, to use GIS to count the number of residential units within each noise contour range to compile the approximate number of residences that may be affected by train horn noise in proximity to each crossing. The crossings may be grouped into economically feasible projects and pursued as funding allows, and the noise contours and assessment of residents within the various sound levels, will assist the City in understanding the areas likely to be most affected.

A Noise Contour Diagram can be included, if directed by the City, in Appendix C of the final report.

D. *Concept Costs*

FHU generated an opinion of conceptual level construction costs for each Quiet Zone Improvement option. Roadway improvement costs are taken from current industry information for materials and utilize approximate percentages of construction items to estimate drainage, stormwater management, construction traffic control, mobilization, signing & striping, and contingencies. Costs for railroad elements are also taken from current, available industry information for materials and labor. It should be noted that these costs are conceptual in nature and conservative, and would be refined as the City proceeds into design of actual crossing improvements.

Concept costs for each crossing option are shown in **Table 12**.

Table 12. Opinion of Conceptual Costs

CROSSING	STREET	M.P.	SSM Options			Wayside Horns	Opinion of Construction Cost Rounded	Comments/Assumptions
			Raised Medians	Channelizing Devices	4-Quad Gates			
244827V	North 63rd Street	35.29			X		\$432,000	CWT upgrade & new gates
						X	\$312,000	CWT upgrade & 3 horns
244824A	North 55th Street	33.77			X		\$432,000	CWT upgrade & new gates
						X	\$240,000	CWT upgrade & 2 horns
				X			\$156,000	1-60 ft & 1-100 ft channelizing devices
			X				\$180,000	1-60 ft & 1-100 ft medians; some curb/gutter
244823T	Jay Road	33.25			X		\$480,000	3 exit gates & CWT upgrade
						X	\$240,000	CWT upgrade & 2 horns
244822L	Independence Road	32.33			X		\$492,000	CWT upgrade; 2 exit gates; stub channeliz.
					X		\$516,000	CWT upgrade; 2 exit gates; stub medians
						X	\$240,000	CWT upgrade & 2 horns
				X			\$156,000	1-60 ft & 1-100 ft channelizing devices
			X				\$216,000	1-60 ft & 1-100 ft medians; full curb/gutter
244821E	47th Street	32.04	X				\$72,000	South median extension to 100 ft
244818W	Valmont Road	31.45	X				\$216,000	CWT upgrade & new gates
					X		\$432,000	CWT upgrade & new gates
244815B	Pearl Parkway	27.83			X		\$432,000	CWT upgrade & new gates
244813M	55th Street (south end)	26.38	X				\$216,000	CWT upgrade & new gates
						X	\$240,000	CWT upgrade & 2 horns
244811Y	63rd Street (south end)	25.37	X				\$144,000	Extension of 4 medians to 60 ft
					X		\$528,000	CWT upgrade & new gates
						X	\$384,000	CWT upgrade & 4 horns

VI. IMPLEMENTATION PLAN

A. *Funding and Oversight*

State jurisdiction over railroad safety is extremely broad, however most areas have been preempted by the federal government. The Public Utilities Commission (PUC) of Colorado has primary jurisdiction over all public highway-rail crossings, including the opening and closing of at-grade crossings, upgrading of crossings, overpasses or underpasses, and the allocation of costs for grade separations, if requested. All economic jurisdiction over railroads that are part of the national railroad system come under the jurisdiction of the Surface Transportation Board.

Typically, applications to the PUC are required for highway-railroad crossings if the roadway is being widened, if additional crossing elements (such as pedestrian walkways, bike trails, etc.) are being added to a crossing, or if there are operational changes on the part of the railroad. The following activities do not require a PUC application:

1. Replacement of the roadway crossing surface material (provided the surface is not being lengthened to widen the roadway)
2. Placement or replacement of approach signing or striping in accordance with MUTCD standards
3. Slight raising or lowering of the crossing to match approaches for smoothness

According to PUC regulations, costs for improvements to at-grade crossings are allocated to the road authority and railroad as follows:

1. Surfacing
 - a. Road Authority
 - i. Crossing material and maintenance
 - ii. Road approach material, labor and maintenance
 - b. Railroad
 - i. Labor to install crossing material
 - ii. Track, tie, ballast, subballast material, labor and maintenance
2. Signing, Striping and Signals
 - a. Road Authority
 - i. Approach warning signs and pavement striping in accordance with MUTCD
 - ii. Signal improvements if the road authority is the project proponent
 - b. Railroad
 - i. Crossing sign (cross bucks)

Federal and State Funding

The recent passing of the Fixing America's Surface Transportation (FAST) Act has provided more federal level funding availability for crossing improvements that could assist communities in working toward Quiet Zone compliance. Historically, none of the funding opportunities specifically indicated use for Quiet Zones. However, the more recent funding announcements provide several grant options that could include improvements that render crossings Quiet Zone compliant, as well as a grant program that specifically includes Quiet Zone projects. The following is a brief summary of some of the programs and funding available:

Colorado Section 130 Funds: The Federal Section 130 railroad/highway hazard elimination program (Section 130 Funding) is a source of federal funds available for crossing safety improvements. CDOT allocates the Federal Section 130 money for the State of Colorado for at-grade crossings and grade separated crossings.

