

# Downtown Sioux Falls Rail Yard Redevelopment Project

Project Number: EM-1225(02), PCN 00UH, CIP 452099

City of Sioux Falls, Minnehaha County, South Dakota

## Draft Environmental Assessment and Section 4(f) Evaluation

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by the:

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and  
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7-18-2013

Date of Approval



Terrence Keller, SDDOT



Marion Barber, FHWA

The following persons may be contacted for additional information concerning this document:

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Joshua Peterson  
Principal Engineer  
City of Sioux Falls  
224 W. Ninth Street  
Sioux Falls, SD 57117-7402  
(605) 367-8616  
jpeterson@siouxfalls.org

Terrence Keller  
Environmental Manager  
South Dakota Department of Transportation  
700 East Broadway Avenue  
Pierre, SD 57501  
(605) 773-3721  
Terry.Keller@state.sd.us

Marion Barber, PE  
Environmental Engineer  
Federal Highway Administration  
116 East Dakota Avenue, Suite A  
Pierre, SD 57501  
(605) 224-8033  
Marion.Barber@dot.gov

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## CHAPTER 1 INTRODUCTION AND PURPOSE & NEED

### 1.1 INTRODUCTION

The City of Sioux Falls, South Dakota (City), in cooperation with the Federal Highway Administration (FHWA) of the United States Department of Transportation (USDOT) and the South Dakota Department of Transportation (SDDOT), is proposing to purchase a portion of the Downtown BNSF rail yard and construct necessary railroad infrastructure improvements to complete Phases II and III of the *Rail Relocation Conceptual Phasing Plan* (TKDA 2002) in Sioux Falls and Minnehaha County, South Dakota. The Downtown Rail Yard Redevelopment Project is a key part of a much larger effort to encourage redevelopment of the downtown area of the City, outlined in part or in whole by numerous other studies and reports, beginning with the *Sioux River Greenway Concept Plan* (Spitznagel Partners 1975), the *Sioux Falls Downtown Development Plan* (Sioux Falls 1987), and the *Phillips to the Falls - A Brownfields Redevelopment Plan: Final Report* (Big Muddy Workshop 1998); continuing with the *Rail Relocation Feasibility Study* (TKDA 2001) and the *Sioux Falls Rail Plan Benefits Study: Draft Report* (TKDA 2002); and evidenced most recently by the *City of Sioux Falls 2015 Downtown Plan* (Sioux Falls 2004), the updated *Sioux Falls Greenway & Riverfront Master Plan* (Design Studios West, Inc. 2004), the *Development Summary, 2008 Downtown Report* (Sioux Falls 2009), and the *Shape Sioux Falls 2035 Comprehensive Plan* (City of Sioux Falls 2009).

The overall objectives of the *Rail Relocation Conceptual Phasing Plan (Conceptual Phasing Plan)* were to provide opportunities for and encourage redevelopment of the downtown area of Sioux Falls, improve the quality of life of the residents of the City, provide for economic growth and an increased tax base, and to decrease the conflicts between trains, vehicles, and pedestrians throughout the downtown area. These objectives were envisioned to be realized by constructing several new rail infrastructure improvements in multiple phases. Phases II and III involved constructing a new switch yard and a new bridge over the Big Sioux River, and removing parts of the existing downtown rail yard, including bridges, tracks, and other features that currently impede redevelopment, discourage pedestrian access, create vehicular conflicts, and generally divide the downtown district. Phases I and IV involved similar infrastructure improvements, including additional yard removals, new tracks or siding construction, and crossing improvements or overpasses. Major portions of the Phase I and Phase IV projects have already been completed.

The Phase II and Phase III improvements were specifically identified in the USDOT's 2005 Highway Funding Bill, referred to as the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (SAFETEA-LU), which provided \$40 million of federal funding for the project. These funds are being administered by FHWA through the SDDOT.

This Draft Environmental Assessment (EA) was prepared in compliance with the requirements of the *National Environmental Policy Act of 1969* (NEPA), the Council on Environmental Quality (CEQ) regulations in the Code of Federal Regulations (CFR) (40 CFR 1500-1508), and guidelines in FHWA's Technical Advisory T-6640.8A, *Guidance for Preparing and Processing Environmental and Section 4(f)*

*Documents.* The intent of these regulations and guidelines are to ensure that all factors are considered in the transportation decision-making process, including a concern for the environment and the involvement of the public (FHWA 1987).

## **1.2 BACKGROUND**

### **1.2.1 HISTORY OF SIOUX FALLS**

The City of Sioux Falls is the county seat of Minnehaha County, with some southern portions of the City now extending into Lincoln County (**Figure 1.1**). The City is a thriving metropolitan area, with a 2010 population of 153,888 (US Census Bureau 2012). The greater metropolitan population is 228,261, which accounts for 28 percent of South Dakota's entire state population.

Sioux Falls was founded in the mid-19<sup>th</sup> century on the banks of the Big Sioux River, and more specifically, around the impressive cascades of the river over a unique rock formation of Sioux quartzite, which are commonly referred to as "the Falls." The Falls have been an iconic feature for the City throughout its history, and have drawn many peoples to the area, beginning with prehistoric people who settled around the Falls around 500 B.C., and later, an agricultural society who built villages in the same areas. Native nomadic peoples, who arrived in the 18<sup>th</sup> century, were followed by the French fur traders and European settlers, and eventually by the railroads and land companies of the late 1800's. Indeed, the Falls still draw people to the area, and many of the City's most historic events and features in the core of the downtown area are linked directly to the Falls.

### **1.2.2 THE RAILROADS**

The Dakota Land Company and the Western Town Company organized in 1856 to claim the land around the Falls and the Village of Sioux Falls was founded in 1876. Soon after, in 1878, the Chicago, Saint Paul, Minneapolis & Omaha Railway arrived. Over the next several decades, additional railroads were constructed across South Dakota, many of them with main lines or branch lines in Sioux Falls, which was eventually served by no less than five separate railway companies. These included the Chicago & North Western Railway; the Chicago, Milwaukee & Saint Paul Railroad; the Great Northern Railway; the Illinois Central Railroad; and the Chicago, Rock Island & Pacific Railroad. The City grew into a regional manufacturing center, drawing large companies that shaped the downtown character, including the John Morrell meat packing plant and stockyards, the Queen Bee Mill, Sioux Steel, and an Army Air Base just north of downtown. Eventually, with the construction of the interstate highways in the 1960's, Sioux Falls solidified itself as one of the largest agriculturally based industrial cities in the nation (South Dakota State Historic Preservation Office 1998, revised 2007). Now, after many of the railroads consolidated in the 1970's, there remains only one first-class railroad in Sioux Falls: the Burlington Northern and Santa Fe Railroad (now referred to simply as BNSF), and two short-line railroads: the Ellis and Eastern Railroad (E&E), and the Dakota and Iowa (D&I) Railroad.

Three separate BNSF branch lines, or subdivisions, connect within a large rail yard in downtown Sioux Falls (referred to hereafter as the Downtown Yard) which is situated immediately south of the Falls and just east of the Big Sioux River. These three subdivisions are the Madison, Canton,



and Corson Subdivisions. The Madison Subdivision extends northwest from Sioux Falls to Madison, South Dakota. The Canton Subdivision extends south from Sioux Falls to Canton, South Dakota, where it connects to the Mitchell Subdivision. The Corson Subdivision extends northeast from Sioux Falls to Garretson, South Dakota, where it connects to a BNSF mainline (**Figure 1.2**).

The E&E Railroad uses a portion of the BNSF tracks within the Downtown Yard in Sioux Falls, and services local concrete and gravel industries between the towns of Brandon and Ellis, South Dakota. The D&I Railroad services areas between Dell Rapids, South Dakota to Sioux City, Iowa, and also uses the BNSF mainline in Sioux Falls<sup>1</sup>. Both the D&I and E&E have rail transloading<sup>2</sup> sites available in the region for the efficiency of shipping and exchange of goods. Direct connections with dock spurs and freight forwarding service<sup>3</sup> are also available from the railroads at other locations throughout Sioux Falls.

The resulting complex network of numerous railroad tracks, yards, switches, sidings, and crossovers constructed over the last century has left its mark on Sioux Falls. In particular, several of these rail yards were originally situated around the Falls, and eventually were surrounded by downtown, including the Milwaukee Yard and the Downtown Yard, which provided easy access for the major industries that were located near the Falls, including John Morrell and Sioux Steel. However, over the years, the railroad transportation system servicing the Sioux Falls area has changed. Most heavy industry has now moved out of the downtown area, with light industry and other businesses opting to use other freight transportation services utilizing over-the-road transportation. The BNSF switching operations within the Downtown Yard have also changed; resulting in fewer overall trains, yet with increased vehicular conflicts at 6<sup>th</sup> Street and 8<sup>th</sup> Street.

While the surrounding industries have moved away from downtown, the rail yards have remained, physically limiting the economic development potential and re-connection of the downtown area to the Big Sioux River and the Falls. Therefore, over the past few decades, the re-configuration or removal of tracks and rail yards from the downtown area has been a primary component of the City's efforts to promote and encourage economic development downtown.

### 1.2.3 DOWNTOWN REDEVELOPMENT

Over the last 25 years, dozens of separate studies have been prepared with the intent of improving downtown Sioux Falls. Many of these studies have developed a similar theme, and have come to the same conclusion: the railroad corridors downtown occupy prime locations for growth that are both compatible and supportive of a viable downtown district. Several plans have been developed to encourage this development for the purpose of economic development, with the secondary goals of reducing pedestrian conflicts, reducing vehicle delays, and re-connecting downtown with the City's

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<sup>1</sup> The D&I Railroad only passes through Sioux Falls on BNSF's tracks and will not be affected by this project.

<sup>2</sup> Transloading is the process of transferring a shipment from one mode of transportation to another.

<sup>3</sup> Freight forwarding is a service used by companies that deal in international or multi-national import and export. While the freight forwarder does not actually move the freight itself, it acts as an intermediary between the client and various transportation services.

namesake, the Falls. Over time, as railroad operations have changed, opportunities have arisen to remove or relocate rail lines, and/or reconfigure railroad operations to reclaim these areas for the benefit of economic development.

The *Phillips to the Falls – A Brownfields Redevelopment Plan: Final Report*, completed in February 1998, outlined concepts for the redevelopment of a large portion of the downtown Sioux Falls area, immediately north and west of the Sioux Steel property, which is located at 1<sup>st</sup> Avenue and 6<sup>th</sup> Street. This plan has been under implementation for the past decade with the goal of recreating a historic connection to the Big Sioux River by redeveloping and reclaiming areas around the old Milwaukee Yard, a central brownfields and rail yard area. The resulting redevelopment, which began in earnest in 2004, has already begun providing opportunities for the expansion and enhancement of downtown Sioux Falls and Falls Park. The new Falls Park West now regularly hosts concerts and other outdoor events in close proximity to downtown restaurants, shops, and offices that were previously cut off from the river, and offers viewing points of the upper falls from the west bank of the river.

On December 17, 2001, the City of Sioux Falls City Council adopted Resolution 136-01, establishing a citizen-member Downtown Task Force to prepare a long-range plan for future growth and development of the Central Business District (CBD), which encompassed areas on both sides of the Big Sioux River. The Downtown Task Force used public participation from a Community Visioning Workshop, several proactive community groups, the 1994 Sioux Falls Tomorrow community-based plan<sup>4</sup>, and other related studies to develop the *City of Sioux Falls 2015 Downtown Plan (2015 Downtown Plan)*.

The *2015 Downtown Plan* expanded on the CBD, and identified an area referred to as the Downtown Planning Area as the official downtown area<sup>5</sup>. It also specifically identified a portion of downtown east of the Big Sioux River, described as the East Bank Redevelopment Area, as a “high-priority area” for redevelopment (**Figure 1.3**). These areas were considered locations that were at less than their full economic potential and where new development was desired. The plan recognized that relocation of the downtown BNSF rail yard would not only allow redevelopment, but would also meet the City’s long-term goals of reducing traffic conflicts between trains and automobiles. The plan also recognized that removal of the rail yard and siding tracks would improve the physical conditions of the area for pedestrians and bicyclists. A direct connection between the Madison and Corson Subdivisions, or some improvement to the current railroad operations, was identified in the study as a key component to redeveloping the downtown area (Sioux Falls 2004).

In conjunction with the *2015 Downtown Plan*, in order to quantify the potential benefits of relocating the rail yard and/or operations, the City of Sioux Falls commissioned several related studies to identify

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<sup>4</sup> The “Sioux Falls Tomorrow” community-based planning process was funded by the Forward Sioux Falls II initiative in 1993. Forward Sioux Falls is a joint venture economic development partnership between the Sioux Falls Area Chamber of Commerce and the Sioux Falls Development Foundation. Since 1987, Forward Sioux Falls has raised nearly \$25 million to enhance the economic development efforts and improve the quality of life in Sioux Falls. (<http://www.forwardsiouxfalls.com/aboutus.cfm>)

<sup>5</sup> The downtown area was officially recognized by City Ordinance Section 39-142 as encompassing nearly 125 square city blocks that are served by three formal government functions: the Downtown Business Improvement District, the Downtown Urban Renewal Area, and the Downtown Design Review Overlay District.

the feasibility, timing, costs, and benefits related to possible changes to the railroad corridors in downtown. The three studies, prepared by the engineering, architecture, and planning firm of Toltz, King, Duvall, Anderson (TKDA) were: the *Rail Relocation Feasibility Study (Feasibility Study)* in May 2001, the *Conceptual Phasing Plan* in March 2002, and the *Sioux Falls Rail Plan Benefits Study: Draft Report (Benefits Study)* in July 2002. These studies identified several conceptual alternatives, presented a conceptual phasing plan and estimated costs, and calculated the economic benefits of removing rail yards, reconfiguring multiple railroad lines, constructing grade-separated crossings, and constructing other improvements throughout Sioux Falls.

The *Feasibility Study* outlined possible options for providing a direct connection between the Madison and Corson Subdivisions. As currently configured, the three subdivisions meet in the Downtown Yard in the shape of a “Y”, with the Madison being in the upper left, the Corson being in the upper right, and the Canton being the lower leg of the connection. Therefore, in order to move a train from the Madison Subdivision to the Corson Subdivision, trains must pull down to the south along the Canton Subdivision, and then be pulled back up to the north. This configuration requires additional operations to un-hook the lead engine, re-position it at the opposite end of the train, and reverse the direction of the train (**Figure 1.2** and **Figure 1.3**).

The *Feasibility Study* evaluated two basic options for this direct connection; a north downtown option, which would have constructed a “Wye” track (i.e. a complete three way connection in the shape of a triangle) east of Falls Park and south of the John Morrell plant; and a south downtown option, which would have constructed a Wye track south of Falls Park. An additional option evaluated in the *Feasibility Study* was to construct a rail car storage siding along the Corson Subdivision between Weber Street and Lowell Avenue, with a new bridge over Cliff Avenue<sup>6</sup>.

The *Conceptual Phasing Plan* was based upon the conclusions of the *Feasibility Study*, and included preliminary cost estimates and conceptual-level drawings for numerous improvement projects to accomplish the goals of downtown redevelopment (**Figure 1.4**). Among the improvements identified in the plan were an additional siding track along the Madison Subdivision, an improved entrance to Pasley Park, rail line and track removals and/or relocations, a new rail yard, and several grade separation improvements throughout the primary railroad corridors in Sioux Falls. The projects were grouped into four phases (I through IV) as described below:

### **Phase I**

Phase I projects included construction of a new siding east of the airport for rail car storage to replace the Milwaukee Yard, an extension of North Phillips Avenue, and a new vehicle crossing and pedestrian underpass for Pasley Park.

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<sup>6</sup> The siding option was stated to be useful only if either of the new Wye track options were feasible.

The Benson Road Siding, which was constructed in 2003, replaced the Milwaukee Yard tracks, which were removed in 2004 as part of the brownfields redevelopment plan. North Phillips Avenue was also constructed in 2004, along with Falls Park West, in the location of the Milwaukee Yard. The Pasley Park crossing was constructed in 2004, and included a combined vehicle and pedestrian underpass. The Phase I projects were partially funded by the Department of Housing Urban and Development (HUD) (\$1,000,000) and the Environmental Protection Agency (EPA) Brownfields<sup>7</sup> funds (\$600,000).

## **Phase II**

Phase II included the construction of a new rail yard to replace the existing Downtown Yard. Based on the previous studies, the location of this new rail yard was to be situated along BNSF's Corson Subdivision, near the intersection of Timberline Avenue and Rice Street.

## **Phase III**

Phase III included the removal of the existing Downtown Yard. It also included the construction of a Wye track, or other necessary improvements required to maintain service between the three BNSF subdivisions, as well as provisions for the E&E to BNSF connection at the south end of the Downtown Yard.

## **Phase IV**

Phase IV included the construction of several grade-separated crossings in southern Sioux Falls over the Canton Subdivision. Several of these crossings have already been constructed; the 57<sup>th</sup> Street overpass was completed in 2008, and the 69<sup>th</sup> Street overpass was completed in 2011. These crossings were constructed by the City in partnership with BNSF. Two additional crossings, one at Cliff Avenue near 12<sup>th</sup> Street, and one at 26<sup>th</sup> Street near Southeastern Avenue, were also evaluated for future construction.

The *Benefits Study* evaluated the potential benefits of implementing the *Conceptual Phasing Plan*. The potential benefits included broad categories of traffic-related benefits, rail maintenance and bridge replacement cost savings, and public fiscal benefits (i.e. tax revenues). The *Benefits Study* evaluated several alternatives for rail removal, new yard construction, new bridges, and potential land areas made available by the proposed projects described in the *Conceptual Phasing Plan*. The *Benefits Study* provided the City with a vision for increasing economic development, improving the quality of life, and enhancing the downtown area of Sioux Falls.

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<sup>7</sup> The EPA Brownfields Grant program involves the expansion, redevelopment, or reuse of a property of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off green spaces and working lands.

Since its completion, the *Conceptual Phasing Plan* has gained tremendous local community support. As described above, several of the projects in Phases I and IV have already been constructed in partnership between the City, BNSF, and other local and federal entities.

As a result of these and many other planning efforts, downtown Sioux Falls has already taken major steps toward becoming a thriving and successful business district as originally envisioned. To illustrate this success, the City produced a report in 2009 detailing the efforts of the past year, entitled *A Development Summary, 2008 Downtown Report*. This report highlighted numerous projects that occurred in the downtown area in 2008, including building renovations and additions, new construction, building permits, special events, and other redevelopment efforts. Additionally, the report highlighted some of the City's redevelopment incentives, including an historic façade easement program, new tax increment financing (TIF) districts, and several recently completed tax abatement projects. According to the report, the property values in the downtown area increased to over \$220 million for 2008, which was well over double the property valuation in 1998 of just over \$97 million (Sioux Falls 2009).

### **1.3 STATEMENT OF PURPOSE AND NEED**

This project is needed because the Downtown Yard occupies an area of Sioux Falls that has been identified as a central location for economic redevelopment by numerous studies, reports, and plans focusing on the downtown area. In addition, with the passage of SAFETEA-LU, there is congressionally authorized intent to complete Phases II and III of the *Conceptual Phasing Plan*.

Therefore, the purpose of the project is to make the Downtown Yard land available for economic development purposes by removing the yard tracks, while maintaining BNSF's railroad operations, meeting applicable railroad design criteria and safety standards, and being feasible from an engineering and logistics standpoint.

The following sections provide further discussion of the three primary components of the purpose and need.

#### **1.3.1 PROVIDE OPPORTUNITIES FOR ECONOMIC DEVELOPMENT IN DOWNTOWN SIOUX FALLS**

Downtown is the City's primary district for business, finance, government, arts, and culture, offering a range of dining, shopping, lodging, housing, education, and entertainment opportunities. Over the past 25 years, the downtown area has experienced tremendous growth, with the construction of new buildings, redevelopment of underutilized properties, and rehabilitation of historic buildings, due in part to the incentives offered by the City, which have stimulated private reinvestment and ensured competitive development compared to other areas of the City. New parks and landscaping have been integrated with the Big Sioux River and Falls Park, and developers have given special considerations to utilizing quality materials and attractive building design, which has created an aesthetically-pleasing downtown. Additionally, as new investments have been made, care has been taken to maintain and increase the amount of sidewalks, landscaping, outdoor art, and public spaces.

While there have been economic investments on both the west and east banks of the river, the Downtown Yard continues to hinder redevelopment of the East Bank high-priority area. Removing the switching operations from the Downtown Yard would make available this critical piece of property for redevelopment.

### 1.3.2 FULFILL LEGISLATIVE INTENT

On August 10, 2005, Congress enacted SAFETEA-LU to address the many challenges facing the United States' transportation system, including improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

Based on the findings of the 2001 and 2002 TKDA studies, the City requested \$40 million in federal funding for the completion of Phase II and Phase III of the Phillips to the Falls Project, which was granted by Congressional approval of SAFETEA-LU in 2005. Therefore, this project is funded by the federal government, and is being administered by FHWA (Pub. L. 105-59, Stat. 1505, Section 1934. No. 377).

### 1.3.3 MAINTAIN ACCEPTABLE RAILROAD OPERATIONS

Most rail service to and from Sioux Falls is provided by BNSF, which provides service nationwide with over 32,000 miles of track, and accommodates all types of materials. The existing Downtown Yard is part of a regional rail system providing freight service to southeast South Dakota using the BNSF mainline (via the Corson Subdivision) to connect to main lines serving areas such as Sioux City, Iowa and Willmar, Minnesota. The Downtown Yard serves as the place for BNSF and the E&E Railroad to interchange rail cars, and also provides a place to store and service rail cars and engines, as well as a location for infrequent transloading with local customers.

The City and BNSF have coordinated to identify the specific, current operations within the Downtown Yard and have documented these operations in an *Operations Plan (Appendix A)*. The *Operations Plan* indicates that BNSF does not anticipate any changes to their current operations in the future, with the exception of unforeseen market forces or unknown future developments. The following sections provide a summary of the **current operations**<sup>8</sup> of BNSF and the E&E Railroad throughout Sioux Falls as they relate to the Downtown Yard, as taken from the *Operations Plan*. The *Operations Plan* approximates the average number of trains and train lengths; however, these numbers can vary greatly depending on season, crop production, supply and demand, and other factors affecting their markets.

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<sup>8</sup> Changes to these operations (i.e. **future operations**) are described in other sections of this document, as they relate to the alternatives considered, and socio-economic and environmental impacts.

### BNSF Operational Requirements

There are four primary operational requirements that need to be met for BNSF acceptance of the proposed project. These items are as follows:

- **OPERATE REGIONAL TRAINS** – The ability to continue to operate regional trains arriving and departing Sioux Falls.
- **E&E INTERCHANGE** – The ability to continue to interchange rail cars with the E&E Railroad.
- **CONNECT SUBDIVISIONS** – The ability to maintain the connection between the Madison, Corson, and Canton Subdivisions for all train traffic.
- **SERVICE LOCAL BUSINESSES** – The ability to continue to provide local service to commercial and industrial customers in and around Sioux Falls.

#### **OPERATE REGIONAL TRAINS**

Regional service in Sioux Falls peaks at approximately 10 unit trains<sup>9</sup> (approximately 50 cars each with two engines) arriving and departing at the Downtown Yard per week. These trains enter and leave Sioux Falls on the Corson Subdivision. Most of these trains are interchanged to the E&E Railroad for handling to their final destination.

#### **E&E INTERCHANGE**

Currently, BNSF and the E&E Railroad utilize the Downtown Yard to transfer rail cars. This process, typically referred to as an interchange, is where rail cars that are ready for delivery to customers within Sioux Falls or destined for customers outside Sioux Falls, are either disassembled into smaller trains or assembled into larger ones, and then delivered to customers within Sioux Falls by the E&E Railroad, or to their ultimate destination outside Sioux Falls by BNSF.

#### **CONNECT SUBDIVISIONS**

There are also unit trains that enter the Downtown Yard to move between the Madison and Corson Subdivisions. These unit trains do not stop in the Downtown Yard for switching. These trains enter the yard from one subdivision and pull through the yard so that the tail end is south of 6<sup>th</sup> Street. A switch engine connects to the north end of the train and pulls it out of the yard to the north. The switch engine is disconnected, and the main engines are “run around” to the new lead end of the train at the existing sidings along the Madison and Corson Subdivisions. On average, four unit trains, two loaded and two empty (usually 110 cars, but ranges from 98 and 120 cars, with three engines per train) make this movement per week.

#### **SERVICE LOCAL BUSINESSES**

Local rail service involves the delivery and pickup of rail cars to and from rail-served customers in Sioux Falls and the surrounding region (Madison, Canton, etc.). Rail cars are transported between

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<sup>9</sup> Train traffic throughout Sioux Falls, excluding local service, is typically described as unit trains. Unit trains consist of one or more lead locomotive engines and anywhere from 50 to 125 rail cars (e.g. boxcars, flatcars, gondolas, liquid tanks, hoppers, etc.).

the Downtown Yard and customers along all three BNSF subdivisions; Madison, Canton, and Corson. Local service along the Madison Subdivision averages approximately seven trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week. Local service along the Canton Subdivision averages approximately four trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week. Finally, the Corson Subdivision averages at around five trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week.

## **1.4 SUMMARY**

The existing Downtown BNSF Rail Yard occupies a location that is central to the redevelopment of downtown Sioux Falls, and hinders opportunities for increased economic activity and reducing potential investment in the area. Removing or relocating the Downtown Yard, and/or constructing new infrastructure improvements to maintain or improve railroad operations, would open the area to redevelopment opportunities. Furthermore, removing the rail yard and constructing infrastructure improvements to maintain or improve railroad operations would fulfill the legislative intent of funds approved by Congress in SAFETEA-LU, which mandated the implementation of Phases II and III of the *Conceptual Phasing Plan*. Proposed solutions must also be consistent with BNSF's operational requirements, allowing them to maintain or improve rail service within Sioux Falls and the region.

Specifically, these improvements must allow BNSF to continue to switch regional trains and engines, allow BNSF and the E&E to interchange rail cars, provide a connection between the three subdivisions, and maintain local service to businesses throughout Sioux Falls, all while meeting current railroad safety standards, engineering criteria, and operational and maintenance requirements.



Figure 1.1 – Location Map

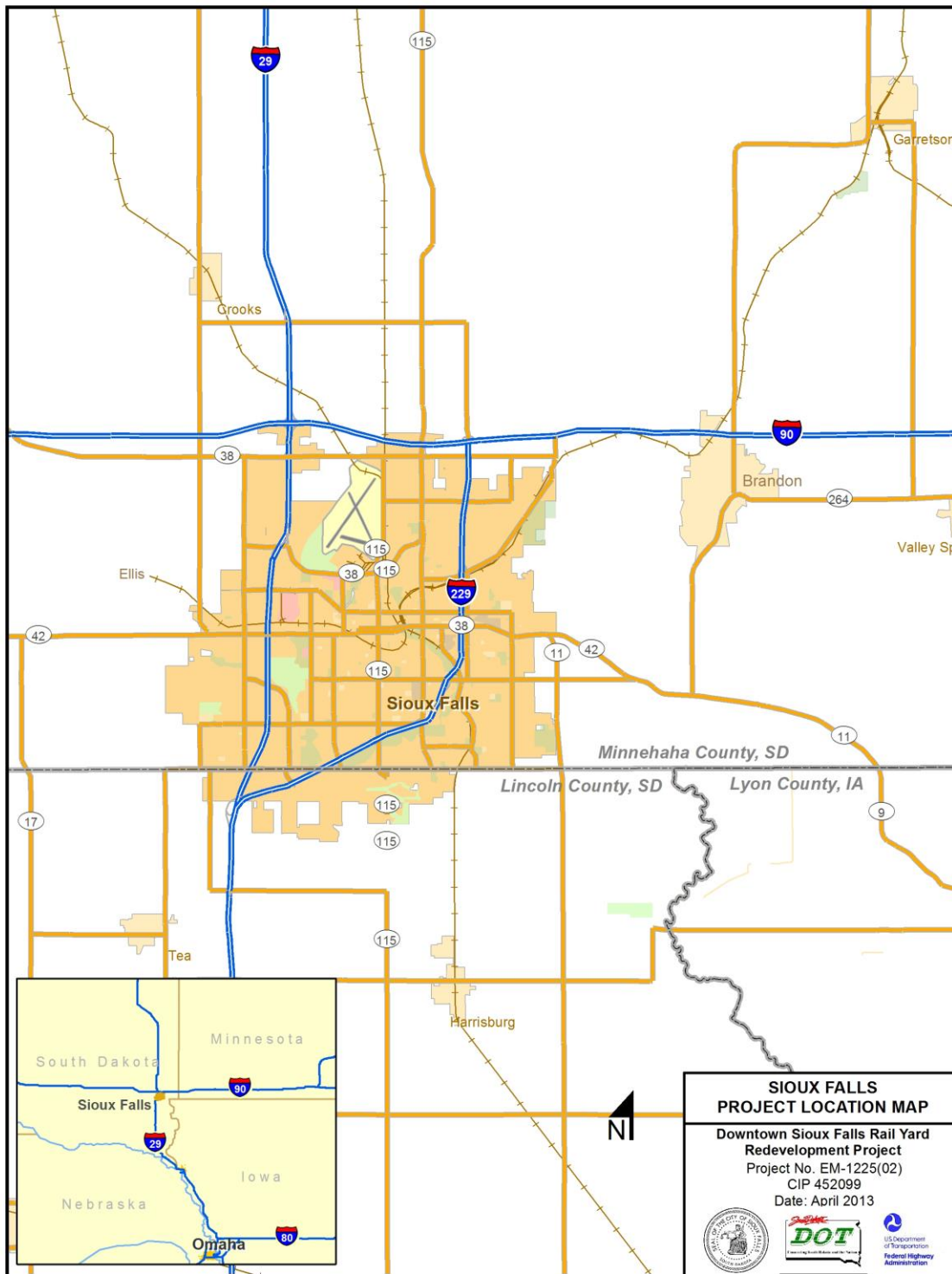


Figure 1.2 – Railroad Subdivision Map

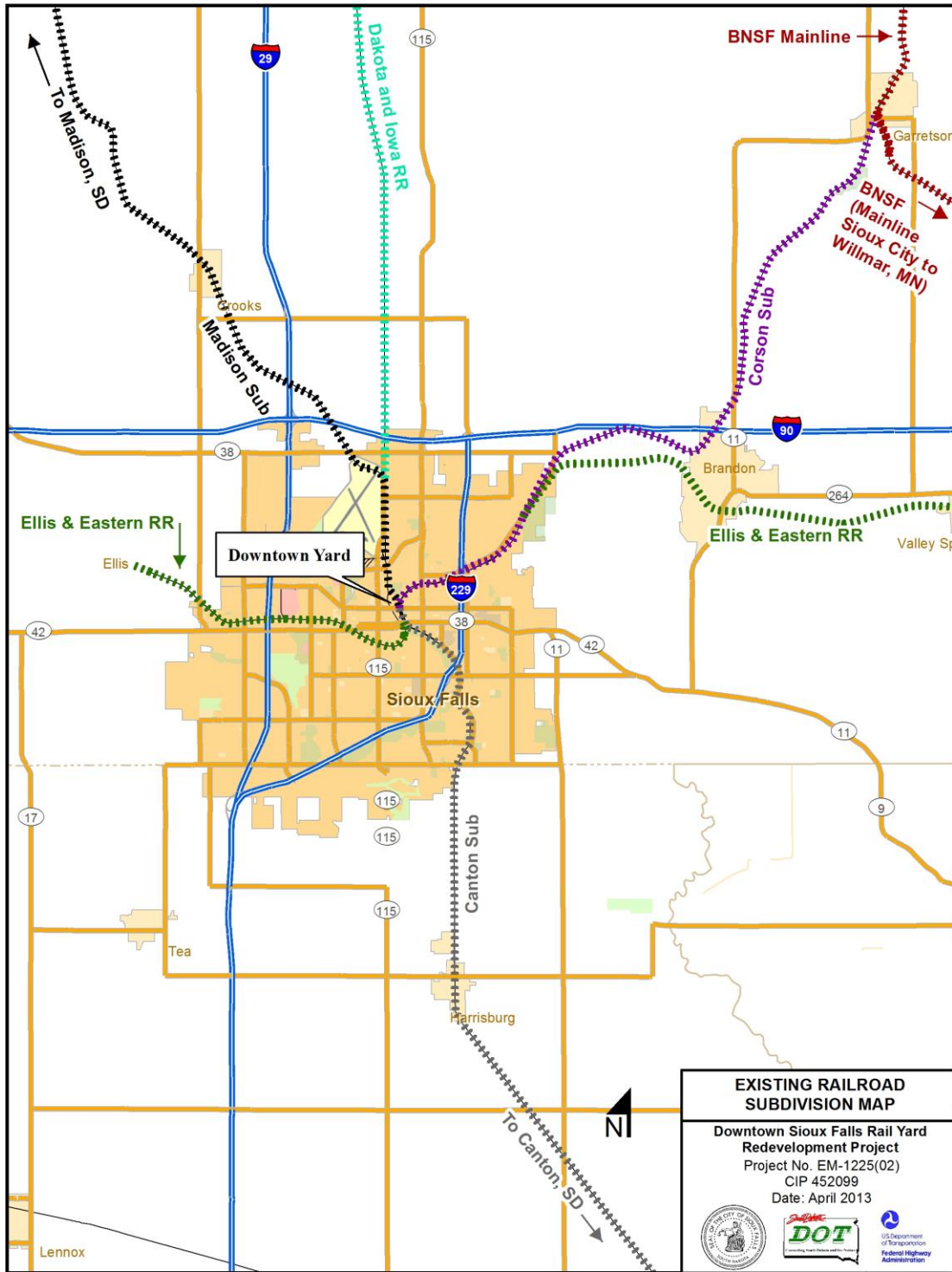


Figure 1.3 – Downtown Redevelopment Area

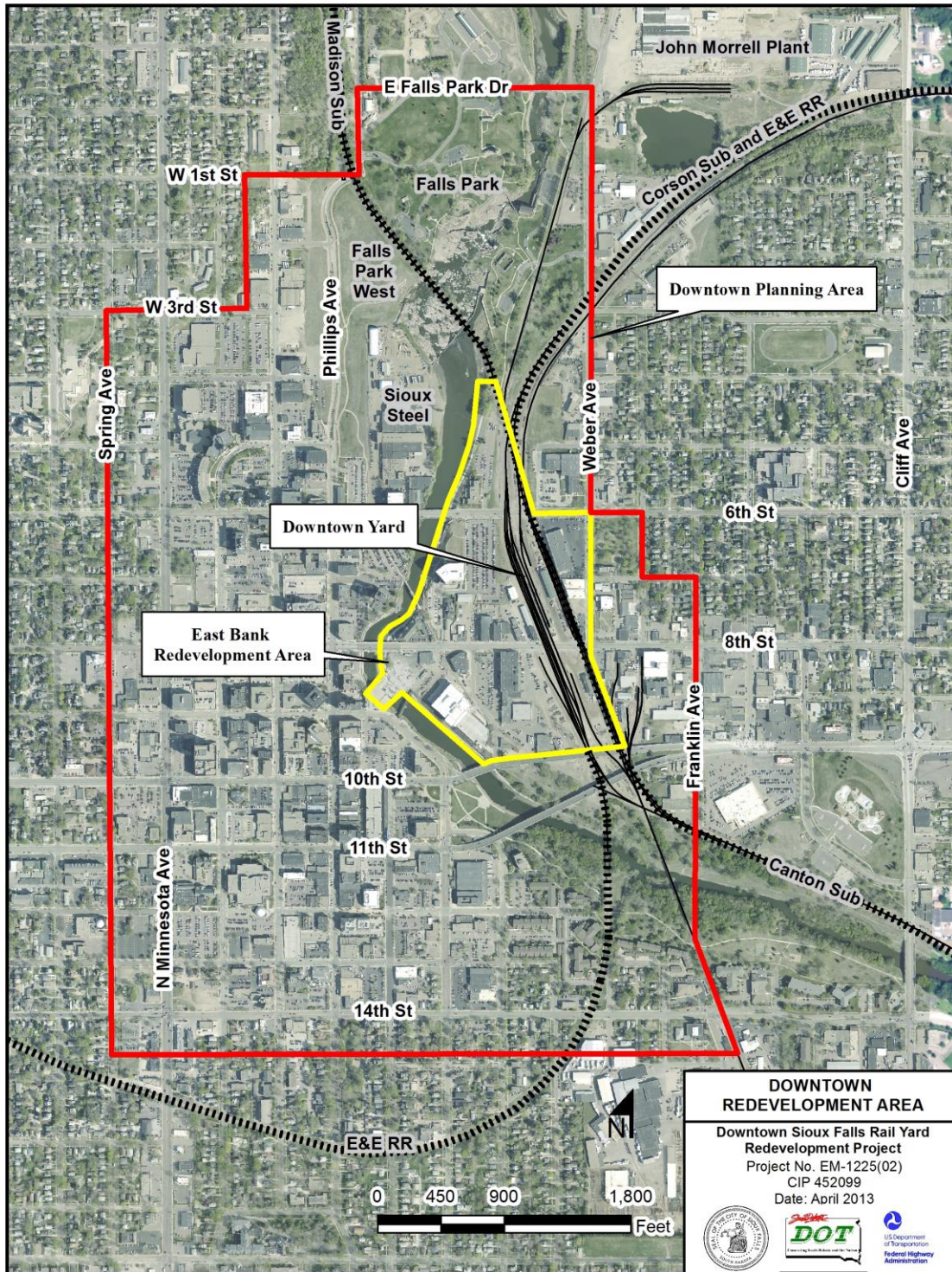
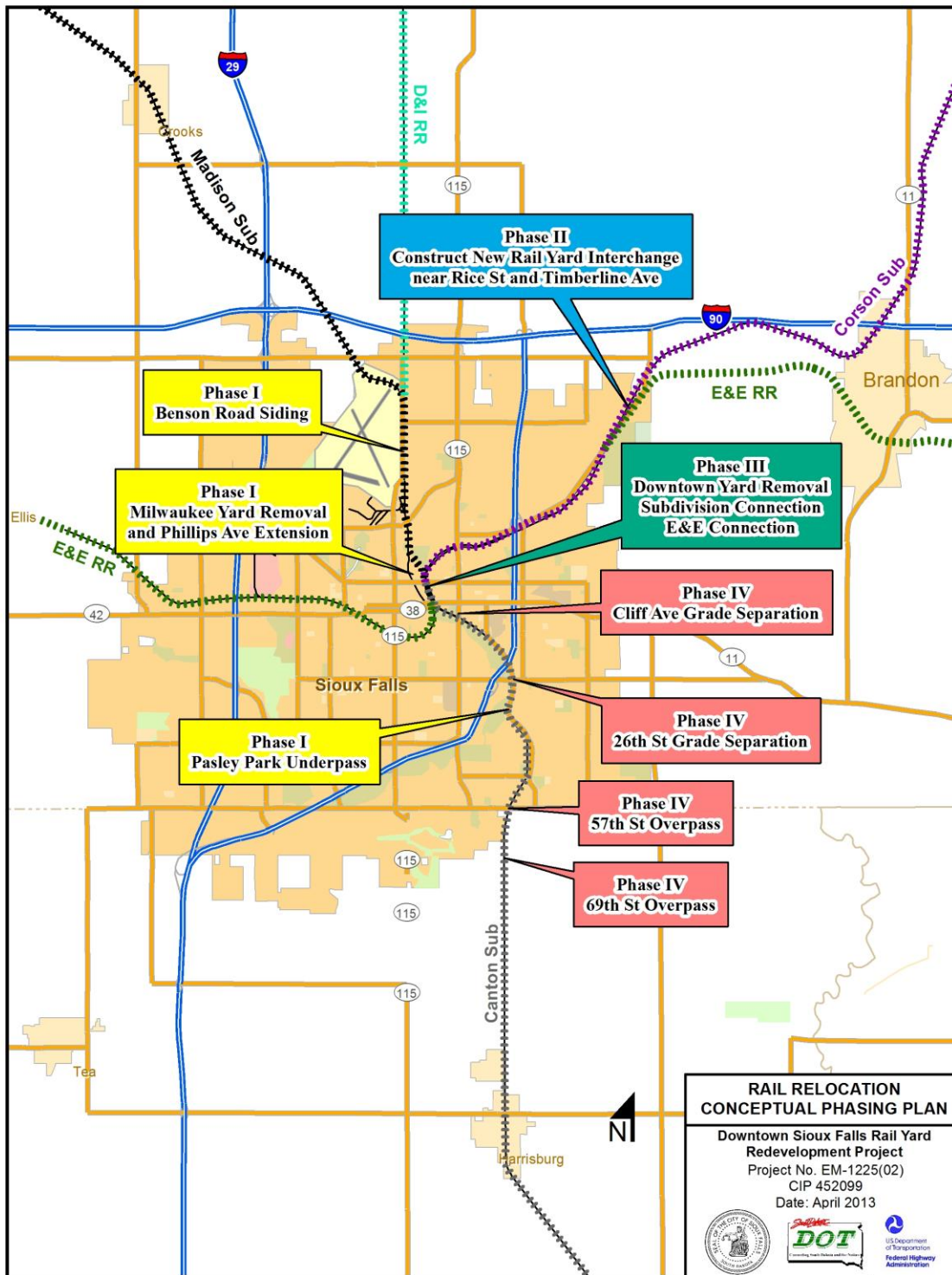


Figure 1.4 – Rail Relocation Conceptual Phasing Plan



## CHAPTER 2 ALTERNATIVES

### 2.1 DEVELOPMENT AND SCREENING OF ALTERNATIVES

NEPA requires that reasonable alternatives, including the No-Action Alternative, be presented and evaluated in a NEPA document. This section describes the process used to identify the alternatives that were carried forward for further analysis in this Draft EA.

Under NEPA, the advancement of a proposed action first must consider the potential for significant<sup>10</sup> social, economic, and environmental impacts, which determines if the project will proceed as an Environmental Impact Statement (EIS). If there are no significant impacts, then the project may proceed as a Categorical Exclusion (CE). If the impacts are unknown, then the project should proceed as an EA, in order to determine if there are significant impacts or not. While an EIS typically evaluates numerous alternatives, an EA or a CE may only include one Proposed Alternative. The lead federal agency determines the level of documentation and scope of the alternative analysis.

#### Defining General Study Areas

As described in **Chapter 1**, this project is needed to provide for economic redevelopment opportunities in the downtown area. This project is also needed to fulfill the legislative intent of SAFETEA-LU, which was to complete Phases II and III of the *Conceptual Phasing Plan*, including the relocation of the Downtown Yard **and** construction of a direct connection between the Madison and Corson Subdivisions. Therefore, throughout the development of the project, these two components were considered together.

Because the intent of Phase II was to include the construction of a new rail yard to replace the operations (i.e. interchange and storage) within the Downtown Yard, several potential yard locations were identified. During the development of the TKDA feasibility studies, the City evaluated potential locations along each of the three subdivisions (Madison, Corson, and Canton). However, since the Corson Subdivision is the primary route for train traffic entering and exiting Sioux Falls, this was the only rail line on which a yard could be constructed that would be considered operationally efficient. While several locations along the Corson Subdivision were evaluated, an area near the intersection of Timberline Avenue and Rice Street was the only location identified that would provide enough straight track length to meet BNSF's operational requirements, was outside the developed portion of Sioux Falls, yet still within the city limits.

Once the general location for a new yard was determined, a corresponding study area of adequate size was identified that would allow for multiple yard/interchange layouts, and would encompass adjacent resources, such as the Big Sioux River, two nearby electrical substations, as well as several adjacent

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<sup>10</sup> Significance, as defined in NEPA, requires consideration of both context and intensity. Context means that actions must be analyzed in context of society as a whole, the affected region, affected interests, and at the local level. Significance varies with the setting. Intensity means that impacts may be beneficial and adverse, and the degree to which these impacts may affect various resources need to be considered with the knowledge that more than one agency may make decisions about each action.

residences, to evaluate potential environmental impacts. This general location was defined as Study Area 1 (**Figure 2.1**).

Because the intent of Phase III was to provide a direct connection between the three subdivisions in downtown Sioux Falls, as well as to remove the Downtown Yard itself, a second study area was identified that included an area large enough to evaluate multiple connections between the subdivisions, as well as the removal of the yard. This general location was defined as Study Area 2 (**Figure 2.1**). The downtown study area encompassed several adjacent resources such as the Big Sioux River, Falls Park, and the businesses surrounding the Downtown Yard.

## **2.2 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER CONSIDERATION**

For this project, several preliminary concepts were developed during the preparation of the 2001 and 2002 TKDA reports. These reports focused on the construction of a new Wye track and bridge over the Big Sioux River, removal or re-configuration of the Downtown Yard, and construction of a new yard near Timberline Avenue and Rice Street. At that time, the City was unsure of the ultimate funding source, and a lead agency had not been identified. Once the funding was secured in 2005, and FHWA was determined as the lead agency, it was decided that the project would proceed as an EA because the extent and significance of the social, economic, and environmental impacts were unknown.

Early in the development of the EA, several of the Wye track concepts from the TKDA reports were eliminated because other improvement projects had since been constructed in the area, or because more detailed information rendered them unfeasible from an engineering or logistics standpoint. Some early yard locations were also eliminated due to agency concerns, BNSF/City requirements, inconsistency with local and regional land use plans, or because they had significant impacts to parks or historic resources.

As new information became available and the public responded to alternatives, several new study areas were added. The additional study areas included new areas along the BNSF subdivisions as well as the E&E rail lines for the evaluation of alternatives that could meet the purpose and need. These locations included a potential new rail yard along the E&E Railroad line just west of Brandon, SD; a siding track in lieu of a direct Wye connection along the Canton Subdivision in southern Sioux Falls; and another siding track location immediately south of the Downtown Yard along the Canton Subdivision.

While all of the alternatives considered and subsequently eliminated from consideration are not described in detail in this section, a description of each alternative, and the reasons for which it was eliminated, was documented in a Technical Memorandum (Benesch 2013e)(**Appendix A**). The memorandum includes summaries of the eliminated alternatives' impacts to natural and social resources, as well as summaries of their operational deficiencies, which were documented in a letter from the City to BNSF (letter from J. Peterson to S. Dhuru dated February 27, 2013 and concurred on March 7, 2013).

### 2.3 NO-ACTION ALTERNATIVE

The No-Action Alternative, as defined by FHWA's Technical Advisory T-6640.8A, includes normal, short-term, minor activities that address safety and maintenance issues, without making any major improvements to the existing transportation network, but which also do not preclude the construction of other planned improvements through the City's Long Range planning process, Comprehensive Plans, or through other county or state projects. This Alternative does not meet the purpose and need, because leaving the existing Downtown Yard in place does not provide economic redevelopment opportunities, nor does it fulfill the legislative intent of the funding authorized by SAFETEA-LU. Nonetheless, it was carried forward for analysis, and is included as a baseline for comparison of environmental impacts.

### 2.4 PROPOSED ALTERNATIVE

After the consideration of the potential environmental impacts, agency concerns, public comments, BNSF, E&E, and City requirements, and engineering feasibility, a Proposed Alternative was developed that avoided major impacts to the natural and social environment. A Memorandum of Understanding (MOU) was signed between the City and BNSF on January 9, 2013 to outline their general understandings for the Proposed Alternative (**Appendix A**). Whereas the previously considered alternatives focused on the construction of major infrastructure improvements (i.e. new rail yards, new sidings, new bridges) that would be transferred to BNSF, allowing BNSF make land within the Downtown Yard available for economic development, the Proposed Alternative consists of a direct sale of land within the Downtown Yard from BNSF to the City, and construction of other minor infrastructure improvements to maintain current railroad operations. As stated in the MOU, the terms and conditions for the sale of the Downtown Yard would be formalized by the execution of a Purchase and Sale Agreement (PSA) between the City and BNSF.