CDOT now receives approximately \$5.0 million in funding from the Federal government each year for Section 130 crossings improvements. As a general rule, about half of the funding is budgeted for the additional of railroad flashing lights and gates at crossings. CDOT utilizes a hazard index analysis to prioritize crossings in need of safety improvements, and allocates funding to those crossings accordingly each year.

Activities eligible for the use of Section 130 safety funds are as follows:

- Crossing consolidations (including the funding of incentive payments up to \$15,000 on a 50-percent matching basis to local jurisdictions for crossing closures).
- Installation of grade separations at crossings or repair of existing grade separations.
- Signing.
- Pavement marking.
- Illumination.
- New highway-railroad grade crossing signals.
- Upgraded highway-railroad grade crossing signals or circuits.
- Improved crossing surfaces.
- Traffic signal interconnection/preemption.
- Sight distance or geometric improvements.
- Data improvements (up to 2 percent of apportionment).

Nationally Significant Freight and Highway Projects Funding: This is a competitive grant process through the USDOT. Grants must be at least \$25 million. Eligible applicants include states, MPOs over 200,000 in population, local governments, political subdivisions of a state or local government, tribal governments, public authority with a transportation function, and federal land management agencies jointly applying with a state. Eligible projects include highway freight projects, rail freight projects, and railway-highway grade crossings or grade separation projects. There are other stipulations to the government's allocation of this funding that can be reviewed on the USDOT website.

TIGER Grant Funding: Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grant program provides funds for surface transportation projects that will have a significant impact on the Nation, a metropolitan area or a region. Within Colorado, the Town of Windsor was successful in their pursuit of TIGER V funds for Quiet Zone improvements to 13 at-grade crossings within the Town's limits. Since the program was established in 2009, the types of projects receiving TIGER Grant funds have become more diverse and the locations, more widespread. This funding is a viable option for funding Quiet Zone improvements.

Intercity Passenger Rail Funding: This new Grant Program is to assist in financing the cost of improving passenger and freight rail. This grant program specifically indicates that eligible projects include Positive Train Control (PTC), capital projects, highway-rail grade crossing projects, including Quiet Zones. Federal share is limited to 80%, giving preference to projects requesting 50% or less, and setting aside 25% for rural areas. Funding under this program is subject to annual appropriations. Although the City does not currently have passenger rail, current freight rail operations and planned commuter rail through the City may allow for pursuit of this funding if City funds can be allocated to support the non-subsidized portion.

Other Funds: Other potential funding sources include local General Fund, Sales Tax revenue, Special Districts, Tax Increment Financing (TIF) and Federal earmarks. The Federal Railroad Administration also offers a loan

program specifically titled Railroad Rehabilitation & Improvement Financing (RRIF) Program that provides direct loans and loan guarantees to finance a variety of acquisitions or improvements related to railroad equipment or facilities, including track. It should be mentioned that any use of federal funding would trigger studies following the National Environmental Policy Act (NEPA). The cost to perform NEPA studies are not included in the estimates provided in this report.

B. Crossing Groups and Associated Costs

Many communities interested in Quiet Zone establishment prioritize and phase crossing improvements over a period of time to allow for budgeting, planning and design, and to spread the costs out, making the overall pursuit more affordable.

The Final Rule indicates a necessary length for a Quiet Zone of ½ mile. Therefore, ¼ mile is needed on each side of each crossing to meet this criterion. Where crossings are in closer proximity than ¼ mile, these crossings need to be addressed as a corridor, in order to render the series of crossings quiet.

There are no crossings being evaluated as part of this study that are within ¼ mile of each other along this BNSF corridor. Therefore, no crossings are required to be treated for quiet zone compliance concurrent with any other crossings. However, there are clusters of crossings that may affect the same general noise receptor areas, such as similar residential communities, and therefore should be considered for quiet zone establishment concurrently or in close succession for maximum benefit.

The City requested consideration of logical grouping of the crossings based on location, type of treatment and amount of existing crossing warning devices currently in place that contribute to Quiet Zone establishment. It should be noted that the grouping of crossings is not intended to represent a prioritization, but rather the names of the crossings that may be addressed at the same time, due to proximity or other issues. The logically grouped crossings are as follows:

Group 1 Crossings – North 55th Street and Jay Road. While these two crossings are not required to be treated together, the ½ mile distance between them places them in close enough proximity that there is benefit in establishing both crossings as quiet zones in relatively close succession.