The Proposed Alternative consists of the City purchasing approximately ten acres<sup>11</sup> of the Downtown Yard property from BNSF; BNSF constructing a railroad interchange along the Corson Subdivision to allow BNSF and the E&E Railroad to transfer railcars; BNSF re-configuring the connection between the E&E tracks and the BNSF tracks at the south end of the Downtown Yard (i.e. just north of the Big Sioux River); and BNSF making minor modifications to their regional operations. The BNSF mainline and siding tracks along the eastern edge of the Downtown Yard, as well as the BNSF depot building south of 8<sup>th</sup> Street, would remain, allowing BNSF to continue to make the Madison to Corson movement by utilizing the Canton Subdivision, using staff and engines staged downtown.

While the Proposed Alternative does not include construction of a new rail yard, removal of all operations from the Downtown Yard, or construction of a direct Wye track connection between the three subdivisions, it does constitute a "functional replacement" for the operations within the Downtown Yard, and is supported by FHWA, SDDOT, the City of Sioux Falls, and BNSF.

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<sup>11</sup> Approximately 1.15 acres of land would also be officially transferred from BNSF to the City for the right-of-way for 6<sup>th</sup> Street and 8<sup>th</sup> Street.

In addition, E&E has indicated to the City that they will relinquish their right of first refusal to purchase the Downtown Yard property in conjunction with closing the City's purchase of the property from BNSF, which is one of the stipulations in the MOU (letter from J. Mulloy to J. Peterson dated June 24, 2013).

### Proposed Improvements

The functional replacement includes several minor infrastructure improvements and modifications to BNSF's operations, which are explained below:

- The location for the proposed railroad interchange would be north of Rice Street and west of Timberline Avenue at Study Area 1 (**Figure 2.2**). The interchange would consist of two siding tracks, each consisting of approximately 3,400 feet of straight track, with shorter lengths of track (i.e. 500 feet) to tie back into the BNSF mainline on each end of the sidings. An access road for BNSF and the E&E Railroad would be constructed along the entire length of the siding tracks on the east side of the tracks. In addition, the access road for the Xcel Energy substation would be realigned along the west side of the BNSF tracks and would utilize an existing crossing south of the interchange (Benesch 2013b). The railroad interchange would be constructed entirely within existing BNSF right-of-way (ROW), and only a minor amount of land would be required for a permanent easement for the Xcel Energy access road.
- The construction of the interchange would allow the west grouping of tracks in downtown (Study Area 2) that cross 6<sup>th</sup> Street (i.e. four tracks) and 8<sup>th</sup> Street (i.e. five tracks) to be removed (**Figure 2.3**). 6<sup>th</sup> Street and 8<sup>th</sup> Street would also be reconstructed following the removal of the tracks.
- The southern connection between the E&E and BNSF tracks (within Study Area 2) would be realigned from the southwest corner of the existing yard to the mainline tracks on the east side of the yard (**Figure 2.4**) (Benesch 2013c).
- The resulting property made available by the proposed improvements would be purchased by the City and sold to developers, who would in turn develop the property into commercial, retail, office, and parking, consistent with the City's plans for downtown redevelopment (**Figure 2.5**). A fence would also be constructed along the east side of the property to provide safety and security between the BNSF operations and the redevelopment area.

### Changes to BNSF Operations

BNSF's operations throughout Sioux Falls would also change slightly, affecting the timing of crossings and number of trains stored at the new interchange and various other existing locations in the region. A summary of the **future operations** is presented below, as taken from BNSF's *Operations Plan*.

- **OPERATE REGIONAL TRAINS**

The number of regional unit trains entering/leaving Sioux Falls would not change as a result of this project. Approximately four unit trains per week would continue into town but would no longer stop downtown. These trains would either continue directly to their final customers, or would be stored on the existing siding track along the Corson Subdivision, between Weber Avenue and Lowell Avenue, until ready for delivery.



- **E&E INTERCHANGE**

The new siding tracks at the Rice Street location would allow the BNSF and E&E Railroad to continue to transfer rail cars. Approximately six unit trains per week would stop at the interchange site. The E&E Railroad would then shuttle these cars to/from their final customers.

- **CONNECT SUBDIVISIONS**

The proposed alternative would maintain the BNSF depot building in the Downtown Yard south of 8<sup>th</sup> Street as an office for BNSF personnel. Also, three siding tracks east of the depot would be maintained. This would allow trains to continue to make the Madison to Corson movement by utilizing the Canton subdivision with staff and engines staged downtown. The number of through unit trains making this movement would not change as a result of this project.

- **SERVICE LOCAL BUSINESSES**

Local service would not change with the proposed alternative. To allow for removal of the yard, BNSF would modify their operations to perform blocking<sup>12</sup> of rail cars off-site. Blocking in locations other than the existing downtown switching yard would eliminate the need for repositioning of rail cars in downtown Sioux Falls. This may require additional operations such as additional switch engines and/or crews in off-site locations. This would occur within existing rail yards and would require only minor additional infrastructure improvements (e.g. improved track, upgraded switches) within existing BNSF ROW.

#### Project Funding Requirements

In order to comply with the legislative intent of providing federal funding for this project, the City will apply all money generated from the sale of the Downtown Yard property acquired as part of the Proposed Alternative to future projects eligible for funding under Title 23 of the United States Code (USC).

#### Environmental Study Areas

After the Proposed Alternative was developed, the study areas were refined. These refined study areas were used when assessing natural and social environmental impacts in **Chapter 3**, and are shown on **Figure 2.6** and **Figure 2.7**.

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<sup>12</sup> Blocking is a process of sorting and positioning rail cars for efficient delivery to customers.

Figure 2.1 – Generalized Study Areas

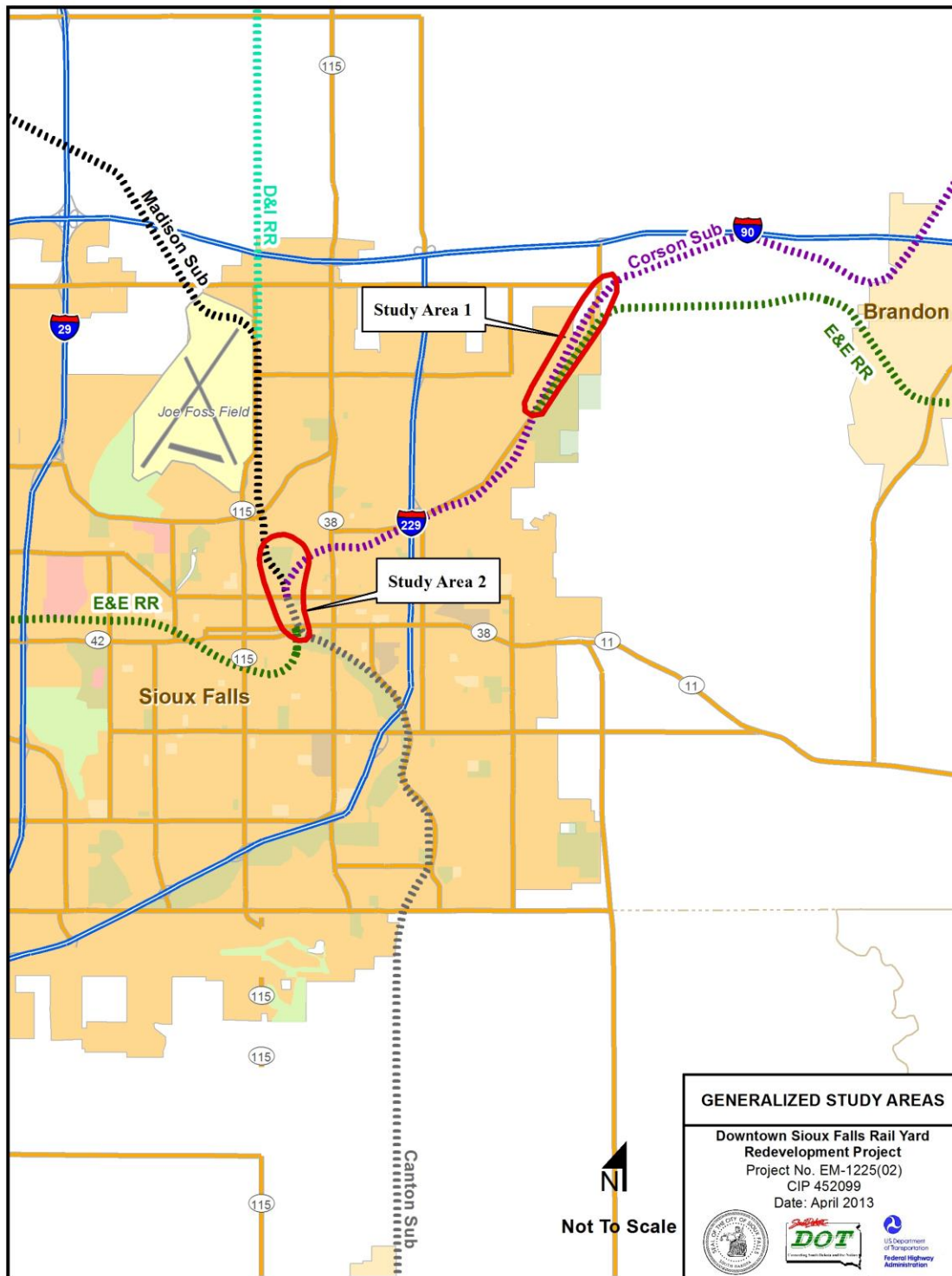


Figure 2.2 – E&E Interchange

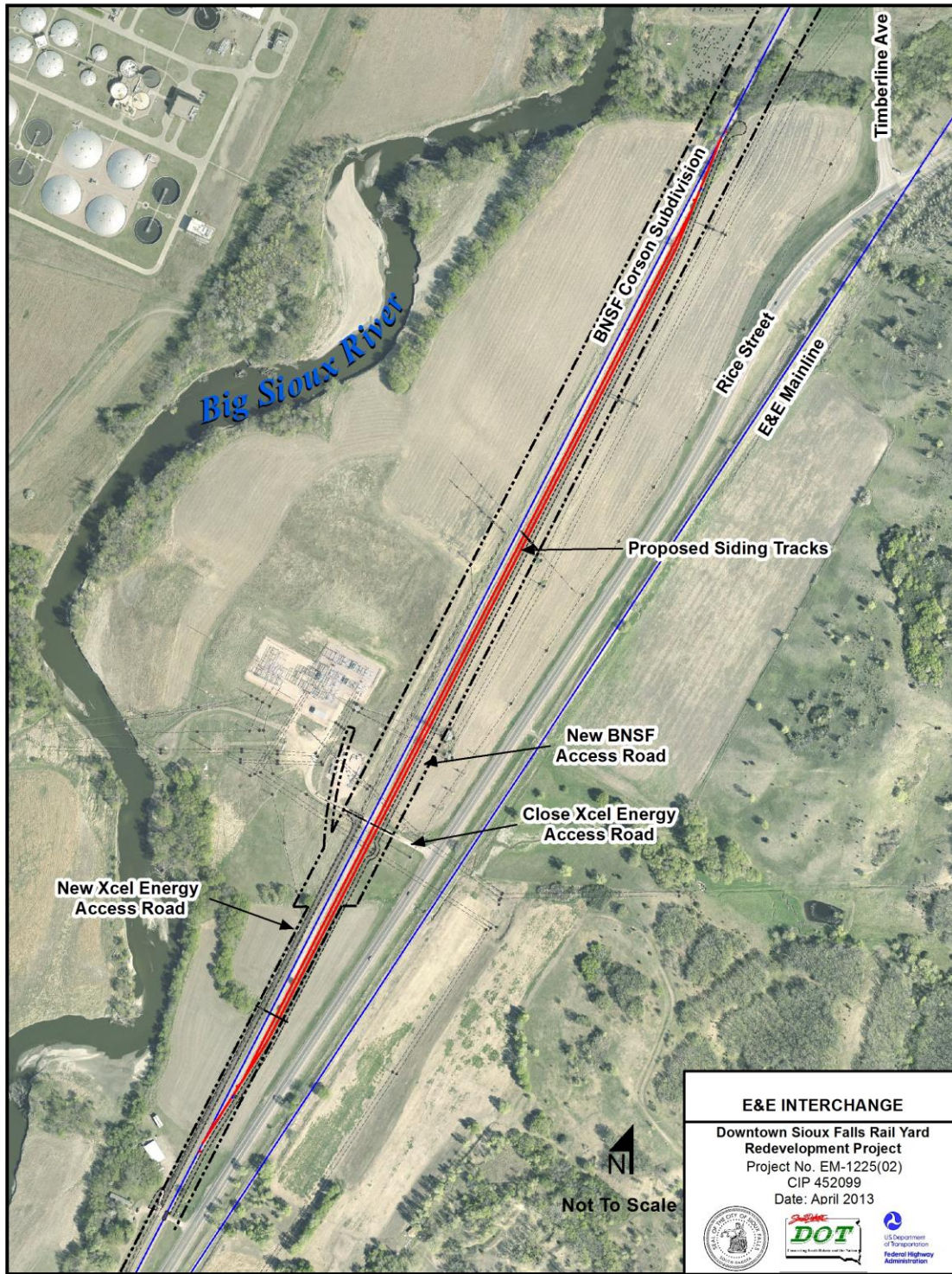


Figure 2.3 – Proposed Land for Purchase

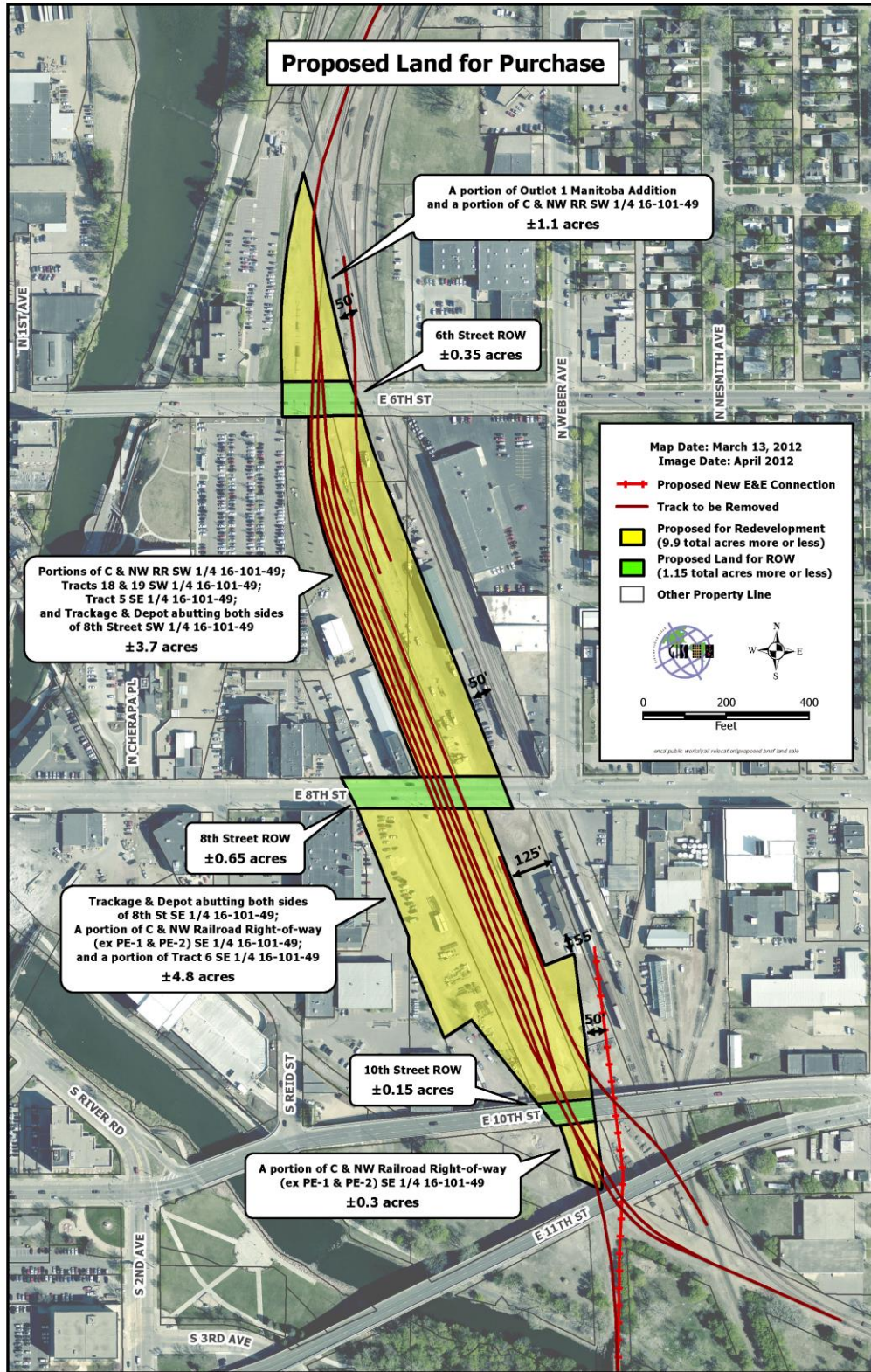


Figure 2.4 – E&E Connection

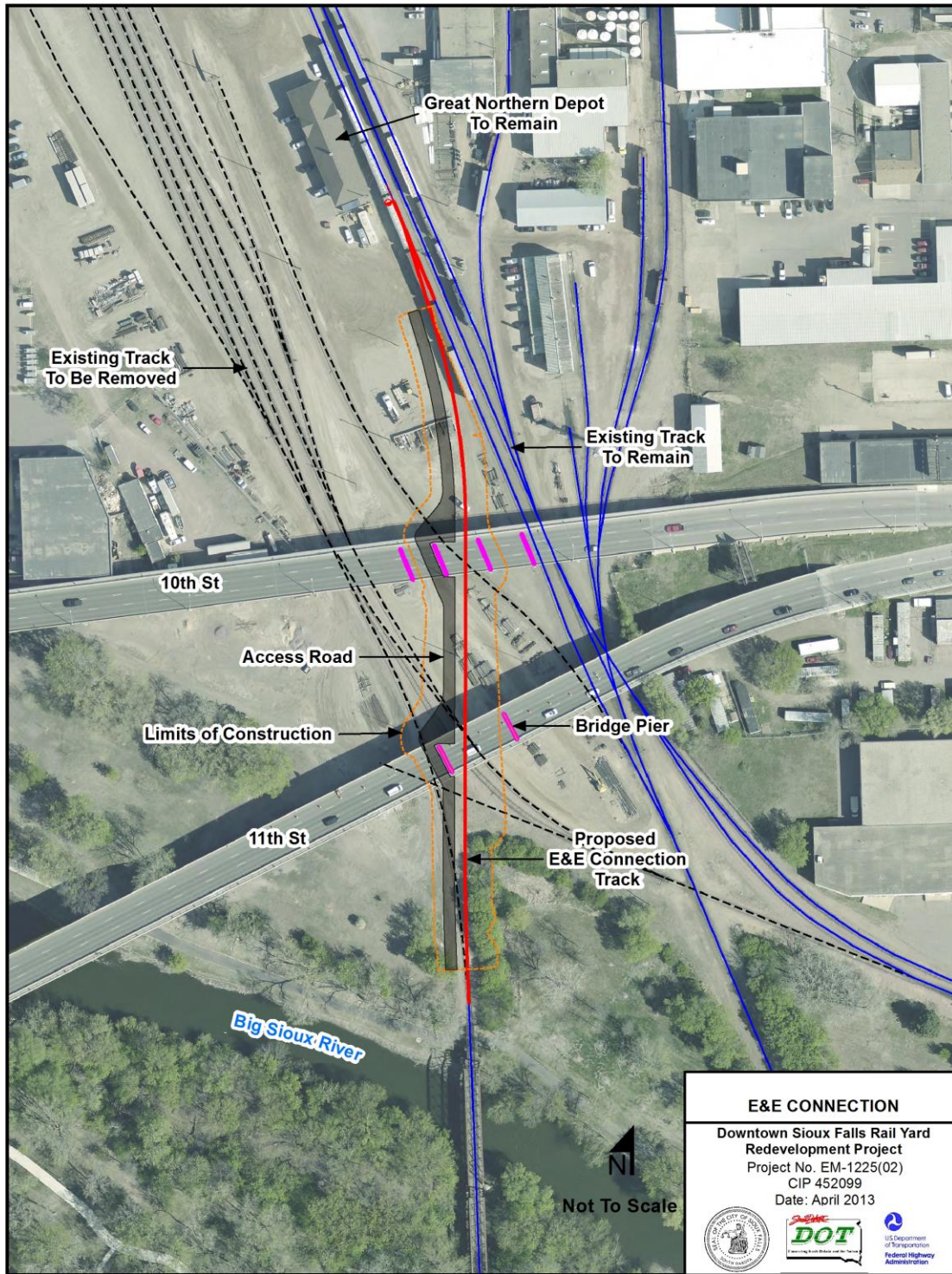
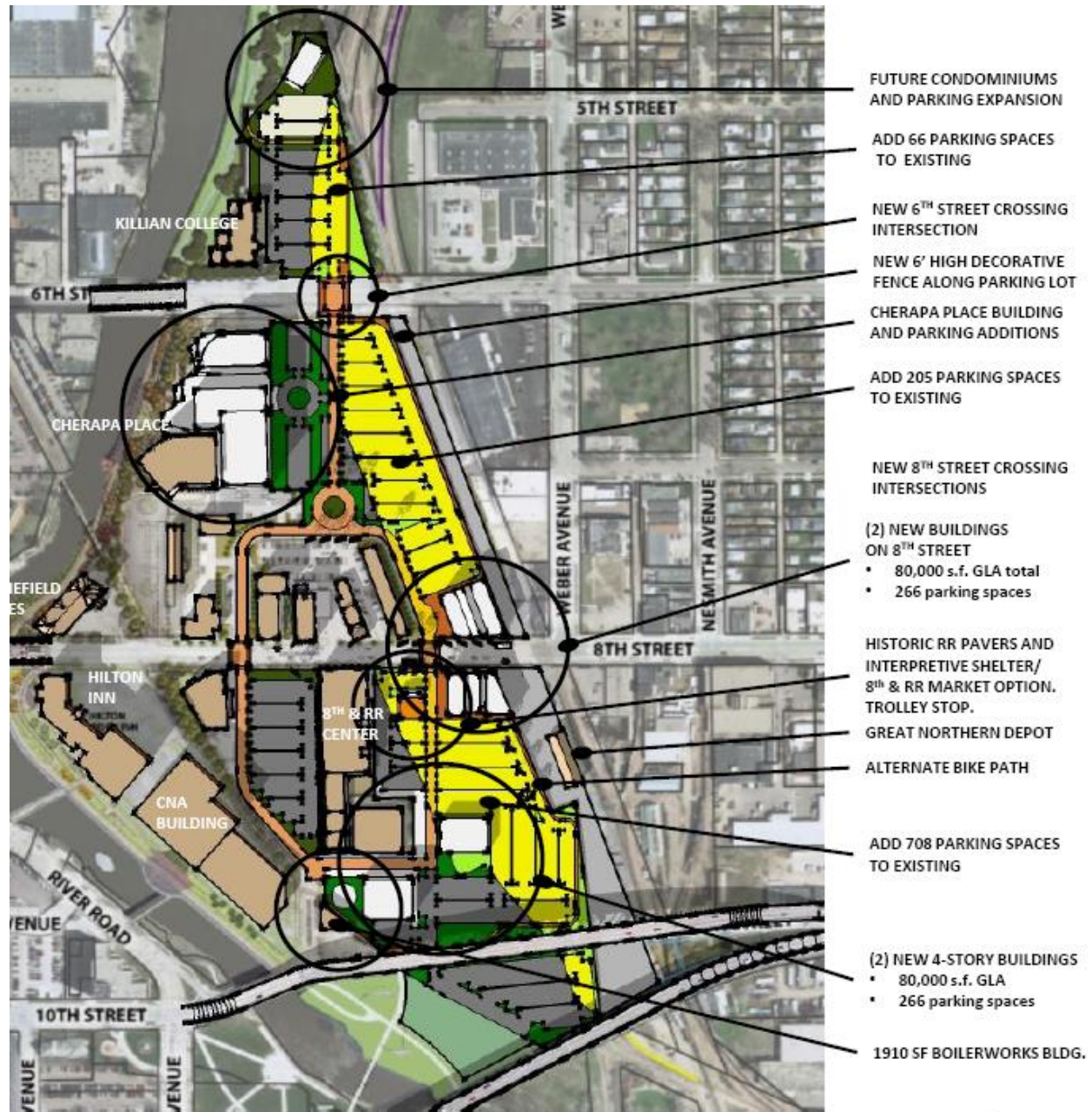


Figure 2.5 – Preliminary Redevelopment Plan



Rail Relocation Project - Phase III Area

Figure 2.6 – Study Area 1

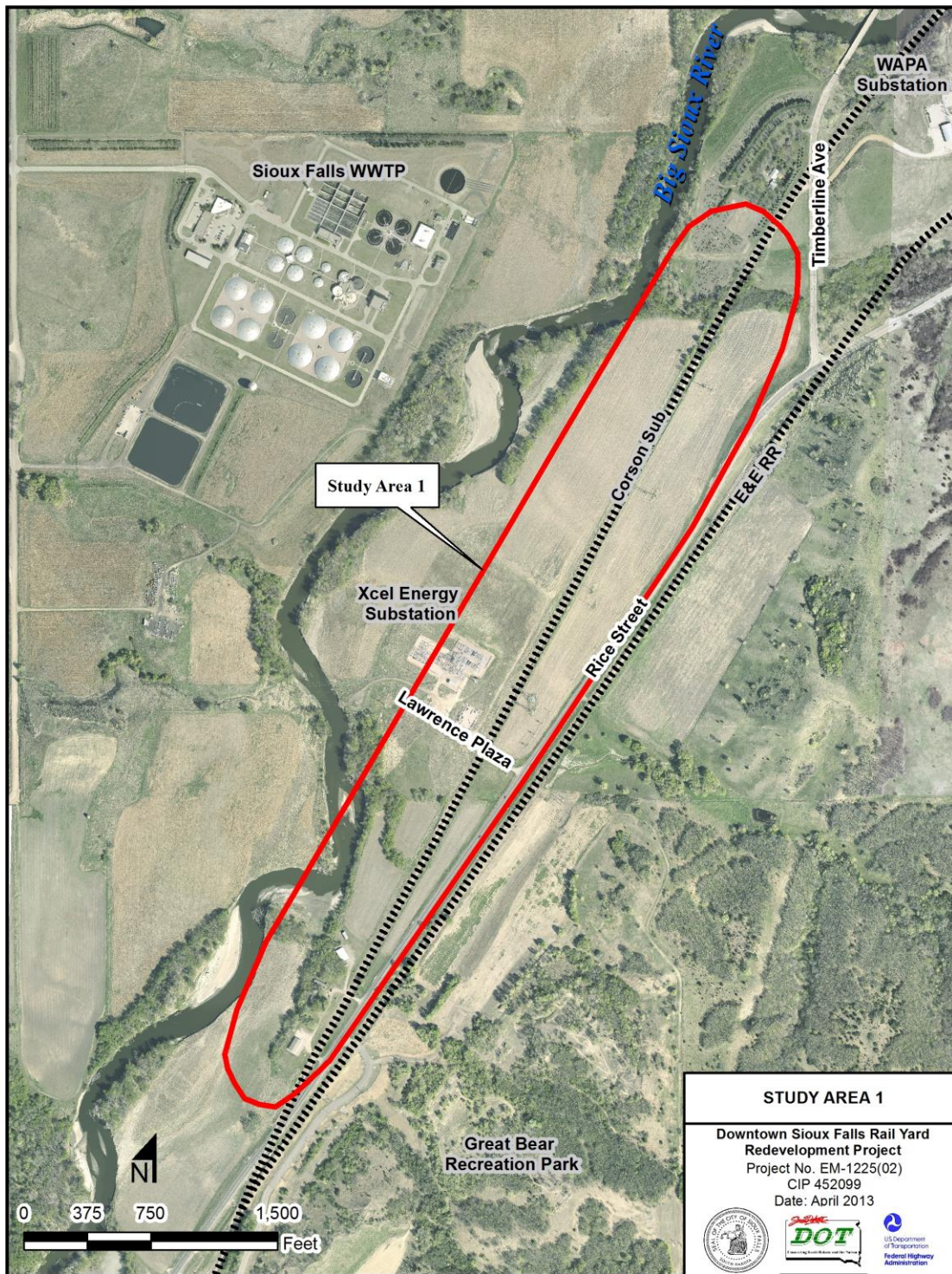
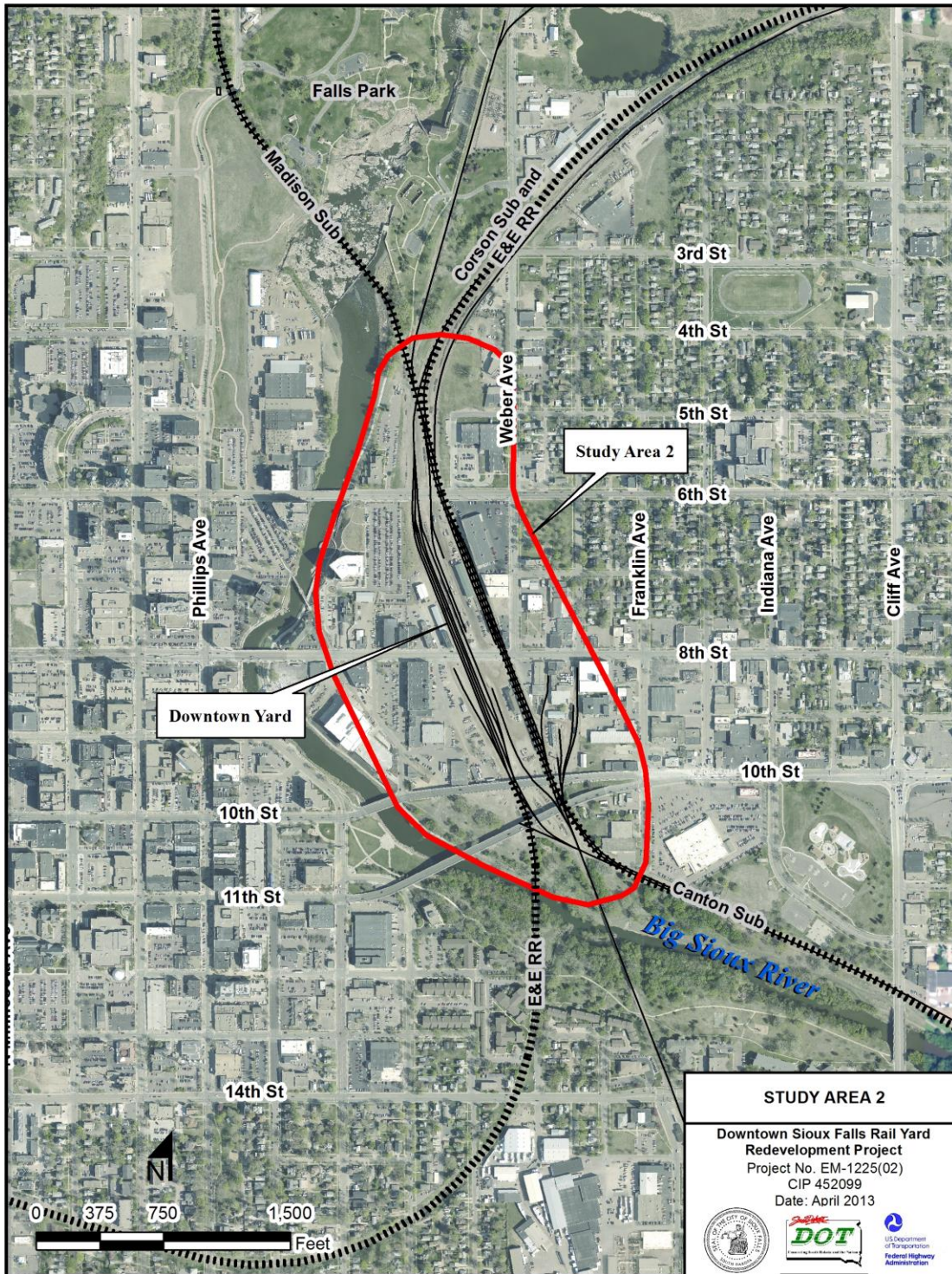


Figure 2.7 – Study Area 2





### **CHAPTER 3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES**

This section includes a description of potentially affected natural and human environmental resources, and the environmental consequences of the No-Action and Proposed Alternative. It also lists mitigation measures of the Proposed Alternative to avoid, minimize, or mitigate adverse impacts. Pursuant to NEPA, and based on the character of the study area, as well as input received from agencies, the public, and stakeholders, the following list of potentially affected resources was identified for detailed analysis:

- Land Use
- Social and Economic Considerations
- Environmental Justice
- ROW, Acquisitions, and Relocations
- Pedestrians, Bicyclists, and Accessibility for Individuals with Disabilities
- Historic and Archeological Resources
- Wetlands and Water Resources
- Farmland
- Floodplains
- Threatened and Endangered Species, Wildlife, and Migratory Birds
- Utilities
- Noise and Vibration
- Hazardous Materials and Recognized Environmental Conditions
- Visual Impacts and Aesthetic Considerations
- Temporary Construction Related Considerations
- Secondary and Cumulative Impacts

The following potentially affected resources either do not occur in the study area, or were determined to be not affected by the proposed project, and are therefore not discussed in this section:

- Air Quality and Mobile Source Air Toxics (MSAT) – The City of Sioux Falls is within an attainment area for all criteria pollutants under the Clean Air Act (CAA). The Proposed Alternative will not result in any meaningful changes in traffic volumes (i.e. car or rail), vehicle mix or speed, basic project location, or any other factor that would cause a decrease in air quality or an increase in MSAT impacts over the No Action Alternative.
- Wild and Scenic Rivers - The nearest Wild and Scenic River is the Missouri River at Yankton, SD.
- Coastal Barriers or Coastal Zones - There are no coastal areas in South Dakota.

### 3.1 LAND USE

This section assesses the consistency of the alternatives considered with the surrounding existing land uses and with local land use plans and policies, including Comprehensive Plans, Long Range Transportation Plans (LRTP), community development plans, special zoning or overlay districts, and other growth initiatives. In addition to existing zoning and land use maps, the City and the Sioux Falls Metropolitan Planning Organization (MPO) have prepared numerous planning documents that outline their vision for future land uses, including the *2015 Downtown Plan*, *Sioux Falls Greenway & Riverfront Master Plan*, *Shape Sioux Falls 2035 Comprehensive Plan (2035 Comprehensive Plan)*, and *Direction 2035 – Sioux Falls MPO Long Range Transportation Plan (2035 LRTP)*.

#### 3.1.1 CURRENT CONDITIONS

##### Study Area 1

The existing land use in Study Area 1 is primarily cropland. See **Section 3.8** for additional information regarding farmland. An Xcel Energy electrical sub-station is located along the west side of the existing railroad tracks, with an access road from Rice Street. There are three single-family residential dwellings and two commercial buildings at the south end of the study area, between the railroad tracks and the Big Sioux River. There is also one additional single-family residential dwelling just north of the study area. Just outside of the study area, on the east side of Rice Street, is Great Bear Recreation Park, a city-owned recreational area, that is used for hiking, biking, downhill skiing, and snow tubing. There are no other parks or recreational facilities within or adjacent to Study Area 1 (**Figure 3.1**). See **Chapter 4** for additional information regarding parks.

Study Area 1 is currently within the city limits of Sioux Falls, and also within an area designated as a “Planned Urbanized Area” according to the *2035 Comprehensive Plan*<sup>13</sup>. The existing zoning, as well as the future land use, is primarily light industrial east of the existing railroad tracks, and conservation land on the west side of the existing tracks, as depicted on the City’s *2013 Shape Places Zoning Map* (City of Sioux Falls 2012). The Xcel Energy electrical sub-station is situated in an area zoned as light industrial.

##### Study Area 2

The existing land uses and existing zoning in Study Area 2 are primarily industrial, commercial, office, and warehouse related. While the existing rail yard remains a predominant feature, much of the area has seen significant redevelopment as other rail lines have been removed, buildings have been renovated or replaced, and industrial areas have been converted to commercial and retail. There are also several BNSF office and warehouse buildings located within the study area. Just outside Study Area 2 is Falls Park to the north, Big Sioux River Greenway to the west, and Beadle Greenway to the south (**Figure 3.2**). The Sioux Falls Bike Trail runs through both of these parks. See **Chapter 4** for additional information regarding parks.

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<sup>13</sup> According to the *2035 Comprehensive Plan*, a “Planned Urbanized Area” is an area where urban services are available, land is annexed, and new development is approved. These areas should be a priority for new facilities such as libraries, parks, fire stations and schools.

As for future land uses, the *2015 Downtown Plan* depicts Study Area 2 as part of a redevelopment priority site, due to its location and potential for generating substantial new economic growth (Sioux Falls 2004). Additionally, the *2035 Comprehensive Plan* depicts downtown, including Study Area 2, as a “Regional Employment Center”<sup>14</sup> (City of Sioux Falls 2009).

### 3.1.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would not create any changes to the existing land uses in Study Area 1, and would therefore be consistent with the City’s future land use plans for this area.

The No-Action Alternative would not create any changes to the existing land uses in Study Area 2. However, because the Downtown Yard would not be made available for redevelopment, the No-Action Alternative would be inconsistent with local land use plans.

#### Proposed Alternative

The Proposed Alternative would construct two new siding tracks and two access roads in Study Area 1 in an area that is zoned as industrial, but is currently being used as cropland. The siding tracks and access roads would be constructed almost entirely within the existing BNSF ROW, and would use a minimal amount of land outside of the ROW that is zoned as industrial. The remainder of the surrounding area would remain available for use as cropland or industrial land uses, consistent with local land use plans.

The Proposed Alternative would also make available approximately ten acres of existing rail yard property for redevelopment in Study Area 2, which could include commercial, retail, and office land uses. It could also allow for additional parking areas for other adjacent redevelopment projects.

Both of these components are consistent with the City’s future land use plans for this area, by providing opportunities for regional employment and growth downtown. It should be noted that the Proposed Alternative is included in the 2035 LRTP as an important priority to assist with the region’s economic development strategy, and would “provide significant urban renewal possibilities to help revitalize the urban core and downtown of Sioux Falls” (Sioux Falls MPO 2010).

### 3.1.3 PROPOSED MITIGATION

No mitigation is proposed.

## **3.2 SOCIAL AND ECONOMIC CONSIDERATIONS**

This section assesses impacts to the social environment, including changes to community cohesion, travel patterns, accessibility, school districts, conflicts between rural and urban uses, induced development, and other modifications to the surrounding community. Potential economic impacts are also assessed, including changes to the regional or local economy, reduced or increased tax revenues,

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<sup>14</sup> According to the *2035 comprehensive Plan*, a “Regional Employment Center” is a commerce center with regional draw. The area is highly commercialized with an emphasis on creating mixed-use options and appropriate transitions to low-density residential areas. It serves the entire trade area both for employment and shopping. Spaced 6 to 8 miles apart, it serves a market of 75,000 to 200,000 people.

increased public expenditures, changes to employment opportunities, increases or decreases in retail sales, and gains or losses of businesses.

### 3.2.1 CURRENT CONDITIONS

#### Study Area 1

Study Area 1 is primarily agricultural, with two owner-occupied single-family residences, and two commercial businesses located at the south end of the study area. Just outside of the study area is Great Bear Recreation Park, which provides community-based recreation for winter (e.g. skiing and tubing) and summer (e.g. hiking, biking) activities. There are no neighborhoods, schools, or other community facilities within Study Area 1.

#### Study Area 2

Study Area 2 is primarily commercial and industrial, with some additional land uses as described in earlier sections. Some of the stand-alone businesses/facilities in the vicinity include Kilian Community College, Country Inn & Suites, Monk's House of Ale Repute, Sioux Area Metro, Johnstone Supply, CNA Surety, and Advanced Recycling. Cherapa Place, a newly developed mixed-use office building, houses businesses such as Cortrust Bank, Wild Sage Grill, Howalt McDowell Insurance, Morgan Stanley, among others. Additional businesses within the area include several located within the 8<sup>th</sup> & Railroad Center Building, such as Studio Blu Photography, Sticks & Steel, Josiah's Coffeehouse & Café, Sanaa's Gourmet Restaurant, and others located within other mixed-use historic brick buildings, such as Queen City Bakery, Latitude 44, Picturesque, and Bronze Age Casting.

Kilian Community College, Sioux Falls' only community college, is situated at the north end of the study area, just north of 6<sup>th</sup> Street and west of the Downtown Yard. Kilian Community College provides two-year and four-year degree programs, as well as continuing education and professional certifications<sup>15</sup>. Sioux Area Metro (SAM) is located just north of 6<sup>th</sup> Street and east of the Downtown Yard, and provides public transportation services throughout the City, including traditional buses, paratransit, a free downtown trolley, higher educational bus service, and other specialized transportation services. There is an existing bus route (Route 7) that runs along 6<sup>th</sup> Street, with stops at Kilian Community College, John Morrell, the Oakview Branch Library, and other locations<sup>16</sup>. In addition, the downtown trolley runs along 8<sup>th</sup> Street, with stops at Falls Park, the old Courthouse Museum, City Hall, the Orpheum Theatre, and 8<sup>th</sup> & Railroad Center<sup>17</sup>.

### 3.2.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have adverse impacts to social cohesion and economic vitality by leaving the rail yard in place, which would not allow for redevelopment and improvement of the downtown business district.

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<sup>15</sup> <http://kilian.edu/>

<sup>16</sup> <http://www.siouxfalls.org/sam.aspx>

<sup>17</sup> The trolley is a rubber tire reproduction trolley, and not a fixed rail system. <http://www.siouxfalls.org/sam/fixe-routes/trolley.aspx>

### Proposed Alternative

The project is intended to have a beneficial impact to the community by encouraging economic redevelopment and reducing the number of trains operating in the downtown area. This would also create a more pedestrian-friendly atmosphere, which will be more conducive to the existing and potential new commercial and retail businesses in the downtown area.

Projections provided by the City's Planning Department indicate that the Proposed Alternative, when fully redeveloped, could result in property valuation increases between \$18 million and \$31 million, and between \$376,000 and \$640,000 in annual property taxes. These increases in economic benefits would come from the construction of new buildings and other improvements on the Downtown Yard property itself, as well as on adjoining property (i.e. existing parking lots) that would be made available for redevelopment by the addition of parking on the Downtown Yard property.

The Proposed Alternative would have no adverse effect on the existing bus and trolley routes, and may actually provide opportunities to increase bus service and trolley service to the area with a more pedestrian-friendly environment. There would also be no adverse impacts to Kilian Community College; the Proposed Alternative would actually allow for the expansion of the college, including additional residences and parking.

### 3.2.3 PROPOSED MITIGATION

No mitigation is proposed.

## **3.3 ENVIRONMENTAL JUSTICE**

Executive Order (EO) 12898 on Environmental Justice (EJ) was signed by President Clinton on February 11, 1994, and requires that, to the extent practicable and permitted by law, low-income or minority populations may not receive "disproportionately high and adverse" impacts as a result of a proposed project. Federal agencies must take the appropriate and necessary steps to identify and address "disproportionately high and adverse" effects of federal projects on the health or environment of low-income and minority populations. Also, representatives of any low-income or minority populations in the community that may be affected by a project must be given the opportunity to be included in the impact assessment and public involvement process.

As defined in FHWA Order 6640.23A - *Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, dated June 14, 2012<sup>18</sup>, a "disproportionately high and adverse effect on minority and low-income populations" which means "an adverse effect that: (1) is predominantly borne by a minority population and/or a low-income population; or (2) will be suffered by the minority population and/or low-income population and is appreciably more severe or greater in magnitude than the adverse effect that will be suffered by the non-minority population and/or non-low-income population."

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<sup>18</sup> More information on FHWA's role in non-discrimination and protecting civil rights can be found at <http://www.fhwa.dot.gov/civilrights>.

### 3.3.1 CURRENT CONDITIONS

Consistent with the requirements of EO 12898, potential EJ populations with respect to race, ethnicity, and income were determined by absolute and relative population measurements using information from the 2010 Census and other available data. A Technical Memorandum was prepared by Alfred Benesch & Company, dated June 21, 2013, to document the presence or absence of minority and low-income populations.

As documented in the memorandum, a Hispanic minority population does occur in the vicinity of Study Area 2 (i.e. 17 percent of the population reported themselves to be Hispanic, which is greater than 10 percentage points higher than the Minnehaha County average of 4.1 percent). For all other minority groups, they are either lower, or not substantially higher, when compared to the City, County, and State averages (Benesch 2013f).

In addition, the southern census tract that covers Study Area 2 does appear to contain a higher percentage of individuals living below the poverty level than the City, County, and State levels; however, it is not above the commonly used 50 percent threshold for determining the presence of low-income populations. The northern census tract that covers Study Area 2 is at or below the poverty levels for the City and the State, and is not significantly higher compared to the County (Benesch 2013f).

Furthermore, there do not appear to be any minority or low-income populations at Study Area 1. (Benesch 2013f).

### 3.3.2 ENVIRONMENTAL CONSEQUENCES

#### *No-Action Alternative*

The No-Action Alternative would have no impacts to minority or low-income populations.

#### *Proposed Alternative*

There have been several meaningful measures taken to address EJ concerns through the project. A total of seven public meetings have been held from 2006 through 2013, which were well attended by the public. Letters were sent to affected residents. Articles in the newspaper were published about the proposed project and public meetings. In addition, information about the project was posted on the City of Sioux Falls website, which was regularly updated with project information. No concerns have been expressed from or about minority or low-income populations or individuals.

Therefore, the Proposed Alternative would not disproportionately affect low-income or minority populations, and in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23, no further EJ analysis is required.

### 3.3.3 PROPOSED MITIGATION

No mitigation is proposed.

### **3.4 RIGHT-OF-WAY, ACQUISITIONS, AND RELOCATIONS**

Residential displacements resulting from the conversion or redevelopment of an area, and/or the loss of available replacement housing for affected residents, are considered to be direct adverse impacts. Displacements can occur by demolition of housing units or conversion of housing units from ownership to rental (or vice versa). Displacements can also occur by the process of neighborhood gentrification, in which a neighborhood or housing area changes in such a way that influences home prices so greatly that individuals are forced to move. Potential secondary adverse impacts resulting from displacements can include loss of family unity, overcrowding, homelessness, acceptance of inadequate or substandard housing, physiological and psychological stress, loss of social cohesion, segregation, increased demand for social services, and increased demand on transportation systems. ROW acquisition is regulated by the *Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970* (Uniform Act), as amended (42 USC 4601 et seq.), and by SDDOT's *Relocation Assistance Brochure* (SDDOT 2001).

#### **3.4.1 CURRENT CONDITIONS**

At Study Area 1, there is one renter-occupied residential home and one owner-occupied residential home. The rest of the property is either owned by BNSF or by Xcel Energy. At Study Area 2, in addition to the land owned by BNSF for the Downtown Yard, there is a mix of industrial, commercial, and urban development, with some urban residential properties around the perimeter of the study area.