North 55th Street currently has active warning devices including approach railroad gates, flashers, cross bucks and CWT circuitry. The location of the track crossing is further from the intersection of North 55th Street with the diagonal Hwy 119, which allows for consideration of Raised Medians or Channelizing Devices at this crossing for quiet zone establishment. For installation of a standard 3-foot wide median, the concept layout on available aerials suggests additional crossing material at the railroad may be needed. This would need to be confirmed with site survey if this option is preferred by the City. Channelizing devices could be installed with no additional crossing material.

Jay Road is currently treated with approach railroad gates, flashers, cross bucks and CWT circuitry. This is one of the crossings that has the westbound egress from Jay Road to northbound Hwy 119 beginning immediately west of the railroad crossing, placing it within 60 feet of the approach gate arm. Further conversation is being conducted with FRA regarding the interpretation of this egress as an access. Conservatively, the addition of exit gates for a 4-quadrant gate installation is the most viable treatment at this location, to completely isolate the tracks in the event of an approaching train, and provide quiet zone compliance.

Group 2 Crossings – 47th Street, Valmont Road and Pearl Parkway. While these three crossings are not required to be treated together, distance between them places them in close enough proximity that there is benefit in establishing these crossings as quiet zones in relatively close succession.

The 47th Street crossing currently has approach railroad gates, flashers, cross bucks and CWT circuitry, and is most easily established as a quiet zone crossing by extending the existing Raised Medians. This would result in an SSM treatment of Approach Gates with Raised Medians, and does not require upgrade to the railroad equipment, but only necessitates roadway approach improvements.

Valmont Road also currently has approach railroad gates, flashers, and cross bucks, but requires upgraded circuitry to CWT circuitry. This location is also most easily established as a quiet zone by extending the existing raised medians to required lengths. This crossing will require upgraded circuitry if CWT is not currently installed, which may necessitate new gate installation and an upgraded railroad signal bungalow.

Pearl Parkway was recently widened and realigned, at which time new railroad gates and signal bungalow were installed. While the current FRA Inventory Report indicates railroad circuitry is DC circuitry, it is believed that the recent project included upgraded circuitry to CWT at that time. This will need to be confirmed by the railroad. This crossing has extended raised medians on each approach. However, the presence of public accesses within 60 feet of the approach railroad gate on the west side of the crossing precludes viability of the SSM, Approach Gates with Raised Medians. Therefore, the only treatment for quiet zone compliance that would silence routine sounding of locomotive horns is a 4-quadrant gate installation.

Group 3 Crossing – Independence Road. Independence Road is currently treated with approach railroad gates, flashers, cross bucks and CWT circuitry. This crossing is approximately 0.30 miles north of 47th Street at the north edge of more densely developed residential property to the south. Independence Road is configured such that Raised Medians or Channelizing Devices could be viable options but would necessitate some restriping of the roadway between the track corridor and Hwy 119. This restriping may not allow for adequate turn movements for some vehicles, and may need to be considered further, based on anticipated traffic. The 4-quadrant gate installation would require stub medians, or stub channelizing devices, to close the gap between approach and exit gates when in the down position, due to the crossing skew. This crossing would be beneficial to be pursued for quiet zone establishment in close succession with the Group 2 to the south, as this group of crossings begin to pass through more areas of residential development.

Group 4 Crossing – North 63rd Street. North 63rd Street is currently treated with approach railroad gates, flashers, cross bucks and DC circuitry, per the current FRA Inventory Report. The type of circuitry needs to be confirmed with the railroad. This crossing is in closer proximity to the diagonal Hwy 119, and is configured with ingress as well as egress turn lanes. The northbound ingress from Hwy 119 to southbound 63rd Street is inside the railroad approach gates, so an additional approach gate exists for the ingress turn bay. Because of this lane configuration, the SSM utilizing Raised Medians or Channelizing Devices is not viable at this crossing. Further conversation with FRA may result in a Modified SSM option at this location, noting that any options other than standard SSM installations, require application to and approval from the FRA. Conservatively, the addition of exit gates for a 4-quadrant gate installation is the most viable treatment at this location for quiet zone establishment. The closest adjacent crossing to North 63rd is approximately 1.5 miles. This crossing can be pursued independent of other crossings.

Group 5 Crossings – 55th Street (south) and 63rd Street (south). 55th Street is currently treated with approach railroad gates, flashers, cross bucks and CWT circuitry. The southern crossing of 63rd Street is currently treated with approach railroad gates, flashers, cross bucks and DC circuitry, per the current FRA Inventory Report. The

type of circuitry needs to be confirmed with the railroad. These two crossings are not required to be treated together. However, their relative distance of about ¼ mile to the north of the residential communities south of Arapahoe Avenue, places both crossings within about the same distance to the residential development. If not concurrent, there is benefit in establishing both crossings as quiet zones in relatively close succession. Creating quiet zones at 55th and 63rd would effectively silence the routing sounding of locomotive horns for a reach of approximately 6.0 miles east of Foothills Parkway along this track segment.