According to the City and County land ownership records, at Study Area 1, there also currently exists ROW dedicated to the extension of Benson Road on the west side of the BNSF ROW.

#### **3.4.2 ENVIRONMENTAL CONSEQUENCES**

##### **No-Action Alternative**

The No-Action Alternative would have no permanent impacts to ROW, nor would it require acquisitions or relocations, and it would not result in any residential displacements.

##### **Proposed Alternative**

For the construction of the two siding tracks at Study Area 1, no permanent ROW would be acquired. Lawrence Plaza, the access road to the Xcel Energy substation, will be closed and a new access road would be constructed along the north side of the BNSF tracks. An access agreement will be required from BNSF for this access road. A permanent easement and temporary construction easements may also be required from Xcel Energy and one other private owner for the construction of this access road. The exact boundaries of these acquisitions would be determined during final design, and impacted properties would be coordinated with in accordance with the proposed mitigation explained below.

The Proposed Alternative would have no effect on the ROW for the future extension of Benson Road over the Big Sioux River and Rice Street.

For the Proposed Alternative, the City would purchase approximately ten acres of land from BNSF. BNSF will lease this land from the City for a period of up to two years while the interchange and connection

are constructed, and while BNSF is making modifications to its operations. Details of the land purchase are outlined in the MOU between the City and BNSF (**Appendix A**).

The Proposed Alternative would require a temporary construction easement along the edge of Beadle Greenway for minor grading activities for the E&E connection. The temporary easement would be acquired from the City of Sioux Falls Parks and Recreation Department, who has concurred with this minor impact (letter from J. Peterson to D. Kearney dated June 26, 2013 and concurred on June 26, 2013). See **Chapter 4** for additional details regarding impacts to Beadle Greenway.

The Proposed Alternative would not result in residential or business relocations, nor would it create the conditions for the secondary impacts from displacements described above; therefore, there would be no relocation impacts as a result of the Proposed Alternative.

### 3.4.3 PROPOSED MITIGATION

The specific amount of ROW and temporary easements required will be determined during final design. All ROW acquisition will be conducted in accordance with the Uniform Act and SDDOT's *Relocation Assistance Brochure*. The City of Sioux Falls will be responsible for acquiring the Downtown Yard property from BNSF, and BNSF will be responsible for acquiring property or easements needed to construct the Proposed Alternative. SDDOT will assist the City and BNSF by providing guidance to comply with the Uniform Act.

## **3.5 PEDESTRIANS, BICYCLISTS, AND ACCESSIBILITY FOR INDIVIDUALS WITH DISABILITIES**

The *Americans with Disabilities Act of 1990* (ADA) prohibits discrimination on the basis of disability in employment, State and local government, public accommodations, commercial facilities, transportation, and telecommunications. Other Federal laws affecting the design, construction, alteration, and operation of facilities include the *Architectural Barriers Act of 1968* (ABA), and the *Rehabilitation Act of 1973*, which apply to all federally funded facilities. The ADA applies to facilities, both public (title II) and private (title III), which are not federally funded. Newly constructed and altered facilities covered by titles II and III of the ADA must be readily accessible to and usable by people with disabilities.

### 3.5.1 CURRENT CONDITIONS

#### Existing Sidewalks

There are no sidewalks within Study Area 1, as it is in a rural setting and is primarily agricultural cropland. There are existing sidewalks in Study Area 2; however, the existing conditions within the Downtown Yard are generally not conducive to ADA access, as there are numerous railroad crossings on 6<sup>th</sup> Street and 8<sup>th</sup> Street. Sidewalks throughout the rest of Study Area 2 are somewhat accessible; however, there are still a number of sidewalks that are not continuous or accessible at all locations.

#### Existing Trails

According to the City of Sioux Falls *Bicycle Plan*, the only existing trail within Study Area 1 is a designated bike shoulder along Rice Street. In Study Area 2, the Sioux Falls Bike Trail is situated along the east bank of the Big Sioux River, and passes through Beadle Greenway, the Big Sioux River Greenway, and Falls



Park (**Figure 3.3**). In addition, 8<sup>th</sup> Street is designated as a Basic Rider Route<sup>19</sup> in the Bicycle Plan (Sioux Falls 2008).

#### Planned Trails

Within Study Area 1, the City and the Sioux Falls MPO have plans to extend two bikes trails in the future (**Figure 3.4**). The first would be an extension of the Sioux Falls Bike Trail and Big Sioux River Greenway along the north side of the Big Sioux River. The second would be a new trail in connection with a future roadway project for the extension of Benson Road from Sycamore Avenue to Rice Street, and eventually to the City of Brandon. According to multiple planning studies and conceptual design plans, Benson Road would be constructed with a single bridge spanning over the Big Sioux River, the BNSF tracks, and Rice Street, with a bike trail included as a component of the overpass (Sioux Falls MPO 2011). Connections would be made to Rice Street to provide access to Great Bear Recreation Park.

While there are no planned trails in Study Area 2, the City's *Bicycle Plan* indicates that bicycles should be accommodated along designated routes, and that signage, bike lanes, and parking facilities should be incorporated into projects according to the plan (Sioux Falls 2008).

### 3.5.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have no adverse impacts to pedestrians or bicyclists. However, there would be continued concerns from pedestrians and bicyclists about the safety of the rail crossings of 6<sup>th</sup> Street and 8<sup>th</sup> Street. The No-Action Alternative would have no impact on existing or planned bicycle trails.

#### Proposed Alternative

At Study Area 1, the Proposed Alternative would not adversely impact the existing designated bicycle shoulder along Rice Street. As described previously, while there would be an increase in the number of blocked crossings on Rice Street, the trains would be shorter, and there would not be an increase in the overall number of rail cars at this crossing. The Proposed Alternative would also have no effect on the planned extension of the Sioux Falls Bike Trail along the Big Sioux River, or on the planned extension of a trail along the future Benson Road corridor.

At Study Area 2, the Proposed Alternative would include construction or re-construction of ADA compliant sidewalks along the segments of 6<sup>th</sup> Street and 8<sup>th</sup> Street directly affected by the removal of railroad tracks. The reconstruction of 8<sup>th</sup> Street would be a positive impact on the bicycle route designated along 8<sup>th</sup> Street. In addition, there would be fewer blocked crossings along 6<sup>th</sup> and 8<sup>th</sup> Street, reducing delays for bicycles and pedestrians. The Proposed Alternative would also not adversely impact the Sioux Falls Bike Trail downtown.

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<sup>19</sup> Basic Riders are adults and teens that are casual or new riders who are less comfortable in their ability to operate in traffic without special provisions for bicycles. Accommodations include providing designated bike lanes, wider shoulders for well-defined separation of bicycles and vehicles, and special access to facilities. Basic Rider routes are typically on streets with low traffic volumes and speeds.

### 3.5.3 PROPOSED MITIGATION

To the extent practicable, sidewalks and roadways will be kept open during construction. Existing sidewalks would be replaced along 6<sup>th</sup> Street and 8<sup>th</sup> Street after the rails and crossings are removed. Signage, detours, and temporary paving would be used during construction. Additional possible improvements may include an alternative pedestrian and/or bicycle path within the redevelopment area.

## **3.6 HISTORIC AND ARCHEOLOGICAL RESOURCES**

Section 106 of the *National Historic Preservation Act of 1966* (NHPA) requires that Federal agencies take into account the effects of their undertakings on historic properties, and afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The ACHP regulations, *Protection of Historic Properties* (36 CFR 800), which were last revised on August 5, 2004, outline how Federal agencies must comply with Section 106. The *Archeological and Historic Preservation Act of 1960* (16 USC 469-470), and EO 11593 - *Protection and Enhancement of the Cultural Environment*, issued in 1971, provide additional directives to Federal agencies on historic preservation.

Generally, the Section 106 consultation process consists of the following steps:

1. Identify consulting parties (includes Tribes and local historic preservation entities).
2. Identify and evaluate historic properties located within the Area of Potential Effect (APE)<sup>20</sup> established for an undertaking.
3. Assess adverse effects to properties listed in, or eligible for listing in, the National Register of Historic Places (NRHP).
4. Consult with the State Historic Preservation Officer (SHPO) and, as appropriate, the ACHP and other interested parties to resolve adverse effects.

### 3.6.1 CURRENT CONDITIONS

#### Tribal Consultation

In compliance with state and federal regulations, FHWA and SDDOT consulted with the South Dakota State Historic Society (SDSHS), the South Dakota SHPO, and seven Native American Tribes to determine if there were any known cultural, historical or archeological resources in the APE, including:

- Cheyenne River Sioux Tribe
- Flandreau Santee Sioux Tribe
- Lower Brule Sioux Tribe
- Sisseton-Wahpeton Oyate Tribe
- Standing Rock Sioux Tribe

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<sup>20</sup> In consultation with the SHPO, the Direct APE for this project was defined to include a 50-foot buffer around the areas proposed for purchase by the City and any other construction activities, including rail removal, at both study areas. The Indirect (i.e. Visual) APE does not have a definitive boundary; rather it is dependent on topography and the presence of other shielding features between the proposed project and any historic properties. The Direct APE for both study areas is shown on **Figure 4.1** and **Figure 4.2**.

- Yankton Sioux Tribe
- Three Affiliated Tribes (Mandan Hidatsa Arikara Nation)
- Ponca Tribe of Nebraska<sup>21</sup>

The Tribes were first notified by FHWA of the proposed project in October 2006 (letter from G. Massie dated October 2, 2006). No responses to this notification were received. The Flandreau Santee Sioux Tribal Historic Preservation Officer (THPO) conducted a site visit in the summer of 2011 with SDDOT at Study Area 1 and Study Area 2. The Flandreau Santee Sioux Tribe THPO sent a response in 2013 that concurred with the SDDOT determination of no properties affected (letter from J. Weston to T. Keller dated April 16, 2013). All of the Tribes were also formally notified of the public meeting that was held on January 31, 2013. There have been no other comments or responses from the Tribes.

#### Archeological and Architectural Surveys

Archeological (Level III) and architectural surveys were completed for Study Area 1 and Study Area 2 by Cultural Heritage Consultants and the Archeology Laboratory of Augustana College in 2008. These studies were updated and revised by Alfred Benesch & Company in April 2013 to reflect the limits of the Proposed Alternative in a report titled *Cultural Resources Identification and Evaluation for the Downtown Sioux Falls Rail Yard Redevelopment Project*. The 2013 report included recommendations on the eligibility of all properties evaluated and the potential for adverse effects (Benesch 2013d). The results of these surveys are summarized below:

##### Archeological Survey Results

The Study Area 1 investigation did not result in the discovery of any previously unknown archeological properties, but did involve the re-investigation of two previously known sites (39MH161 and 39MH228). These sites lacked the integrity or significance to qualify for listing on the NRHP, and no further work was recommended. These sites are not within the Direct APE for the project.

The Study Area 2 investigation identified archeological site 39MH2000 (Sioux Falls Rail Yard), which was recommended eligible for listing in the NRHP.

##### Architectural Survey Results

For Study Area 1, there was only one eligible property in the vicinity (1897 Bridge); however it was not within the Direct APE. Six newly identified properties were recommended not eligible because they are modern and lacked architectural significance.

For Study Area 2, there were three standing structures that were recommended eligible for the NRHP within the Direct APE (Great Northern Freight House Addition, the Great Northern Depot, and the Tri-State Electric/Wilson Storage and Transfer Building), and one previously unevaluated building (Howe Building) that was recommended not eligible.

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<sup>21</sup> The Ponca Tribe of Nebraska was added to the list of consulted Tribes in January 2013.

For the Visual APE of Study Area 2, there were numerous properties that were evaluated, including many eligible properties, several of which were already listed on the NRHP. Many of these properties occurred within two historic districts located on the west side of the Big Sioux River in downtown Sioux Falls. There were also several unevaluated properties within the vicinity of Study Area 2, some of which appear to be no longer extant.

### 3.6.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have no adverse impacts to historic or archeological resources.

#### Proposed Alternative

The Proposed Alternative would have no adverse impacts to historic or archeological resources in Study Area 1. FHWA has determined that two properties in Study Area 2 would have an adverse effect: the Great Northern Freight House Addition and the Downtown BNSF Rail Yard. The Proposed Alternative would have no adverse effect on all other properties identified in the surveys. SHPO has concurred with these recommendations (letter from A. Rubingh to T. Keller dated May 31, 2013). The ACHP was also consulted on the adverse effect determination and advised FHWA that they will not be participating in the resolution of adverse effects (letter from L. Johnson to M. Barber dated April 1, 2013).

### 3.6.3 PROPOSED MITIGATION

Adverse effects to historic properties will be mitigated in accordance with a Memorandum of Agreement (MOA) between FHWA and SHPO (signed June 25, 2013) that includes stipulations for 1) a redevelopment plan to maintain the historic integrity of the surrounding historic structures; 2) signage regarding the historic railroad and its role in the development of downtown Sioux Falls to be placed for public consumption; and 3) recordation of the current state of the rail yard prior to any changes taking place to the tracks or the freight house building.

If there is an inadvertent discovery of a historic property during construction of the undertaking, the City will stop construction of the undertaking and immediately notify FHWA. FHWA will notify the appropriate authorities and follow the procedures outlined in 36 CFR 800.13.

## **3.7 WETLANDS AND WATER RESOURCES**

Wetlands and other waters of the United States are regulated by the United States Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA) and are also protected under EO 11990 - *Protection of Wetlands*, which requires that Federal agencies "avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative". FHWA has implemented a goal of "net gain of wetlands" including a phased approach of wetland impacts through avoidance, then minimization of impacts to wetlands, and finally mitigation.

### 3.7.1 CURRENT CONDITIONS

A preliminary wetland determination was conducted in August 2006 for Study Area 1. A desktop review of aerial photographs in 2012 confirmed the general findings of the field investigation. One wetland was identified at the north end of the study area, situated in the railroad ditch along the east side of the tracks. This wetland has a direct surface connection to a nearby perennial stream that connects to the Big Sioux River. In addition, there is an ephemeral stream located south of the Xcel Energy station that passes through the railroad embankment on its way to the Big Sioux River.

Study Area 2 does not contain any wetland areas; the entire area consists of disturbed or fill material for the Downtown Yard and the surrounding businesses.

### 3.7.2 ENVIRONMENTAL CONSEQUENCES

#### *No-Action Alternative*

The No-Action Alternative would have no impacts to wetlands or waters of the United States.

#### *Proposed Alternative*

The Proposed Alternative would require minor impacts to one wetland and an unnamed ephemeral stream that crosses under the existing BNSF Corson line in Study Area 1. These impacts are unavoidable and are expected to be authorized by a Nationwide Permit (NWP), which would contain general and special conditions for its use. Prior to submitting a 404 Permit application, a formal wetland delineation will be conducted and an alternatives analysis will be submitted, as requested by the USACE (letter from S. Naylor to T. Keller dated June 25, 2013). The perennial stream north of the project area will not be impacted by construction.

### 3.7.3 PROPOSED MITIGATION

Impacts to the ephemeral stream and wetland are expected to be less than 100 feet in total loss of stream length and less than 0.10 acres. These impacts will be temporary and self-mitigating (i.e. wetlands will establish with the ditches along the new sidings); therefore, no compensatory mitigation is proposed. If the impacts to the stream or wetland will exceed these thresholds, compensatory mitigation will be necessary. A Section 404 NWP will be obtained for these impacts during final design. An alternative analysis will be provided to the USACE that demonstrates that the preferred alternative is the least environmentally damaging practicable alternative. Construction will implement Best Management Practices (BMPs), and the general and special conditions required with the NWP will be followed.

Impacts to downstream wetlands and water resources are expected to be minor and temporary, and would be mitigated by implementing BMPs as required by City of Sioux Falls and the South Dakota Department of Environment and Natural Resources (SDDENR). The City will also incorporate soil erosion and sediment control practices as detailed in a Stormwater Pollution Prevention Plan (SWPPP). Construction activities will be permitted and will limit post construction erosion to pre-construction levels. BMPs are discussed in greater detail in **Section 3.15**.

### 3.7.4 COMPLIANCE WITH EXECUTIVE ORDER 11990

Based on the above considerations, and due to the location of the identified wetlands (i.e. along the existing railroad embankment), it has been determined that there is no practicable alternative to the proposed construction in wetlands, and that the Proposed Alternative has included all practicable measures to minimize harm to wetlands which may result from such use.

Nonetheless, in compliance with EO 11990, SDDOT and FHWA must determine that all practicable mitigation for these impacts be considered and ultimately implemented. Due to their location and relatively low quality, SDDOT and FHWA have determined that the impacts will be self-mitigating and no compensatory mitigation is proposed.

## **3.8 FARMLAND**

The *Farmland Protection Policy Act of 1981* (FPPA) was enacted to minimize the impact Federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses, and is administered by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). Projects undertaken by a Federal agency or with assistance from a Federal agency which may irreversibly convert farmland to a non-agriculture use are subject to FPPA requirements. FPPA guidelines define “farmland” as prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland, but cannot be water or urban built-up land. Also, farmland committed to urban uses or zoned for purposes other than agricultural are not subject to FPPA requirements (NRCS 1994).

### 3.8.1 CURRENT CONDITIONS

According to the USDA-NRCS State Soil Scientist for South Dakota, there is no farmland, under the definition of the FPPA, within either study area for the following reasons: they are both within the city limits of the City of Sioux Falls, they are both within the Sioux Falls “urbanized area” as defined by the US Census Bureau, and are both currently zoned for commercial or industrial uses (email from D. Peterson to J. Engelbart dated April 8, 2013).

### 3.8.2 ENVIRONMENTAL CONSEQUENCES

#### *No-Action Alternative*

The No-Action Alternative would have no adverse or beneficial impact on farmlands.

#### *Proposed Alternative*

The Proposed Alternative would have no impacts to farmland under the definition of the FPPA.

### 3.8.3 PROPOSED MITIGATION

No mitigation is proposed.

### 3.9 FLOODPLAINS

EO 11988 – *Floodplain Management*, requires federal agencies to, among other directives, reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to restore and preserve the natural and beneficial values served by floodplains. This EO requires Federal agencies to assess potential impacts to floodplains and applies to all federally funded actions.

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program (NFIP), and publishes and updates the Flood Insurance Rate Map (FIRM) to illustrate those areas susceptible to flooding, and therefore requiring federal flood insurance. The City of Sioux Falls and Minnehaha County both participate in the FEMA NFIP. The FIRM for Minnehaha County, effective September 2009, illustrates the floodplain of the Big Sioux River at both study areas.

#### 3.9.1 CURRENT CONDITIONS

In the vicinity of Study Area 1, an area of the Big Sioux River floodplain (i.e. Zone AE 100-year floodplain) extends upstream along a right-bank tributary, and through a railroad bridge crossing. The floodplain pools at an elevation of approximately 1311.3 mean sea level (MSL) in the tributary, and also in the railroad ditches upstream of the bridge crossing. The floodplain in this location is a “backwater” area (i.e. an area where flood waters pond with little or no current as the river rises) and does not carry active flow from the Big Sioux River (**Figure 3.5**).

In the vicinity of Study Area 2, two areas along the eastern bank of the Big Sioux River are shown where floodwaters overtop and expand onto the bank (i.e. Zone AE 100-year floodplain). These areas do not carry active flow from the river, due to the location of embankments for the railroad lines and the 10<sup>th</sup> Street and 11<sup>th</sup> Street viaducts restrict downstream movement of water in the floodplain. During a 100-year flood event, the flood waters that encroach onto the eastern bank will pond in these areas until the river stage has dropped below the eastern bank (**Figure 3.6**).

#### 3.9.2 ENVIRONMENTAL CONSEQUENCES

##### No-Action

The No-Action Alternative would have no impacts on the FEMA designated floodplain.

##### Proposed Alternative

The Proposed Alternative would have a direct impact on the FEMA designated 100-year floodplain in both study areas, and would require a floodplain development permit from County and City officials. However, the FEMA designated floodway will be avoided by the Proposed Alternative at both locations.

Within Study Area 1, the proposed design includes the construction of two additional tracks, an access road, and a drainage ditch to the east of the existing BNSF track. While some fill material will be placed in the Big Sioux River floodplain, this encroachment is limited to a backwater area, and the proposed ditch along the east side of the access road will actually provide compensatory backwater storage up to the 100-year floodplain elevation of 1311.3 MSL.

Within Study Area 2, the proposed design includes the removal of several lines of existing BNSF track, and the construction of a new connecting track between the E&E and BNSF tracks, with an adjacent access road and drainage ditches. While some fill material will be placed in the floodplain at the southern project limits for the proposed track embankment, the proposed construction will actually increase the volume of flood storage during the 100-year event due to the excavation of material from the floodplain for the drainage ditches.

### 3.9.3 PROPOSED MITIGATION

The proper floodplain permits will be obtained from the Minnehaha County Planning Department and the City of Sioux Falls, who will certify that the construction activities are in compliance with South Dakota floodplain regulations prior to project letting. Because the Proposed Alternative will not encroach into the Big Sioux River Floodway, a “No Rise” Certification will not be needed. Standard provisions included in the required floodplain permit will be incorporated into the construction specifications, and will be followed to minimize impacts on the floodplain. There would be no additional mitigation measures above what is already required by City and County programs.

## **3.10 THREATENED AND ENDANGERED SPECIES, WILDLIFE, AND MIGRATORY BIRDS**

Federally-listed threatened and endangered species are protected under the *Endangered Species Act of 1973* (ESA) as amended (16 USC 1531 et seq.) by the United States Fish and Wildlife Service (USFWS). State-listed threatened and endangered species are protected by the South Dakota Department of Game, Fish and Parks (SDGFP) under South Dakota Statutes 34A-8 and 34A-8A. The *Bald and Golden Eagle Protection Act of 1940* (16 USC 668-668c), as amended, provides protection for bald and golden eagles by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit. The *Migratory Bird Treaty Act of 1918* (16 USC 703-712: Chapter 128) (MBTA) similarly protects migratory birds and their eggs, young, and/or active nests. In addition, EO 13312 provides guidance to federal agencies on ways to prevent and control invasive species.

### 3.10.1 CURRENT CONDITIONS

#### *Threatened and Endangered Species*

Agency coordination with USFWS and SDGFP regarding threatened and endangered species began in 2006, and has continued throughout the process as the alternatives have been developed and evaluated. This coordination included agency scoping letters as well as agency meetings. Additional information regarding agency meetings is included in **Chapter 5**.

In their initial coordination, USFWS indicated that the Western prairie fringed orchid (*Platanthera praeclara*) and the Topeka shiner (*Notropis topeka*) had the potential to occur in the vicinity of Study Area 1 (email from N. Gates to D. Graves dated July 25, 2006 and letter from P. Gober to R. Tusa dated August 11, 2006).



According to the USFWS, the potential habitat for the federally-threatened Western prairie fringed orchid includes mesic upland prairies, wet prairies, sedge meadows, sub-irrigated prairies, or swales in sand dune complexes habitat types. None of these habitat types exist in or near either study area.

Also according to the USFWS, the Topeka shiner (federally-endangered) is known to occupy small streams within the Big Sioux watershed, including Slip-Up Creek, which is located across the river from the unnamed perennial tributary north of Study Area 1. Therefore, a survey was conducted in the unnamed tributary adjacent to the northern portion of Study Area 1 by Steven Wall and Sheila Thomson in July 2007. The purpose of the survey was to determine the presence or absence of Topeka shiner and/or suitable habitat in the unnamed tributary, and to evaluate possible impacts the project may have on the species. Topeka shiners were not found in the stream after sampling, and the habitat was not indicative of Topeka shiner presence (Wall 2007).