Table 13 shows the grouping of the crossings, along with notes regarding implementation, and approximate summarized concept costs for Groups 1 through 5.

Table 13. Crossing Groups and Associated Costs

GROUP	CROSSINGS/LOCATIONS	QUIET ZONE TREATMENT	Opinion of Constr Cost Per Site	Opinion of Constr Cost Total (Range)	Comments/Notes
1	North 55th Street	4-Quadrant Gates	\$432,000	\$446,000 to \$962,000	
		Wayside Horns	\$240,000		May require circuitry upgrade
		Gates/Chan.Dev.	\$156,000		
		Gates/Medians	\$180,000		May require add'l crossing material
	Jay Road	4-Quadrant Gates	\$480,000		
		Wayside Horns	\$240,000		May require circuitry upgrade
	Contingencies		\$50,000		
2	47th Street	Gates/Medians	\$72,000	\$770,000 to \$986,000	Median extension only
	Valmont Road	Gates/Medians	\$216,000		Reqs circuitry upgrade
		4-Quadrant Gates	\$432,000		Reqs circuitry upgrade
	Pearl Parkway	4-Quadrant Gates	\$432,000		May have CWT which would lower cost
		Contingencies			\$50,000
3	Independence Road	4-Quadrant Gates	\$492,000	\$206,000 to \$566,000	Reqs stub channelizing devices
		4-Quadrant Gates	\$516,000		Reqs stub medians
		Wayside Horns	\$240,000		May require circuitry upgrade
		Gates/Chan.Dev.	\$156,000		Reqs restriping/turn lane restriction
		Gates/Medians	\$216,000		Reqs restriping/turn lane restriction
		Contingencies			\$50,000
4	North 63rd Street	4-Quadrant Gates	\$432,000	\$362,000 to \$482,000	CWT upgrade & 4 exit gates
		Wayside Horns	\$312,000		CWT upgrade & 3 horns
		Contingencies			\$50,000
5	55th Street (south)	Gates/Medians	\$216,000	\$410,000 to \$818,000	Reqs circuitry upgrade
		Wayside Horns	\$240,000		Reqs circuitry upgrade
	63rd Street (south)	Gates/Medians	\$144,000		Median extension only
		4-Quadrant Gates	\$528,000		Exit gates at both crossings
		Wayside Horns	\$384,000		May require circuitry upgrade
		Contingencies			\$50,000
Range of Costs for All Crossings:			\$2,194,000	to	\$3,814,000