In 2007, the SDGFP sent a list of state and federally-listed threatened and endangered species and species of concern from the South Dakota Natural Heritage Database (SDNHD). Other than a previously known Bald eagle nest (see section below for more information), the SDNHD records identified in this letter occurred outside the study area; the closest of which were several species of concern in the Cactus Hills and Great Bear Recreation Park, which are located across Rice Street and east of the study area (letter from D. Backlund to R. Tusa dated May 21, 2007).

Also, according to the SDNHD, the Lined snake (*Tropidoclonion lineatum*), a state-endangered species, is known to occur in the Cactus Hills and Great Bear Recreation Park areas where remnant tall grass prairie or suitable grassland habitat exists. Recent surveys have shown they occur along the Big Sioux River Valley from Palisades State Park south to Union County. There are no remnant tall grass prairies or other areas of suitable grassland habitat within either study area.

#### Wildlife

In general, railroad ROW offers some marginal vegetated cover and limited habitat for wildlife. Rail corridors can include den sites, foraging opportunities for small, reptiles and amphibians, or nesting and roosting cover for birds. However, at Study Area 1 there is very little vegetation other than the grasses along the railroad embankment and few trees near the north of the study area. Study Area 2 is mostly industrial and commercial with very few trees and very limited wildlife habitat.

#### Migratory Birds

As indicated above, Study Area 1 is mostly agricultural cropland and has minimal trees for nesting. Study Area 2 is mostly industrial and commercial with very few large trees, with the exception of an area along the south side the Downtown Yard, adjacent to the Big Sioux River.

#### Bald and Golden Eagles

In their initial coordination, USFWS indicated the potential for Bald eagles (*Haliaeetus leucocephalus*) to be found along the Big Sioux River in the vicinity of Study Area 1. Further coordination with SDGFP provided additional details of the location and potential for Bald eagles at one specific nest location

(email correspondence between D. Backlund and R. Tusa dated September 12-14, 2006). One known nest approximately one mile from the study area had been observed since 2004, and fledged young in 2004 and 2006; however, SDGFP indicated that this nest would likely not be affected by construction in Study Area 1 (Backlund 2006).

### 3.10.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have no impacts to threatened and endangered species, wildlife, or migratory birds.

#### Proposed Alternative

There are no documented occurrences of state or federally-listed threatened or endangered species in either study area, nor is there any designated critical habitat. The Proposed Alternative would have “no effect” on the Lined snake, Western prairie fringed orchid, or Topeka shiner. The Proposed Alternative would also have “no effect” on Bald eagles and will be in compliance with the Bald and Golden Eagle Protection Act, the MBTA, and the ESA. Furthermore, in June 2013, USFWS indicated that they had no objection to the Proposed Alternative (letter from T. Keller to N. Gates dated June 11, 2013 and concurred on June 18, 2013).

The Proposed Alternative would involve minor impacts to wildlife in Study Area 1. Wildlife may be displaced within the immediate project limits, and may also temporarily lose access to the Big Sioux River (i.e. while trains are parked on the sidings). However, more suitable habitat exists adjacent to the study area, and there are more suitable areas (i.e. wooded riparian corridors) upstream and downstream. The Proposed Alternative would not significantly change conditions for wildlife in Study Area 2, as there is little to no habitat within this area. Overall impacts to wildlife are minimal or negligible.

The Proposed Alternative could potentially impact migratory birds since trees will be removed in both study areas. However, the amount of trees being removed will be negligible. Although nesting ground habitat may exist in Study Area 1, it is mostly agricultural cropland. No habitat for ground nesting birds exists in Study Area 2 since the area is disturbed. There will be limited impacts to trees in both Study Areas 1 and 2.

### 3.10.3 PROPOSED MITIGATION

BMPs, described in greater detail in **Section 3.15**, will mitigate and minimize impacts to migratory birds and other wildlife.

Weed free and approved plant materials will be used to re-vegetate disturbed areas. Chemical and biological control along with any additional coordination will be used as needed.

If any trees are removed for the project, they will be removed outside the primary migratory bird nesting season (April 1 through September 1), or field surveys will be conducted in accordance with policies defined by the USFWS. After construction, any disturbed areas will be re-vegetated.

### **3.11 UTILITIES**

#### **3.11.1 CURRENT CONDITIONS**

Private and public utilities were coordinated with early in the project scoping phase. Utility providers were invited to public meetings and information regarding the location, size, and type of their facilities was requested. No concerns have been expressed by the utility providers, and ongoing coordination has taken place for those utilities that were identified on site. A list of the providers contacted is provided below:

##### Public Utilities

- City of Sioux Falls – Electric Light
- City of Sioux Falls – Sanitary Sewer
- City of Sioux Falls – Storm Sewer
- City of Sioux Falls – Traffic
- City of Sioux Falls – Water Main
- Lincoln County Rural Water
- Minnehaha Community Water Corporation
- East River Electric Power Cooperative
- Sioux Valley Energy
- Southeastern Cooperative
- Excel Energy (electric and natural gas)
- Magellan Pipeline Co, LLC
- Northern Natural Gas Co
- Alliance Communications
- AT&T
- Qwest Communications

##### Private Utilities

- MidContinent Communications
- PrairieWave Communications Inc.
- SDN Communications
- McLeod USA
- Qwest Communications
- Sprint
- Swiftel Communications
- Verizon Business

In addition the Xcel Energy substation and the major transmission lines associated with it, numerous public and private utility lines are located in Study Area 1, including an 8" and a 36" sanitary sewer, underground and overhead electrical distribution lines, communications, and natural gas lines. These utility lines are situated within the existing ROW as well as separate utility easements that cross the BNSF tracks. No major utilities are known to occur in Study Area 2; however, typical private and public utilities such as storm sewer, underground and overhead distribution lines, and underground communications lines are present. Typically, if a utility provider existed first in a particular location, they are not responsible for the costs of utility conflicts; whereas utility providers that cross an entity who existed before them are responsible for the costs of utility conflicts. All utilities will be located during final design and relocation costs will be determined at that time.

#### **3.11.2 ENVIRONMENTAL CONSEQUENCES**

##### No-Action Alternative

The No-Action Alternative would have no impacts on public or private utilities.

### Proposed Alternative

Major utilities have been avoided for the Proposed Alternative at Study Area 1. None of the transmission lines will be relocated. Other major utilities crossing the BNSF tracks will be encased using standard construction methods approved by the railroad.

Within Study Area 2, there will be minor impacts to utilities due to the removal of the rail yard and the reconstruction of the crossings at 6<sup>th</sup> Street and 8<sup>th</sup> Street; however, a final determination of conflicts cannot be made until the final design phase.

#### 3.11.3 PROPOSED MITIGATION

During preliminary design, efforts have been made to avoid and minimize utility impacts to the extent feasible. Coordination with utility companies with known resources in the study areas will be conducted to obtain the latest information possible on the number, type and location of each utility within the corridor to assist in avoiding and minimizing impacts to these utilities. Where relocations are required due to conflicts with the Proposed Alternative, designs to relocate the utility would be developed by the utility company. The City of Sioux Falls will coordinate with utilities prior to construction and removal activities.

## **3.12 NOISE AND VIBRATION**

A noise and vibration analysis was conducted in accordance with the Federal Transit Administration's (FTA) guidance document entitled: *Transit Noise and Vibration Impact Assessment, May 2006*<sup>22</sup>. The FTA's noise impact criteria are based on a comparison of existing and future outdoor noise levels, and are also dependent upon land uses. There are three levels of analysis: screening, general, and detailed, and impacts can be considered moderate or severe.

### 3.12.1 CURRENT CONDITIONS

According to the screening level analysis, due to the location of two residences near the Study Area 1, a detailed noise and vibration analysis was warranted for Study Area 1. Due to the existing and proposed conditions of Study Area 2 (i.e. commercial and industrial uses), no further noise or vibration analysis was warranted for Study Area 2. Therefore, a detailed noise and vibration analysis was conducted by Alfred Benesch & Company for Study Area 1. The results of the noise and vibration analysis were summarized in a Technical Memorandum dated April 26, 2013. The memorandum utilized existing noise levels measured during the preparation of a noise analysis for one of the previous alternatives, and also utilized information from the BNSF *Operations Plan* and other data provided by BNSF and E&E.

Existing noise measurements were taken at 5910 Rice Street (land use Category 2 – residences) between June 13 and June 14, 2007. This location corresponds to the two occupied residences immediately south of the proposed E&E Interchange (approximately 135 feet from the farthest southern point of the new sidings). Existing noise levels at these residences were measured at 67 A-weighted decibels (dBA).

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<sup>22</sup> In 2008 FHWA directed the City to utilize the FTA guidance for the noise analysis, as the SDDOT noise policy does not address railroad noise.

### 3.12.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have no impacts to nearby residences from noise or vibration.

#### Proposed Alternative

At Study Area 1, the Proposed Alternative would result in increased train operations, primarily due to the switching of regional trains into local trains, and vice versa. As stated in BNSF's *Operations Plan*, the number of overall rail cars will not increase at this location; rather, there will be regional trains that stop at the E&E Interchange, that are broken into smaller trains which will then continue into town. The main change in operations will be an increase in the number of locomotives and the resulting noise from the trail cars being switched.

According to the model provided by FTA, these activities would not result in any increase in the future noise levels (calculated to be 67 dBA) at the closest residential receivers at 5910 Rice Street. Nonetheless, FTA's guidance still indicates that these noise levels would be considered a "moderate impact" (Benesch 2013a).

In addition, according to the FTA guidance, rail projects should be evaluated for potential vibration impacts. Vibration dissipates rapidly over short distances, and also decreases as the speed of the train decreases. As documented in the memorandum, the threshold for vibration impacts at Study Area 1 is approximately 41 feet from the tracks, which is within the BNSF ROW. Therefore, there would be no vibration impacts to the two residences at 5910 Rice Street, which are over 135 feet away (Benesch 2013a).

### 3.12.3 PROPOSED MITIGATION

According to FTA's guidance, where there is a "moderate" impact, noise mitigation measures should be considered. Mitigation measures (i.e. noise barriers) were considered, but were found to not be reasonable or feasible for a variety of reasons, including their effectiveness, cost, number of benefitted properties, and the relatively minor increase in noise levels.

## **3.13 HAZARDOUS MATERIALS AND RECOGNIZED ENVIRONMENTAL CONDITIONS**

Environmental risk sites are those facilities and/or locations where hazardous substances, hazardous waste, or petroleum products were or can be released into the ground water, surface soils, or subsurface sediments. The term "Recognized Environmental Conditions" (RECs) means the presence of, or likely presence of, any hazardous substances or petroleum products on a property under consideration that may indicate an existing release, past release, or a material threat of a release of any hazardous substance or petroleum into the groundwater, surface water of that property or neighboring properties. RECs do not include "de minimis" conditions which do not present a threat to human health or the environment, and that generally would not be subject to enforcement or regulation.

### 3.13.1 CURRENT CONDITIONS

#### Preliminary Assessments

A preliminary assessment of potential impacts related to the presence of hazardous substances or petroleum products was conducted in 2006 for both study areas. The preliminary assessment consisted of a field inspection, a review of public database information, and interviews with BNSF environmental staff. The assessment included evaluations of potential existing and historical conditions at both study areas<sup>23</sup>.

The review of public database information included a search of environmental databases by Environmental Data Resources, Inc. (EDR). EDR provides focused queries of publicly available data records indicative of a wide variety of sites and activities of potential environmental significance that are within industry-standard search radii<sup>24</sup> of a target property.

Information relative to historic BNSF spills or releases was obtained from discussions with BNSF's Environmental Operations Group. Information relative to the remediation history of adjacent downtown areas was also retrieved from the *City of Sioux Falls Brownfield Site Remediation Project Summary* (HDR 2006).

#### Phase I Environmental Site Assessments

Based on the findings of the preliminary assessment, a Phase I Environmental Site Assessment (ESA) was conducted by HWS Consulting Group, Inc. in October 2008 for both Study Area 1 and Study Area 2. The Phase I ESAs were completed in conformance with the scope and limitations of the American Society for Testing and Materials (ASTM) Standard Practice E 1527-05 for Phase I ESAs. The purpose of the Phase I ESA process is to identify, to the extent feasible, RECs in connection with a target property.

**Study Area 1** – The Phase I ESA for this area concluded that no RECs were identified for the site and surrounding areas that would warrant additional investigation. Potential environmental concerns may consist of undocumented releases from locomotives or tank cars from through traffic along the BNSF line and possible minor releases from the small lawn mower facility just west of the property (HWS 2008a).

**Study Area 2** – The Phase I ESA for the downtown redevelopment area concluded that the BNSF rail yard itself presented a REC due to a documented release of diesel fuel along tracks north of the Great Northern Depot building, as well as visual observations of oil-stained ballast at the Locomotive Servicing Area (immediately east of the depot). In addition, potential environmental concerns associated with historic rail operations were noted, including the storage and handling of diesel fuel, lube oil, waste oil, cleaning fluids, and coolants in and around the Locomotive Servicing Area; the potential for releases from through-freight tank cars;

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<sup>23</sup> In 2013, the SDDENR's Environmental Events/Spills database and City of Sioux Falls records were reviewed for any spills or other events since 2006. No additional spills or events in either of the study areas have been reported since 2006.

<sup>24</sup> Minimum search distances vary by the type of database being searched, and the type of hazardous material being searched for, which are outlined in the American Society for Testing and Materials Standard Practice E 1527-05.

and the potential for releases of oil, fuel, or coolants from locomotives staged in the yard. Other potential environmental concerns in the area included the former Zabel Battery Site, the adjacent Midwest Oil Company site, residual manufactured gas plant (MGP) waste, and various other potential small-release sites (**Figure 3.7**) (HWS 2008b).

#### Phase II Environmental Site Assessments

As a result of the preliminary assessment and the Phase I ESA evaluation process, a Phase II ESA was conducted for only those areas with known or suspected contamination. Based on the RECs and potential environmental concerns within the Downtown Yard, a Phase II ESA was conducted in 2008 by GeoTek Engineering, Inc.

The area that was investigated was approximately 240 feet x 2,500 feet, from approximately 4<sup>th</sup> Street to 11<sup>th</sup> Street, and included the BNSF rail yard, associated buildings and railroad street crossings. The contaminants of concern (COC) were Semi-Volatile Organic Compounds (SVOCs - specifically Polynuclear Aromatic Hydrocarbons or PAHs), Polychlorinated Biphenyls (PCBs), Volatile Organic Compounds (VOCs), Metals (8 RCRA), Total Petroleum Hydrocarbons (TPH) as gasoline and fuel oil/diesel, Organochlorine pesticides and Nitrogen, Phosphorus, & Sulfur containing pesticides.

Surface soils (0-24") and subsurface soils (> 24") were assessed using a systematic sampling approach to determine if the mean/median value of a COC exceeds the threshold value within acceptable decision error limits. Thirty-five soil borings were completed in August 2008 (**Figure 3.7**).

The findings of the Phase II ESA field investigations indicated low levels of PAH and other petroleum-related impacts in soils at a number of locations across the yard. Limited metals contamination was also noted. No pesticides were detected above site use benchmarks. These findings are consistent with what may be anticipated within most rail yards from the historical use of diesel fuel and lube oil (Geotek 2008).

VOC contaminant concentrations above projected site use benchmarks were also not detected during the Phase II investigation. Therefore, the vapor intrusion exposure pathway was not considered complete for risk<sup>25</sup>, and no further evaluation of this pathway was done.

Due to elevated levels of petroleum contamination in several of the soil borings at the south end of the Downtown Yard, at the request of SDDENR, one additional soil boring was drilled at the same location in December 2012 to better define the limits of potential contamination, and the soil and groundwater was sampled (**Figure 3.7**). Detections of fuel components were noted, but no violations of water quality standards were found (Geotek 2013).

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<sup>25</sup> Risk pathways require a contaminant source, and a potential receiver. If there is no intermediate pathway, or possibility for contamination to reach a potential receiver, then the pathway is not considered "complete" for risk.

### 3.13.2 ENVIRONMENTAL CONSEQUENCES

#### *No-Action Alternative*

The No-Action Alternative would have no impacts from hazardous materials, petroleum products, or other RECs.

#### *Proposed Alternative*

The Proposed Alternative would not result in any impacts from known RECs or other potential environmental concerns at Study Area 1.

At Study Area 2, impacts from RECs or other potential environmental concerns may occur. Low level soil contamination is likely to be encountered and may need to be addressed and mitigated during future excavation and grading activities directly or indirectly resulting from the Proposed Alternative. Site work for removal of the railroad tracks, construction of new tracks, utility relocation, street construction, as well as future work for construction of commercial and retail developments and parking lots may unearth soils that exceed benchmarks identified by regulatory agencies. Worker health and safety issues will also need to be considered. Some soils may require special handling, treatment, or additional documentation for proper disposal.

### 3.13.3 PROPOSED MITIGATION

In July 2013, in a response to SDDOT's request for additional information and their review of the Proposed Alternative, SDDENR cited the State of South Dakota regulations (SDCL34A-12) that govern the reporting, assessment, and cleanup of contamination for any property within the state. SDDENR further indicated that the City and SDDENR have been working together to strengthen the tracking mechanisms for cleanup of the BNSF Downtown Yard property. To that end, the City has developed an Overlay District within its zoning regulations that will impose use limitations and restrictions on the property once acquired by the City. The Overlay District requires future owners and developers to hire an environmental consultant and to work with SDDENR and the City to insure that identified contaminants do not pose a risk to human health or further risk to the environment. The Overlay District also requires the preparation of a Soils Management Plan, reviewed and approved by SDDENR, for any excavation work on the site, to maintain compliance with the state regulations cited above. SDDENR indicated that information pertaining to the Overlay District and the requirements to prepare a Soils Management Plan need to be included in the Draft EA (letter from K. McIntosh to T. Keller dated July 3, 2013).

As requested by SDDENR, the requirements of the Overlay District are hereby incorporated into the mitigation commitments for the Proposed Alternative, including the requirement for the City and any future developers to work with an environmental consultant to prepare a Soils Management Plan for any excavation or grading activities. The City will also excavate the top six inches of soil from the BNSF property and dispose of it in accordance with a properly prepared Soils Management Plan. Other potential remedial considerations for the redevelopment area may include soil removal, capping, and



institutional controls<sup>26</sup> to limit the type of activity the site may be used for, as well as physical restrictions and controls on intrusive digging at the site. Removal of some contaminated soil and placement of clean fill during development should provide further protection against potential vapor inhalation risk. It is recommended that specific redevelopment scenarios be evaluated against the findings of the Phase II ESA to determine what health and safety precautions may be warranted for construction activity, waste disposal, and long term occupancy of the site. The Phase II ESA, including all analytical data, is included in the Administrative Record for this project.

Furthermore, SDDENR has notified BNSF of their responsibility to maintain compliance with the state regulations governing the reporting, assessment, and cleanup of any contamination on the property that they would maintain ownership of under the Proposed Alternative. Namely, the new tracks that will be constructed for the E&E connection may encounter some low levels of soil contamination in the area between 10<sup>th</sup> Street and 11<sup>th</sup> Street. While not specifically governed by the Overlay District, SDDENR has advised BNSF to follow appropriate reporting and tracking procedures for their own property (letter from K. McIntosh to S. Dhuru dated July 3, 2013).

Any existing structures that will be acquired and demolished should be inspected for the presence of asbestos-containing material and abated, if necessary, prior to demolition, in compliance with federal and state requirements.

### **3.14 VISUAL IMPACTS AND AESTHETIC CONSIDERATIONS**

When a proposed project has the potential to change the visual landscape of an area, the relationship between high-quality visual resources and potential viewers of and from the project should be identified. Measures should also be taken to avoid, minimize, or reduce adverse visual quality impacts. These mitigation measures can include visual design considerations during the planning and design phases, or adding features associated with design, art, or architecture.

Additionally, Section 106 of the *National Historic Preservation Act of 1966* directs federal agencies to consider direct and indirect adverse effects to historic properties. Adverse effects on historic properties may be caused by the introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features (36 CFR 800.5).

#### **3.14.1 CURRENT CONDITIONS**

##### **Study Area 1**

Study Area 1 is located in a rural setting characterized primarily by flat agricultural land. Existing man-made features include the rail line, the Xcel Energy electrical substation, numerous electrical transmission and distribution lines, and several single-family residences. The Big Sioux River and its floodplains are situated to the west, and Rice Street, an additional rail line, and gently rolling hills are situated to the east. The vegetation in Study Area 1 and its immediately adjacent areas consists

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<sup>26</sup> According to the EPA, institutional controls are non-engineering instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

primarily of upland species and agricultural cropland. The flat agricultural land and gently rolling hills within the vicinity of Study Area 1 provides a minimal amount of visual diversity.

### Study Area 2

Study Area 2 is located in an urban setting in downtown Sioux Falls. It is characterized mainly by industrial and commercial uses, with the Downtown Yard and its associated buildings generally occupying the middle of the study area. The area surrounding the Downtown Yard consists of a more traditional downtown urban landscape that includes commercial and industrial businesses, retail shops, restaurants, bars, and residences, among other uses. To the south of the rail yard there are some more natural areas such as the Big Sioux River and Beadle Greenway.

Many of the buildings, parks, and other features surrounding the Downtown Yard have been recently renovated or built in an effort to improve the downtown area; however there are still numerous buildings that are in need of repairs. The Downtown Yard itself is generally perceived as lacking visual quality, which is in direct contrast to the downtown improvement efforts. One of these downtown efforts is the City's façade easement program, which pays for revitalization and/or upkeep to significant historic buildings. In addition, the county has erected several historic markers, one of which is in the middle of the Downtown Yard near 8<sup>th</sup> Street, and several other buildings surrounding the Downtown Yard are listed or eligible for listing on the NRHP. Other improvements to the downtown area include the development and redevelopment of numerous waterfront resources, especially greenways and parks along the Big Sioux River. These greenways and parks provide a connection to the waterfront, and generally offer increased visual qualities. Two examples of these downtown waterfront improvements that have enhanced visual quality include the redevelopment and expansion of Falls Park, and the demolition of the parking structure that once spanned the Big Sioux River.

### 3.14.2 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would have no visual impacts. However, leaving the Downtown Yard in place would continue to detract from the visual quality of the surrounding downtown area.

#### Proposed Alternative

The Proposed Alternative would construct a new railroad interchange in Study Area 1 consisting of two sidings adjacent to the existing rail line, as well as two access roads. Minor visual changes are anticipated as a result of the new interchange, the most notable change being the increased presence of trains in the area, and the staging or storing of rail cars for longer periods of time. However, these visual changes are expected to result in only minor visual impacts since railroad lines already exist within and immediately adjacent to Study Area 1, and because the area does not currently exhibit an above-average level of visual quality. The minor visual impacts resulting from the new interchange would be predominantly borne by those traveling on Rice Street. The construction of the interchange and new access roads would slightly alter the landscape in Study Area 1; however, the area would continue to maintain its rural, agricultural setting.

The Proposed Alternative would result in positive visual changes in Study Area 2, as well as for the immediate surrounding area. The removal of the Downtown Rail Yard would improve the visual quality of the downtown area by minimizing the railroad facilities and its components, and opening the area for redevelopment. The redevelopment of downtown would result in aesthetically-pleasing visual changes that would reflect a traditional urban downtown landscape. Additionally, visual impacts to nearby historic buildings (i.e. within the Indirect APE) have been evaluated in detail by the Section 106 Coordination process (**Section 3.6**), and SHPO has determined that there are no adverse effects to historic properties in the Indirect APE.

### 3.14.3 PROPOSED MITIGATION

No mitigation is proposed for the Proposed Alternative at Study Area 1. As described previously in **Section 3.6**, adverse effects to historic properties will be mitigated in accordance with the MOA between FHWA and SHPO that states that the redevelopment plan must maintain the historic integrity of the surrounding historic structures.

## **3.15 TEMPORARY CONSTRUCTION RELATED CONSIDERATIONS**

### 3.15.1 ENVIRONMENTAL CONSEQUENCES

#### No-Action Alternative

The No-Action Alternative would not have temporary construction related impacts.

#### Proposed Alternative

The Proposed Alternative would result in minor and temporary construction-related impacts that would generally be confined to the railroad ROW. The work will be phased to minimize disruptions. In the first phase, the interchange with the two additional sidings will be constructed in Study Area 1. In the second phase, the connection track will be constructed in Study Area 2, and then the rest of the rail yard will be removed. The final phase will be the reconstruction of the crossings at 6<sup>th</sup> Street and 8<sup>th</sup> Street, and the installation of fencing between the remaining railroad property and the redevelopment area. The railroads will coordinate construction phasing and operations with the City to minimize disruptions to traffic and businesses.

There would be temporary increases in noise levels and vibration from construction activities and equipment. There would be temporary impacts to air quality from dust generated by grading activities. There would also be restricted or modified access. At Study Area 1, there are several residences and two businesses that have private driveway access across the BNSF tracks; there are two driveways at this location. While the northern driveway is being reconstructed, these residences and businesses will temporarily be limited to using only the southern driveway. In Study Area 2, the reconstruction of the crossings at 6<sup>th</sup> Street and 8<sup>th</sup> Street will temporarily re-route or slow vehicle traffic. In addition, other temporary impacts include removal of vegetation or landscaping.

### 3.15.2 PROPOSED MITIGATION

Temporary construction impacts would be mitigated by a variety of BMPs, in accordance with SDDOT construction manuals, that may include the following:

Construction noise will be controlled in accordance with local City and County ordinances. Temporary air quality impacts, such as dust, will be controlled by watering during dry periods to reduce dust and replacing vegetation to decrease dust and visual impacts. Rail construction will mostly take place within existing ROW and avoid impacts to adjacent properties. Where adjacent residential properties are impacted in the southern portion of Study Area 1, alternative access will be maintained by an existing access road to the southwest. Impacts in Study Area 2 would be mitigated by providing signage and information prior to lane closures or modification of access.

Erosion control measures (e.g. seeding, mulching, and blankets), sediment containment (e.g. silt fences, hay bales, and inlet protection) will be used for work on or near streams in Study Area 1 to protect water quality. All permits will be acquired, including the National Pollutant Discharge Elimination System (NPDES) storm water permit. A SWPPP will be prepared. Construction spills and leaks of fuels, oils, or other substances that can degrade water quality also will be controlled by BMPs and the SWPPP. Solid waste generated during construction will be disposed of in accordance with relevant regulations.

### **3.16 SECONDARY AND CUMULATIVE IMPACTS**

#### **3.16.1 ASSESSMENT METHODOLOGY**

In compliance with NEPA and CEQ regulations, the secondary and cumulative impacts of a proposed action should be examined as part of the analysis of environmental consequences.

The CEQ defines secondary (or indirect) effects as:

"...effects which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water on other natural systems, including ecosystems." (40 CFR 1508.8(b))

The CEQ defines a cumulative impact as one that:

"...results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time." (40 CFR 1508.7)

Key concepts for the assessment of secondary and cumulative impacts are as follows:

#### **Geographic Extent**

The geographic extent is the extent to which impacts to the environment could reasonably be expected to be accounted for, and from which the impacts from the Proposed Alternative would have a measurable effect upon. For instance, impacts from a proposed commercial development or roadway project in western Sioux Falls would not have to be accounted for in this assessment.

The Proposed Alternative consists of transferring land from BNSF to the City of Sioux Falls for the eventual redevelopment of the Downtown Yard into commercial, retail, and office land uses. Minor infrastructure improvements will be required downtown to maintain railroad operations. These improvements are limited to the existing BNSF property, and will not require changes to other surrounding land uses. In addition, two siding tracks (i.e. a railroad interchange) will be constructed near Timberline Avenue and Rice Street. These siding tracks will also be constructed within BNSF property, and will not result in changes to the surrounding land uses. An access road for the Xcel Energy substation will be re-configured to main access. These improvements are limited to the immediate property around each of the proposed project components, and will only be influenced by other projects in the immediate vicinity. Therefore, the geographic extent for this project is limited to an area immediately surrounding each of the two study areas for approximately ½ mile in all directions.

Due to concerns expressed by the public early in the project development regarding the potential for changes to at-grade railroad crossings between the two study areas, changes to BNSF's operations elsewhere in the City, and the potential for other minor improvements within BNSF's regional system, these changes were also evaluated for potential secondary and cumulative impacts.

#### Time Period

The assessment of secondary and cumulative impacts should focus on projects in the recent past, the current time period, and the foreseeable future. The time period for assessment of secondary and cumulative impacts should also be somewhat consistent with the time period of the Proposed Alternative.

The downtown area of Sioux Falls has seen a transformation over the past two decades, as industrial buildings and rail infrastructure has been converted into office, retail, commercial, as well as residential property. The Proposed Alternative includes the construction of two siding tracks in Study Area 1, and the sale of approximately ten acres of the Downtown Yard to the City of Sioux Falls. Once the land is cleared other actions will be taken, such as soil cleanup, after which the land will be sold to developers for redevelopment. While the E&E Interchange and the E&E Connection are being constructed, the City will lease the Downtown Yard to BNSF for up to two years to maintain their operations. Following construction, the process to remove the infrastructure in the Downtown Yard and complete any required cleanup may take several additional years to complete.

Therefore, the time period for this assessment is the past and future 20 years from the construction year (i.e. 2015), thus spanning from approximately 1995 to 2035. This timeframe is also consistent with many of the planning documents prepared for the region.

#### Available Data

This assessment has been conducted using readily available data, observed local trends, and discussions with knowledgeable persons. It has not included developing specific predictive modeling or other tools. The Proposed Alternative is a part of the overall effort to redevelop downtown Sioux Falls, and is consistent with the numerous plans that have successfully encouraged more recent redevelopment

efforts. Past projects in this geographic extent have included other projects with the same general goal of redeveloping the downtown area as well as those plans that continue to encourage redevelopment in downtown, including Phase I of the *Conceptual Phasing Plan*. See **Chapter 8** for a list available plans and studies used in the preparation of this Draft EA. Discussions were also held with local officials from the City, the MPO, other consulting engineers, local business leaders, the public, and other individuals contacted during the development of this document.

### 3.16.2 SECONDARY IMPACTS

#### Study Area 1

Identifiable secondary impacts from the construction of the siding tracks near Timberline Avenue and Rice Street in Study Area 1 are likely to be limited to increased noise resulting from changes in railroad operations. As described in **Section 3.12**, there are no mitigation measures (i.e. noise walls) that are feasible and reasonable.

The construction of the siding tracks is not expected to create secondary impacts related to unplanned growth. According to *Shape Sioux Falls 2035*, the area of the new railroad interchange is mapped as “urbanized area” and “planned urbanized area.” Therefore, these areas are already planned for growth, and the new railroad interchange is unlikely to induce growth beyond what is currently planned.

#### Study Area 2

Identifiable secondary impacts from the improvements in Study Area 2 include the redevelopment of the Downtown Yard, which may include commercial, retail, and office land uses. The land may also be utilized for less intensive uses, such as parking, that would enable the redevelopment of other adjacent parcels of land to be converted from parking to commercial or other uses. In addition, the removal of the crossings at 6<sup>th</sup> Street and 8<sup>th</sup> Street will result in less traffic delays and lead to more pedestrians utilizing these crossings.

Furthermore, Section 106 of the NHPA requires that a federal agency evaluate adverse effects to historic properties, including "reasonably foreseeable effects caused by an undertaking that may occur later in time, be farther removed in distance, or be cumulative" (36 CFR 800.5 (a)(1)). Several historic properties and historic districts are located within or adjacent the Direct APE and Indirect APE for Study Area 2. However, as described previously in **Section 3.6**, adverse effects to historic properties will be mitigated in accordance with the MOA between FHWA and SHPO, which states that the redevelopment plan must maintain the historic integrity of the surrounding historic structures.

#### At-Grade Railroad Crossings

Outside the two study areas, there will be little or no change to at-grade crossings affected by this project that are located elsewhere throughout Sioux Falls. The total number of trains moving throughout Sioux Falls will not change; however, the length of these trains will change due to the longer trains stopping at the interchange and being broken into smaller trains to enter the City. Typically, the length of trains will be decreased as a result of the Proposed Alternative. While there may be an

increase in the number of blocked crossing events in some locations, the duration of these events will decrease. A summary of changes to rail traffic at affected at-grade crossings is provided in **Table 3.1**.

**Table 3.1** *Impacts to At-Grade Crossings*

At-Grade Crossings	Impacts to Crossings
Corson Sub Crossings West of New Interchange: Weber Ave (N of 3 <sup>rd</sup> St), Lowell Ave (S of Rice St), Cleveland Ave (S of Rice St), Bahnson Ave (S of Rice St), Richard Pl (S of Rice St), and Rice St (W of Timberline Ave)	The total number of rail cars impacting these at-grade crossings will not change. Unit trains that currently travel to the Downtown Yard will stop at the new interchange site. Smaller length trains will then transport these rail cars to and from the final customers. More frequent smaller trains will travel through the crossings instead of less frequent longer trains.
Corson Sub Crossings East of New Interchange: Timberline Ave (N of Rice St)	No changes at this crossing
Madison Sub Crossings: Minnesota Ave (S of 60 <sup>th</sup> St N) and 60 <sup>th</sup> St N (W of Minnesota Ave)	No changes at these crossings.
Canton Sub Crossings: Cliff Ave (S of 12 <sup>th</sup> St), Cherry Rock Ave, 18 <sup>th</sup> St (W of Southeastern Ave), 26 <sup>th</sup> St (W of Southeastern Ave), Marson Dr (W of Southeastern Ave), 49 <sup>th</sup> St (W of Southeastern Ave)	No changes at these crossings.
South Yard Crossings: 14 <sup>th</sup> St (E of 6 <sup>th</sup> Ave), 17 <sup>th</sup> Street (E of 7 <sup>th</sup> Ave)	There will be a slight increase in blocked crossings due to the slight increase in the length of existing trains. There will be an increase of two to five rail cars per month.
Ellis and Eastern Line Between Sioux Falls and Brandon Crossing: Rice St (E of Timberline Ave)	No change at this crossing.

*Other BNSF Improvements*

As described in **Chapter 2**, the Proposed Alternative will not result in any additional construction other than the E&E interchange siding tracks at Study Area 1 and the E&E connection track at Study Area 2. In addition, BNSF's *Operations Plan* anticipates that there will not be any changes to the volume of trains operating in and around Sioux Falls. However, minor infrastructure improvements or upgrades may be required at locations in the surrounding region to accommodate the changes in operations required for blocking or switching rail cars. These improvements would be limited to track upgrades, minor realignments, and signal modifications, all of which would be within BNSF ROW or existing yards.

### 3.16.3 CUMULATIVE IMPACTS

As described previously, the Proposed Alternative is part of the overall effort to redevelop downtown, which has included the removal and/or reconstruction of numerous industrial facilities and other rail infrastructure. The cumulative impacts resulting from these past projects have been largely beneficial: among them being increased revenues, additional jobs, more pedestrian access, more parkland, more bike-friendly amenities, improved access to the Big Sioux River, enhanced visual aesthetics, and reduced or isolated soil contamination. The removal of the Downtown Yard will likely induce similar beneficial cumulative impacts.

Previous plans and projects have made land available for the redevelopment of downtown. As the redevelopment of downtown Sioux Falls has progressed, additional facilities (e.g. trails, parks, buildings, rail sidings) have been developed, constructed, or removed, which has resulted in beneficial impacts to a broad range of entities, including recreation and economic benefits. The proposed project would make land available to allow for continued redevelopment of downtown, which would generally enhance the area further and create an opportunity for commercial redevelopment and reconnect the downtown area to the Big Sioux River.

Increased acreage devoted to industrial facilities and decreased undeveloped land would impact wildlife habitat and movement. However, the majority of the land within Study Area 1 is used for agricultural production, which does not offer suitable habitat. Additionally, some of the area has already been disturbed by the electrical substation, the existing tracks, and residential and commercial properties.

While the new railroad interchange could create more incentive to develop this area into industrial uses in the future, which would alter the visual surroundings, the area is already zoned as industrial, and is not expected to be developed more than what is currently planned. Overall, based on the existing zoning and future land use plans of the area, increased industrial development above what is already planned is not expected to occur as a result of the new interchange.

Other planned projects in the vicinity of the new railroad interchange (**Table 3.2**) include the Benson Road extension project and the South Dakota Highway 100 (SD100) Corridor project. These two projects could create incentive to change the land use of the surrounding area, or encourage new zoning to accommodate commercial developments, specifically near highway interchanges (e.g. gas stations, retail, and restaurants).



**Table 3.2 Planned Projects**

Project Number; Project Control Number Or Project Name	Project Location	Project Description	Fiscal Year (contract letting)	Potential Influence
PP 000S(269); 02MF <sup>1</sup>	D&I Railroad from Elk Point to Canton, Big Sioux River to Beresford, and Sioux Falls to Dell Rapids. E&E Railroad from Brandon to Ellis.	Replace Railroad Crossing Signs	2013	Some of these crossing signs may be located within the study areas.
EM 8050(65); 03QH <sup>1</sup>	Bike Trail to Great Bear Recreation Area in Sioux Falls	CE & Construction	2013	This trail extends to within ½ mile of the southern end of Study Area 1
PP 1221(02); 02HX <sup>1</sup>	Cleveland Ave. by Rice St. in Sioux Falls; BNSF, DOT #186696J	Upgrade railroad signal system & rehabilitate crossing	2014	This crossing is one of the at-grade crossings evaluated for potential crossing changes
IM 0909(76)402; 00WX <sup>1</sup>	I-90 - EBL, Exit 402 - SD 100	Construct East Crossover	2016	The SD100 Corridor project is a major project along the east side of Sioux Falls and has the potential to affect land uses and zoning
NH 0100(103)417; 00KB <sup>1</sup>	SD-100, From Madison Street to Maple Street in Sioux Falls	Grading, Storm Sewer, Curb & Gutter & PCC Paving	2016	Same as above
IM 0909(75)402; 00WN and NH 0100(104)420; 00X8 <sup>1</sup>	I-90 - EBL, Exit 402; SD-100 - From I-90 (Exit 402) to Rice Street	Construct Interchange; Construct 4 lane urban section as part of SD-100	2017	Same as above
Big Sioux/Brandon to Great Bear Trail <sup>2</sup>	Connects Big Sioux Recreation Area and Brandon to Great Bear Recreation Area and Big Sioux River Trail.	This trail has multiple determinants that will impact the alternative for the Brandon to Sioux Falls Trail	No set date at this time	This trail may cross Study Area 1
Benson Road Bicycle Route <sup>3</sup>	Benson Road from I-229 to Rice Street	Dedicated bicycle lanes or wide curb lane	No set date at this time	This roadside trail may cross Study Area 1.
Benson Road Extension <sup>4</sup>	Extension of Benson Road to provide an interchange with Holly Blvd and an interchange with the Planned SD-100	First phase - extend Benson Road over Big Sioux River and siding tracks. Second phase - extend Benson Road to Holly Blvd	First phase: 2026-2030. Second phase: 2031-2035.	This project crosses Study Area 1

<sup>1</sup> 2013-2017 Statewide Transportation Improvement Program

<sup>2</sup> The Sioux Falls MPO Multi-Use Trail Study

<sup>3</sup> Sioux Falls MPO Bicycle Plan

<sup>4</sup> Direction 2035 Sioux Falls MPO Long-Range Transportation Plan

For the Benson Road project, the surrounding areas are currently zoned as recreation, conservation, and industrial. These areas are not expected to be developed more than what is currently planned as a result of the new interchange or the Benson Road extension, because the primary purpose of the Benson Road extension is to provide an alternate route from Sioux Falls and Interstate 229 to the town of Brandon. As currently planned, the Benson Road extension will completely span the Big Sioux River floodplain, including the BNSF tracks and Rice Street, resulting in no impacts to or from the railroad interchange.

For the SD100 Corridor project, the area surrounding the proposed SD100 Corridor is currently not zoned, and the existing land use is mainly agricultural. The primary purpose of the SD100 Corridor project is to accommodate future growth from public and private developments in the region. Therefore, this planned project could create an incentive to develop adjacent land for uses other than agriculture. As currently planned, the SD100 Corridor would not be directly influenced by or from the railroad interchange at Study Area 2. As a result, in both cases, the new railroad interchange would have no cumulative effect on the future land uses or zoning along either of these proposed projects.

While the projects listed in **Table 3.2** do have the potential to cause impacts to air and water quality, wetlands and Waters of the U.S., floodplains, wildlife, farmland, land uses, and visual aesthetics that would be independent of the Proposed Alternative, each of these projects would be required to comply with applicable local, state, and federal laws protecting environmental resources. By itself, and collectively, the Proposed Alternative would have minimal or no impacts these resources, and would therefore not contribute to cumulative impacts to these resources brought about by collective actions or projects.

### 3.17 SUMMARY OF IMPACTS AND ANTICIPATED PERMITS

A summary of the impacts from the Proposed Alternative is presented in **Table 3.3**. The anticipated permits for the Proposed Alternative are presented in **Table 3.4**.

**Table 3.3** Summary of Impacts

Resource	Summary of Impacts
<b>Land Use</b>	The primary land use in Study Area 1 is agricultural cropland. Existing development is primarily railroad tracks, four single-family residences, and two commercial buildings. The siding tracks and access road would be constructed mainly within BNSF ROW. Approximately one acre of agricultural cropland will be used. Primary land use in Study Area 2 consists of the rail yard. Existing development consists of industrial and commercial. Approximately ten acres of rail yard would be used for redevelopment.
<b>Social and Economic</b>	Great Bear Recreation Park is just outside of Study Area 1, no other community facilities or neighborhoods are nearby. In Study Area 2 Kilian Community College is just outside the limits of the project. Several public and private transportation services operate within the study area. Overall there would be beneficial impacts to the community by encouraging economic redevelopment.
<b>Environmental Justice</b>	Minnehaha County and the City of Sioux Falls are both below the poverty levels for South Dakota. No disproportionately high or adverse impacts to low income or minority populations will be impacted.
<b>ROW, Acquisitions, and Relocations</b>	There would be no residential or business relocations. Minor temporary and permanent easements may be required for construction of a portion of the Xcel Energy access road.
<b>Pedestrians, Bicyclists, and Accessibility for Individuals with Disabilities</b>	Study Area 1 does not have any existing sidewalk or trails, but does have a nearby trail planned. The project will not impact the planned bicycle trail for the Benson Road extension. Study Area 2 is not currently conducive to ADA access. The sidewalks along 6 <sup>th</sup> and 8 <sup>th</sup> Street would be reconstructed as ADA compliant. The Sioux Falls Bike Trail would not be impacted.
<b>Historic and Archeological Resources</b>	Study Area 1 contains four ineligible buildings in the Direct APE and two additional ineligible properties in the Indirect APE. There are two ineligible archeological sites in the Indirect APE that also have a proposed determination of no adverse effect. It is proposed that no historic properties will be affected in Study Area 1. In Study Area 2 there are four eligible historic properties. The proposed recommendation is an adverse effect for two of the properties, the Great Northern Freight House Addition and the downtown BNSF rail yard, and a no adverse effect for the other two properties in the Direct APE. There would be no impacts to all properties in the Indirect APE.
<b>Wetlands and Water Resources</b>	In Study Area 1 minor impacts to the ephemeral tributary and wetland are expected to be less than 100 feet in total loss of stream length and less than 0.10 acres. No wetlands will be impacted in Study Area 2.
<b>Farmland</b>	There is no farmland in either study area since both are considered urbanized areas. The impacts to agricultural cropland within and outside the BNSF ROW needed in Study Area 1 would not be considered significant impacts.
<b>Floodplains</b>	Study Area 1 is in the Big Sioux River floodplain and is in a "backwater" area. Study Area 2 is in the Big Sioux area along the eastern bank of the Big Sioux River and does not carry active flow from the river due to embankments. The removal of rail road track and construction of new track would actually increase the volume of flood storage during the 100-year event due to the excavation of material from the floodplain for the drainage ditches.

Resource	Summary of Impacts
<b>T&amp;E Species, Wildlife, and Migratory Birds</b>	No T&E species are known to occur in either study area. Impacts to wildlife will be minimal or negligible. There is a potential for migratory birds to be impacted since trees will be removed; however the amount of trees being removed will be negligible in both study areas.
<b>Utilities</b>	Utilities in the study areas are those that are commonly encountered, and include overhead and underground electrical, communication lines, as well as municipal utilities such as water and sewer lines. Major utilities have been avoided in Study Area 1. There are potential minor utility line conflicts in Study Area 2, including the 6 <sup>th</sup> and 8 <sup>th</sup> Street crossings.
<b>Noise and Vibration</b>	Study Area 1 would result in minor increased train operations, but the overall number of rail cars will not increase. Noise levels are not expected to increase. There would be no vibration impacts at either study area.
<b>Hazardous Materials and RECs</b>	A Phase II ESA, conducted within Study Area 2, found low levels of PAH and petroleum-related impacts. Vapor intrusion exposure is not a risk at this time. Potential environmental concerns may still exist from undocumented spills from normal railroad activity.
<b>Visual Impacts and Aesthetic Considerations</b>	A new railroad interchange with two sidings and an access road will be constructed at Study Area 1. This will result in minor visual changes since a railroad line already exists. The visual impacts would be mainly from those traveling on Rice Street. In Study Area 2 the visual quality would improve from the removal of the rail yard and reflect a more traditional urban area.
<b>Section 4(f) and Parkland, and Section 6(f)</b>	In Study Area 2, Beadle Greenway would have minor temporary impacts from the track realignment, which have been determined to be exempt from further Section 4(f) documentation. The Sioux Falls Bike Trail would not be impacted from construction activities, but there would be temporary visual and noise impacts to users. In addition, there are two historic properties that would be impacted, although these impacts are unavoidable due to the purpose and need of the project. The removal of the Downtown BNSF Rail Yard would constitute a direct use under Section 4(f), as would the removal of the Great Northern Freight House Addition. The project would not require a Section 6(f) temporary non-conforming use permit for the temporary impacts to Beadle Greenway.

**Table 3.4 Anticipated Permits**

Permit Name/Type	Permit Description	Issuing Agency	Permit Requirements
CWA– Section 404 (Wetlands and waters)	Regulates discharge of dredged or fill material into Waters of the United States	USACE	A formal delineation will need to be conducted. Submit plans and proposed impacts to USACE along with an alternatives analysis, if required by the USACE.
Clean Water Act – Section 401 (Water Quality Certification), and Article 74:51 of the State of South Dakota Administrative Code (SD Surface Water Quality Standards)	Water quality verification and compliance with state statutes	SDDENR	Submit plans and proposed impacts to SDDENR. If impacts are authorized by a NWP from the USACE that is pre-certified by SDDENR, no further action is required. Otherwise follow conditions in Individual water quality certification.
Floodplain Development Permits	Regulates construction within floodplains	Sioux Falls and Minnehaha County	Submit permits for both study areas for construction within the Big Sioux River floodplain.
Clean Water Act – Section 402 (NPDES for grading)	Regulates discharges of pollutants from non-point sources and construction sites greater than 1 acre	SDDENR	Submit design plans and a SWPPP to SDDENR along with a Notice of Intent (NOI). Follow up during construction with inspections as required by the permit, and then submit a Notice of Termination (NOT) following construction.
CWA – Section 402 (NPDES for Industrial Activities)	Regulates discharges of pollutants from non-point sources and industrial activities	SDDENR	Submit design plans and a SWPPP to SDDENR along with a NOI and how run-off will be controlled and to reduce pollutants.
Construction Permit	General City permit required for construction activities	City of Sioux Falls	Complete permit application and submit any required documentation and fees.