APPENDIX A U.S. DOT CROSSING INVENTORY SUMMARY SHEETS

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244827V
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number N 63RD ST (Street/Road Name) * (Block Number)		6. Highway Type & No. Not Yet Reported by State	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR _____			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR _____		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0035.289 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * LONGMONT	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number _____			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established _____		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0732310		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2068720	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244827V	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>3</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>5</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs <u>0</u>
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) <u>2</u>
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input checked="" type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input checked="" type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>4</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>75</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1989</u> AADT <u>006650</u>		8. Estimated Percent Trucks <u>05</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244824A
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number N 55TH ST (Street/Road Name) * (Block Number)		6. Highway Type & No. CR 43	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0033.770 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0564710		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2255260	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 04 / 28 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> Re-Open <input type="checkbox"/> New Crossing <input type="checkbox"/> Date Change Only <input type="checkbox"/> Closed <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244823T
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number JAY RD (Street/Road Name) * (Block Number)		6. Highway Type & No. CR 44	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0033.250 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0510640		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2323240	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *		31.A. State Use *	
30.B. Railroad Use *		31.B. State Use *		30.C. Railroad Use *	
30.D. Railroad Use *		31.C. State Use *		30.D. Railroad Use *	
31.D. State Use *		32.A. Narrative (Railroad Use) *		32.B. Narrative (State Use) *	
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 04/28/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 2448231	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>3</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>4</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs <u>0</u>
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) <u>2</u>
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input checked="" type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input checked="" type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>3</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) <u>0</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input checked="" type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1998</u> AADT <u>008400</u>		8. Estimated Percent Trucks <u>05</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244822L
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number INDEPENDENCE ST (Street/Road Name) * (Block Number)		6. Highway Type & No. Not Yet Reported by State	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0032.329 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0401200		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2418330	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244822L	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>2</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 1
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>2</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>75</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1994</u> AADT <u>002100</u>		8. Estimated Percent Trucks <u>05</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 04 / 28 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244821E
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number N 47TH ST (Street/Road Name) * (Block Number)		6. Highway Type & No. Not Yet Reported by State	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR _____			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR _____		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost _____ 0032.039 _____ (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number _____			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established _____		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0362520		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2442140	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 04/28/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244821E	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>4</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 2
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>2</u> <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input checked="" type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) <u>0</u>			7. Smallest Crossing Angle <input checked="" type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1989</u> AADT <u>001000</u>		8. Estimated Percent Trucks <u>08</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244818W
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number VALMONT RD (Street/Road Name) * (Block Number)		6. Highway Type & No. FAU4058	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0031.449 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF			
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0291910		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2484330	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9		1.B. Total Night Thru Trains (6 PM to 6 AM) 9		1.C. Total Switching Trains 0
1.D. Total Transit Trains 0		1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____		
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244818W	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>4</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 1
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>4</u>		<input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic	2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input checked="" type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1989</u> AADT <u>007500</u>		8. Estimated Percent Trucks <u>05</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244815B
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number PEARL ST (Street/Road Name) * (Block Number)		6. Highway Type & No. FAU4042	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0027.829 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF			
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0236200		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2503370	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated					
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9		1.B. Total Night Thru Trains (6 PM to 6 AM) 9		1.C. Total Switching Trains 0
				1.D. Total Transit Trains 0
1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____				
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 49 3.B. Typical Speed Range Over Crossing (mph) From 1 to 49		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244815B	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 4		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No	2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None		2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No			2.L. LED Enhanced Signs (List types)		
2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____			2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No		
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 4 Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 <input type="checkbox"/> Incandescent Not Over Traffic Lane 0 <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) 4 <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs 0
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) 1
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 4 <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No					
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input checked="" type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) 75			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory		5. Linear Referencing System (LRS Route ID) *	
		6. LRS Milepost *			
7. Annual Average Daily Traffic (AADT) Year 1989 AADT 001200		8. Estimated Percent Trucks 05 %		9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day 0	
				10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244813M
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number 55TH ST (Street/Road Name) * (Block Number)		6. Highway Type & No. FAU4065	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0026.379 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0185450		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2254160	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		30.C. Railroad Use *			
30.D. Railroad Use *		30.E. Railroad Use *			
31.A. State Use *			31.B. State Use *		
31.C. State Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 9	1.B. Total Night Thru Trains (6 PM to 6 AM) 9	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 30 3.B. Typical Speed Range Over Crossing (mph) From 1 to 30		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input checked="" type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244813M	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>4</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs <u>0</u>
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) <u>1</u>
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic Number of Lanes <u>4</u> <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input checked="" type="checkbox"/> (03) Federal AID, Not NHS <input type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input checked="" type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1989</u> AADT <u>007800</u>		8. Estimated Percent Trucks <u>11</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION
FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 03 / 04 / 2016	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Crossing <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 244811Y
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Part I: Location and Classification Information

1. Primary Operating Railroad BNSF Railway Company [BNSF]		2. State COLORADO		3. County BOULDER	
4. City / Municipality <input type="checkbox"/> In <input checked="" type="checkbox"/> Near BOULDER		5. Street/Road Name & Block Number 63RD ST (Street/Road Name) * (Block Number)		6. Highway Type & No. CR 39	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR		
9. Railroad Division or Region <input type="checkbox"/> None POWDER RIVER		10. Railroad Subdivision or District <input type="checkbox"/> None FRONT RANGE		11. Branch or Line Name <input type="checkbox"/> None DEN UD-WENDOVER	
12. RR Milepost 0025.370 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 0476		14. Nearest RR Timetable Station * BOULDER	
15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A BNSF		17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	
18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over		20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No	
21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Commuter		<input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Tourist/Other		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input type="checkbox"/> Number Per Day 0	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 40.0165290		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -105.2066540	
29. Lat/Long Source <input type="checkbox"/> Actual <input checked="" type="checkbox"/> Estimated		30.A. Railroad Use *			
30.B. Railroad Use *		31.A. State Use *			
30.C. Railroad Use *		31.B. State Use *			
30.D. Railroad Use *		31.C. State Use *			
30.E. Railroad Use *		31.D. State Use *			
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-832-5452		34. Railroad Contact (Telephone No.) 817-352-1549		35. State Contact (Telephone No.) 303-757-9425	

Part II: Railroad Information

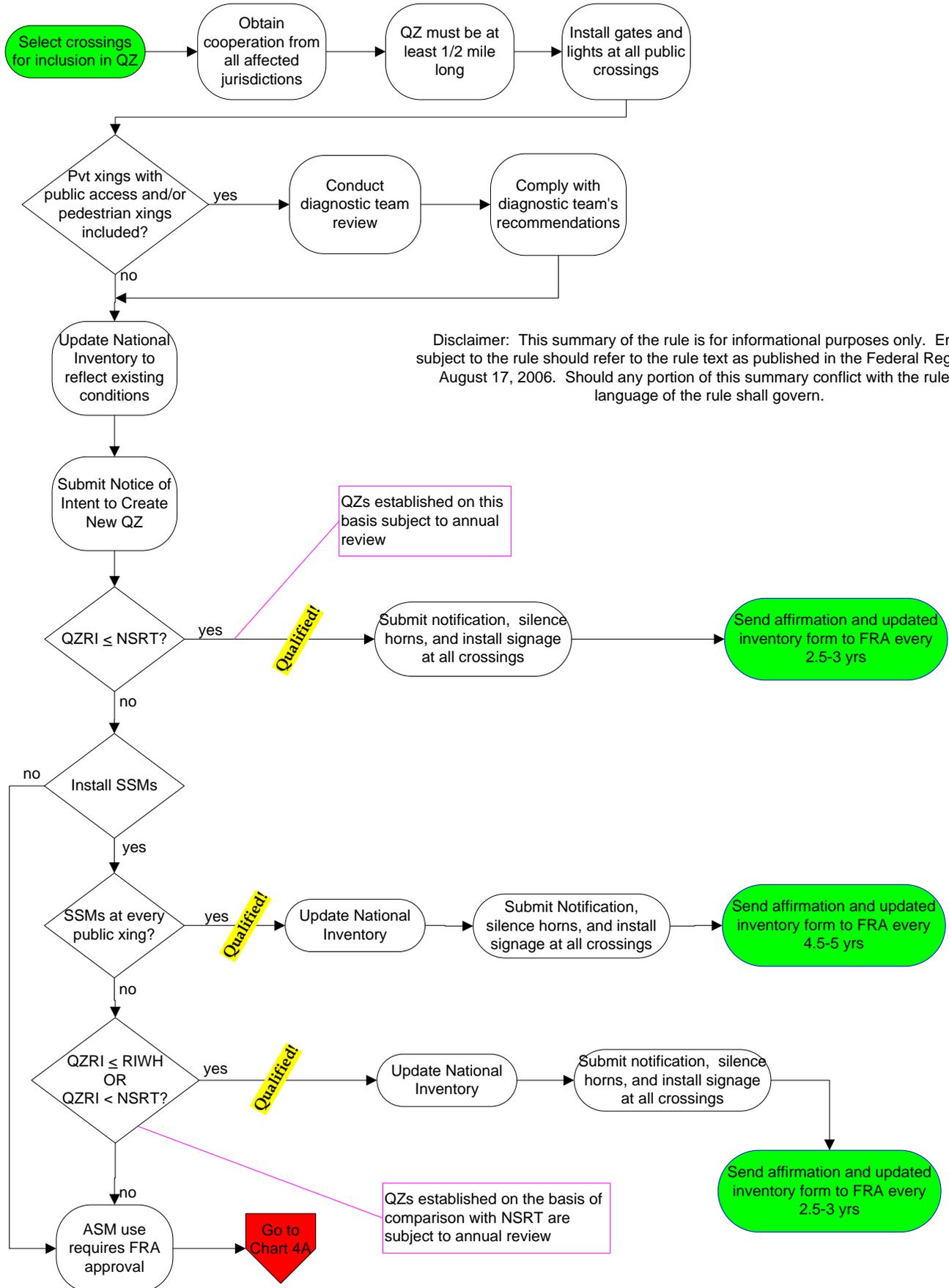
1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 8	1.B. Total Night Thru Trains (6 PM to 6 AM) 8	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day <input type="checkbox"/> How many trains per week? _____
2. Year of Train Count Data (YYYY) 2013		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 30 3.B. Typical Speed Range Over Crossing (mph) From 1 to 30		
4. Type and Count of Tracks Main 1 Siding 0 Yard 1 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input checked="" type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		7.A. Event Recorder <input type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 03/04/2016		PAGE 2		D. Crossing Inventory Number (7 char.) 244811Y	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count)	2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None <input checked="" type="checkbox"/> W10-1 _____ <input type="checkbox"/> W10-3 _____ <input type="checkbox"/> W10-11 _____ <input type="checkbox"/> W10-2 _____ <input type="checkbox"/> W10-4 _____ <input type="checkbox"/> W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count _____) <input type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input type="checkbox"/> Median <input type="checkbox"/> One Approach <input type="checkbox"/> None	2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No
2.I. ENS Sign (I-13) Displayed <input type="checkbox"/> Yes <input type="checkbox"/> No		2.J. Other MUTCD Signs <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____	2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No	2.L. LED Enhanced Signs (List types)	
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>4</u> Pedestrian _____	3.B. Gate Configuration <input type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) Resistance <input type="checkbox"/> 3 Quad <input type="checkbox"/> Median Gates <input type="checkbox"/> 4 Quad	3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED		3.D. Mast Mounted Flashing Lights (count of masts) <u>8</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	3.E. Total Count of Flashing Light Pairs <u>0</u>
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/____ <input type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	3.I. Bells (count) <u>2</u>
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input type="checkbox"/> No	4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs	4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad <input type="checkbox"/> One-way Traffic <input type="checkbox"/> Two-way Traffic Number of Lanes <u>2</u> <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * _____ Length * _____ <input type="checkbox"/> 1 Timber <input type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input checked="" type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input type="checkbox"/> 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Approximate Distance (feet) _____			7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°	8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal AID		2. Functional Classification of Road at Crossing <input checked="" type="checkbox"/> (0) Rural <input type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input checked="" type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory
5. Linear Referencing System (LRS Route ID) *					
6. LRS Milepost *					
7. Annual Average Daily Traffic (AADT) Year <u>1989</u> AADT <u>001700</u>		8. Estimated Percent Trucks <u>08</u> %	9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>		10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

APPENDIX B QUIET ZONE SUMMARY FLOWCHART

Chart 3 - Creating a New Quiet Zone or New Partial Quiet Zone using SSMs



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QZs established on this basis subject to annual review

QZs established on the basis of comparison with NSRT are subject to annual review

Notice of Intent to Create a Quiet Zone¹

Who should submit this notice

A public authority seeking to create a New Quiet Zone or a New Partial Quiet Zone should submit notice of its intent.

Parties to be notified

Before a public authority establishes a quiet zone either through public authority designation or through FRA approval, it must provide written notice to several parties. These parties include the following:

- All railroads operating over the public highway-rail grade crossings within the quiet zone,
- The State agency responsible for highway and road safety, and
- The State agency responsible for grade crossing safety.

All notices must be provided by certified mail, return receipt requested.

Deadlines

A party may submit information or comments to the public authority during the 60-day period after the date on which the Notice of Intent was mailed. This 60-day comment period may terminate early, if the public authority obtains from each party either written comments or written statements that the parties do not have any comments.

¹ The information collection submission for the final rule has been approved by the OMB. The OMB control number is 2130-0560.

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Notification contents

- ❑ The notice must unambiguously state which crossings will be contained within the quiet zone. Each public, pedestrian, and private crossing must be identified by both the U.S. DOT National Highway-Rail Grade Crossing Inventory number and the street or highway name.
- ❑ The notice must indicate the time period during which train horn restrictions would be imposed (i.e. 24 hours or from 10 pm to 7 am)
- ❑ The notice must contain a brief explanation of the tentative plans for implementing improvements within the quiet zone.
- ❑ The notice must clearly indicate the name, title, and contact information for the person who will act as point of contact during the development process.
- ❑ All notifications must contain list of the names and addresses of each party notified.

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Notice of Quiet Zone Establishment¹

Who should submit this notice

A public authority wishing to establish a New Quiet Zone, a New Partial Quiet Zone, a Pre-Rule Quiet Zone, or a Pre-Rule Partial Quiet Zone must submit a notice of Quiet Zone Establishment.

Parties to be notified ((§222.43(a)(4))

The public authority must provide written notice to several parties. These parties include the following:

- All railroads operating over the public highway-rail grade crossing within the quiet zone,
- The highway or traffic control authority, or the law enforcement authority with jurisdiction over motor vehicle traffic at the quiet zone crossings,
- Landowners with control over any private crossings within the quiet zone,
- The State agency responsible for highway and road safety,
- The State agency responsible for grade crossing safety, and
- The FRA Associate Administrator.

All notices must be provided by certified mail, return receipt requested.

Deadlines

Notice of the establishment of a Quiet Zone should be mailed no later than 21 days before the date on which train horns are scheduled to cease sounding. For New Quiet Zones and New Partial Quiet Zones, the Notice of Quiet Zone Establishment can not be served earlier than 60 days after the Notice of Intent was mailed, unless the Notice of Quiet Zone Establishment contains a written statement affirming that

¹ The information collection submission for the final rule has been approved by the OMB. The OMB control number is 2130-0560.

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written comments and/or 'no comment' statements have been received from each party that received the Notice of Intent. For Pre-Rule Quiet Zones that qualified for automatic approval, the Notice of Quiet Zone Establishment should be mailed out before December 24, 2005.

Notification contents (§222.43(e))

- The notice must unambiguously state which crossings are contained within the quiet zone. All public, pedestrian, and private crossings must be identified by both the U.S. DOT National Highway-Rail Grade Crossing Inventory Number, and by street or highway name.
- The notification must clearly cite the regulatory provision that provides the basis for establishing the Quiet Zone:
 - § 222.39(a)(1), implementation of SSMs at every public crossing in the New Quiet Zone or New Partial Quiet Zone;
 - §222.39(a)(2)(i), the QZRI is at or below the NSRT without installation of any SSMs at the New Quiet Zone or New Partial Quiet Zone;
 - §222.39(a)(2)(ii), SSMs were implemented at some crossings in the New Quiet Zone or New Partial Quiet Zone to bring the QZRI to a level at or below the NSRT;
 - §222.39(a)(3), SSMs were implemented at some crossings in the New Quiet Zone or New Partial Quiet Zone to bring the QZRI to a level at or below the RIWH; or
 - §222.39(b), public authority application to the FRA for a New Quiet Zone or New Partial Quiet Zone.
 - § 222.41(a)(i) Pre-Rule Quiet Zones that qualify for automatic approval because every crossing is equipped with an SSM,
 - § 222.41(a)(ii) Pre-Rule Quiet Zones that qualify for automatic approval because $QZRI \leq NSRT$,
 - § 222.41(a)(iii) Pre-Rule Quiet Zones that qualify for automatic approval because $NSRT < QZRI < 2 * NSRT$, and there have been no relevant collisions within the 5 years preceding April 27th, 2005.

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- § 222.41(b)(i) Pre-Rule Partial Quiet Zones that qualify for automatic approval because every crossing is equipped with an SSM,
 - § 222.41(b)(ii) Pre-Rule Partial Quiet Zones that qualify for automatic approval because $QZRI \leq NSRT$,
 - § 222.41(b)(iii) Pre-Rule Partial Quiet Zones that qualify for automatic approval because $NSRT < QZRI < 2 * NSRT$, and there have been no relevant collisions within the 5 years preceding April 27th, 2005.
 - § 222.41(c) Pre-Rule Quiet Zones and Pre-Rule Partial Quiet Zones that do not qualify for automatic approval
 - § 222.41(d) Pre-Rule Partial Quiet Zones that will be converted to 24-hour New Quiet Zones
 - § 222.42(a) Intermediate Quiet Zones or Intermediate Partial Quiet Zones
 - § 222.42(b) Intermediate Partial Quiet Zones that will be converted to 24-hour New Quiet Zones.
- If the notice contains a reference to §222.39(a)(2)(i), 222.39(a)(2)(ii), 222.39(a)(3), 222.41(a)(2), 222.41(a)(3), 222.41(b)(2), or 222.41(b)(3), that is, any time a determination of QZRI is used to justify establishment of a quiet zone, the notification must include a copy of the FRA Quiet Zone Calculator web page that contains the data on which the public authority is relying.
 - If the notice contains a reference to §222.39(b), the notice must include a copy of the FRA's notification of approval.
 - If a diagnostic team is required under §222.25 (private crossings) or §222.27 (pedestrian crossings), the notice must include a statement affirming that the State agency responsible for grade crossing safety and all affected railroads were provided an opportunity to participate in the diagnostic team review. The notice must also include a list of the diagnostic team's recommendations.
 - The notice must contain a statement indicating the time period during which horn restrictions will be observed.

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- ❑ An accurate and complete Grade Crossing Inventory Form for each public, pedestrian, and private crossing within the quiet zone that accurately reflects conditions at the crossing before any new SSMs or ASMs were implemented.
- ❑ An accurate, complete, and current Grade Crossing Inventory Form for each public, pedestrian, and private crossing within the quiet zone that accurately reflects SSMs and ASMs in place upon establishment of the Quiet Zone. SSMs and ASMs that cannot fully be described on the Inventory form shall be described separately.
- ❑ If the public authority was required to file a Notice of Intent (New Quiet Zones and New Partial Quiet Zones), the Notice of Quiet Zone Establishment shall contain a written statement affirming that the Notice of Intent was provided in accordance with the rule, and indicating the date on which the Notice of Intent was mailed.
- ❑ If the public authority was required to file a Notice of Intent, and did so less than 60 days before mailing the Notice of Quiet Zone Establishment, they must also include a written statement affirming that they received written comments and/or 'no comment' statements from the parties that received the Notice of Intent.
- ❑ If the public authority was required to submit a Notice of Detailed Plan, they must include a written statement affirming that the Notice of Detailed Plan was provided in accordance with the rule, and they must state the date on which it was provided.
- ❑ The name and title of the person responsible for monitoring compliance with the requirements of the rule and his/her contact information. In addition to the person's name, title, and organization, contact information should include his/her business address, telephone number, fax number, and email address.
- ❑ Names and addresses of all parties notified in accordance with the rule; and
- ❑ A statement signed by the Chief Executive Officer (CEO) of each public authority continuing the quiet zone. In the CEO's statement, he or she must certify that the information submitted by the public authority is accurate and complete to the best of his/her knowledge and belief.

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**APPENDIX C NOISE CONTOUR DIAGRAM
(IF REQUESTED)**



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