### **3.18 SUMMARY OF MITIGATION MEASURES AND ENVIRONMENTAL COMMITMENTS**

This section provides a summary of the mitigation measures and environmental commitments contained in this Draft EA. Final environmental commitments will be contained in the Final EA and a Finding of No Significant Impact (FONSI), if issued.

- The City will apply all money generated from the sale of the Downtown Yard property acquired as part of the Proposed Alternative to future projects eligible for funding under Title 23 USC.
- The specific amount of ROW and temporary easements will be determined during final design and all ROW acquisition will be conducted in accordance with the Uniform Act.
- Sidewalks and trails will be kept open during construction. Existing sidewalks would be replaced along 6<sup>th</sup> Street and 8<sup>th</sup> Street after the rails and crossings are removed. Signage, detours, and temporary paving would be used during construction, in compliance with ADA.
- If there is an inadvertent discovery of a historic property during construction of the undertaking, the City will stop construction of the undertaking and immediately notify FHWA. FHWA will notify the appropriate authorities and follow the procedures outlined in 36 CFR 800.13.
- A formal delineation will need to be conducted to determine the boundaries of the wetlands and Waters of the U.S. A Section 404 NWP will be obtained for these impacts during final design and an alternatives analysis will be submitted demonstrates that the preferred alternative is the least environmentally damaging practicable alternative. Construction will implement BMPs, and the general and special conditions required. No compensatory mitigation is proposed. If the impacts to the streams or wetlands exceed the threshold, mitigation will be necessary.
- Impacts to water quality are expected to be minor and temporary, and would be mitigated by implementing BMPs as required by City of Sioux Falls, SDDENR, and USACE. A General Permit for Storm Water Discharges Associated with Construction Activities would be required, including a SWPPP.
- Soil erosion and sediment control practices as detailed in a SWPPP will be incorporated. Construction activities will be permitted and will limit post construction erosion to pre-construction levels.
- The proper floodplain permits for floodplain impacts in both study areas will be obtained, which will certify that the construction activities are in compliance with South Dakota floodplain regulations, prior to construction.
- After construction, any disturbed areas will be re-vegetated.
- Weed free and approved plant materials will be used to re-vegetate disturbed areas. Chemical and biological control, along with any other coordination will be used as needed.
- If any trees are removed for the project, they will be removed outside the primary migratory bird nesting season (April 1 through September 1), or field surveys will be conducted in accordance with policies defined by the USFWS.
- Utility providers will be coordinated with prior to construction and removal activities. Where relocations are required due to conflicts with the Proposed Alternative, designs to relocate the utility would be developed by the utility company.

- Adverse effects to historic properties will be mitigated in accordance with the MOA between FHWA and SHPO, that includes stipulations for 1) a redevelopment plan to maintain the historic integrity of the surrounding historic structures; 2) signage regarding the historic railroad and its role in the development of downtown Sioux Falls to be placed for public consumption; and 3) recordation of the current state of the rail yard prior to any changes taking place to the tracks or the freight house building.
- Temporary noise abatement measures will be implemented during construction of the E&E Interchange (e.g. no night-time work).
- The City will excavate the top six inches of soil from the BNSF property and dispose of it in accordance with a properly prepared Soils Management Plan.
- Future developers of the Downtown Yard property will abide by the regulations of the Overlay District in the City's zoning ordinances (i.e. retaining an environmental consultant, preparing a Soils Management Plan for any excavation and grading activities, and working with the City and SDDENR to maintain compliance with State of South Dakota regulations).
- Any existing structures within the Study Area 1 and 2 that will be acquired and demolished prior to construction of the rail yard should be inspected for the presence of asbestos-containing material and abated, if necessary, prior to demolition, in compliance with federal and state requirements.

### **3.19 DOCUMENT DISPOSITION**

This Draft EA documents the analysis of environmental impacts from the proposed Downtown Rail Yard Redevelopment Project in accordance with NEPA. The potential for environmental impacts was examined for the Proposed Alternative and the No-Action Alternative. Active public involvement was encouraged by a variety of different methods during the development of the alternatives. The Draft EA will be provided to the public and agencies for comments. This Draft EA concludes that this project is necessary to promote economic development, and will be completed by removing most of the Downtown Yard tracks, while maintaining BNSF's railroad operations, meeting applicable railroad design criteria and safety standards, and is feasible from an engineering and logistics standpoint.

Figure 3.1 – Existing Zoning – Study Area 1

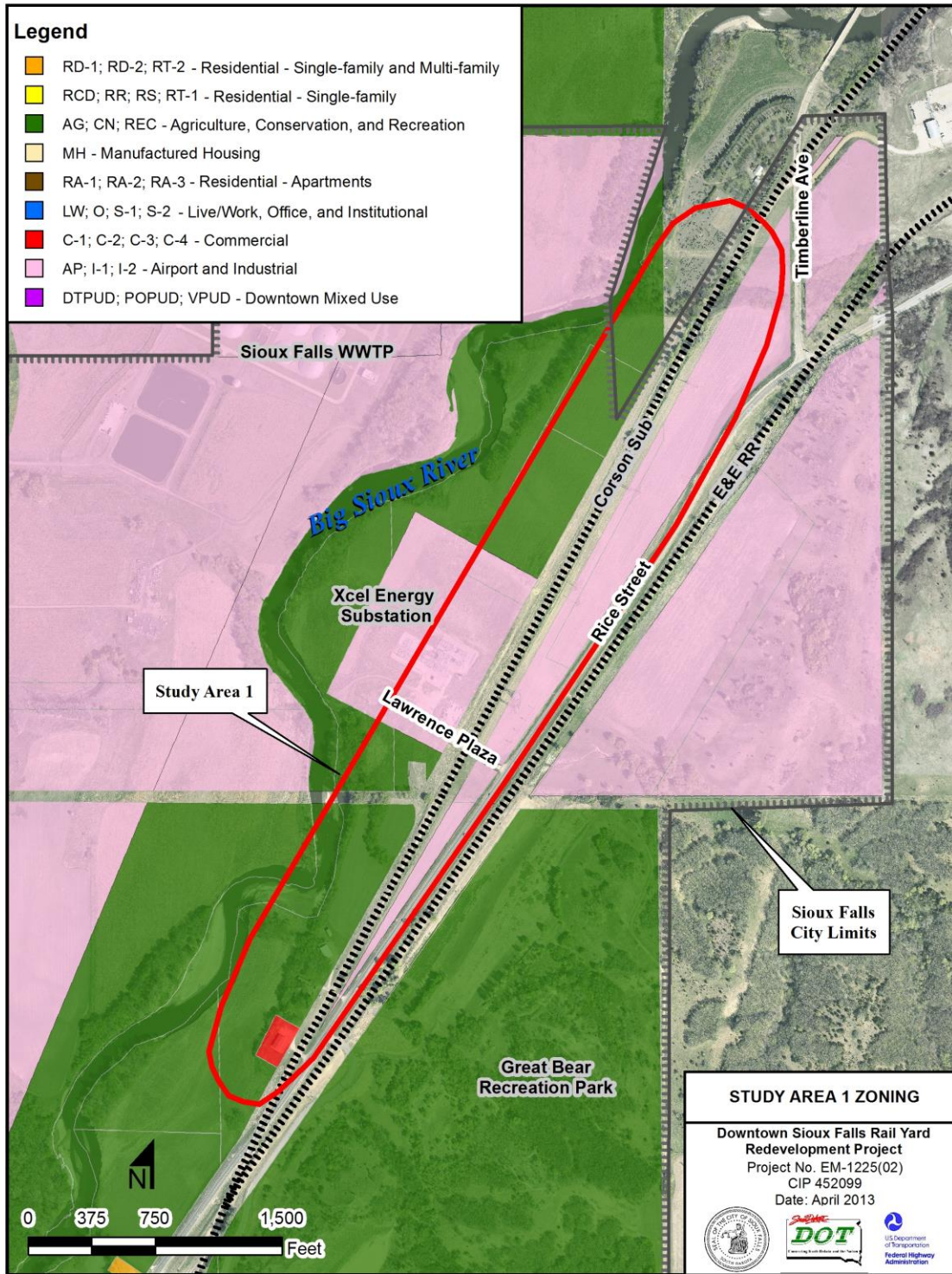




Figure 3.2 – Existing Zoning – Study Area 2

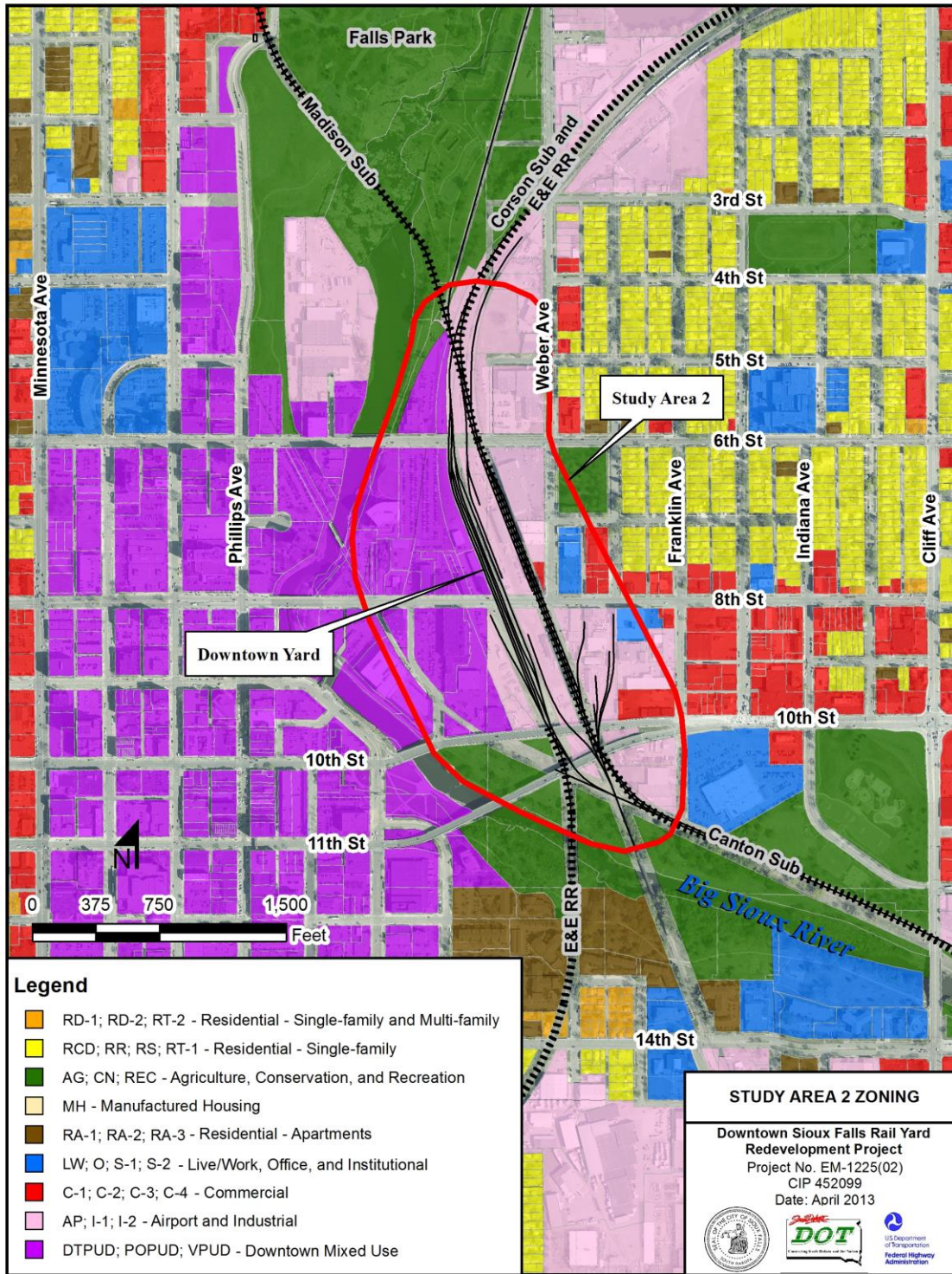


Figure 3.3 – Existing Trails – Study Area 2



Figure 3.4 – Planned Trails – Study Area 1

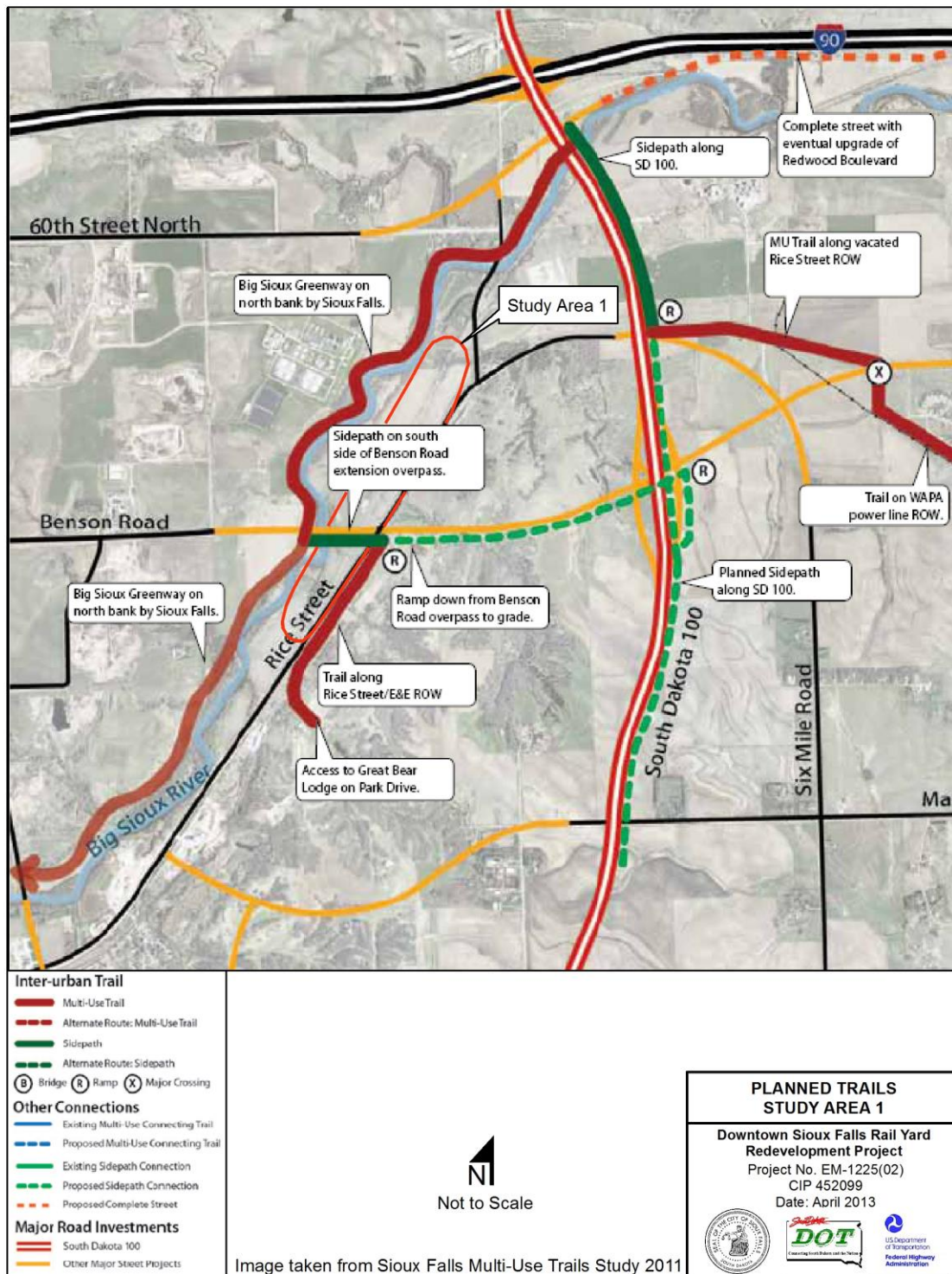


Figure 3.5 – 100-Year Floodplain – Study Area 1

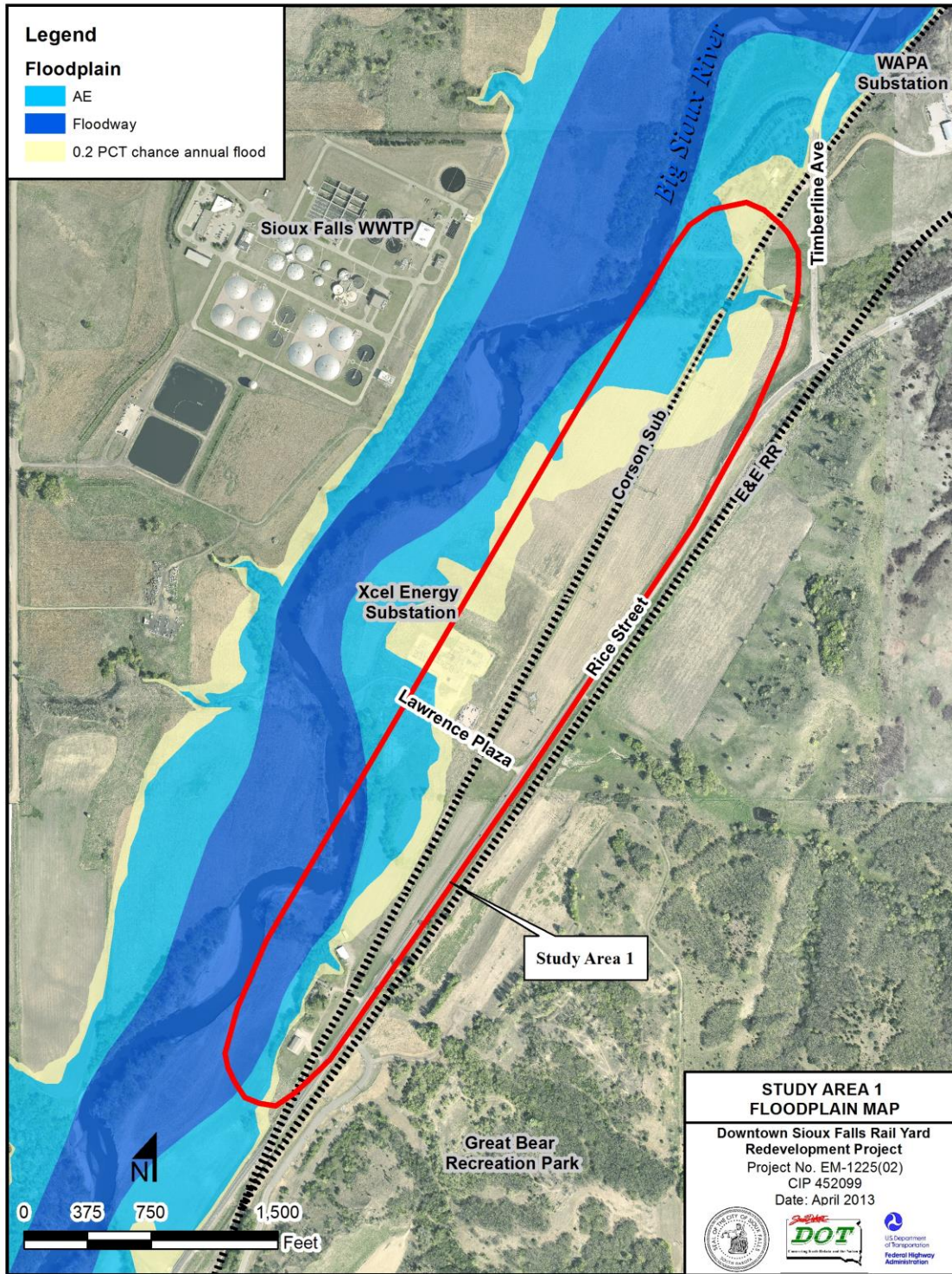


Figure 3.6 – 100-Year Floodplain – Study Area 2

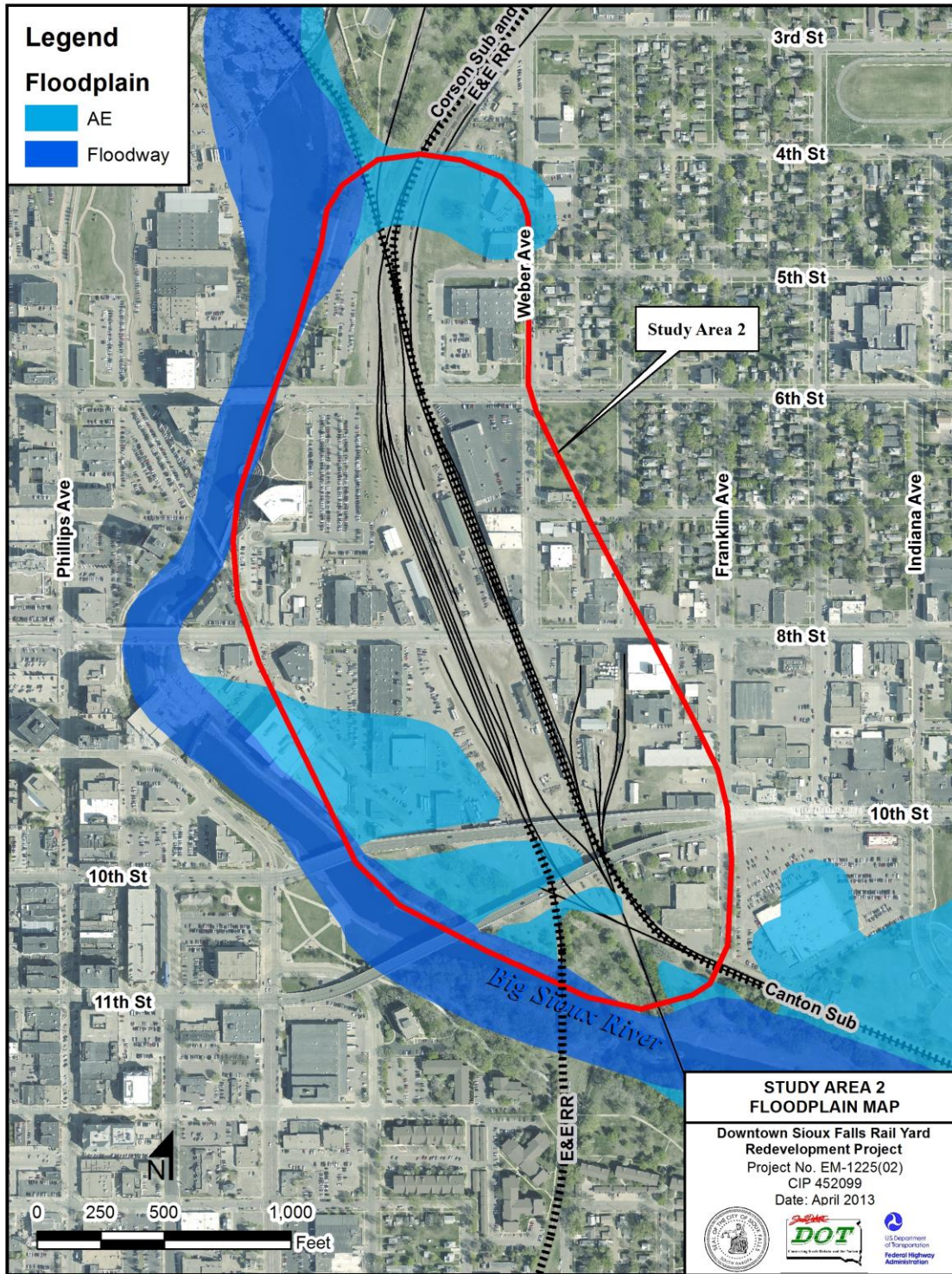


Figure 3.7 – Recognized Environmental Conditions & Potential Environmental Concerns – Study Area 2



## CHAPTER 4 SECTION 4(F) EVALUATION

### 4.1 APPLICABILITY

Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303), declares that it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites.

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project . . . requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- (1) there is no prudent and feasible alternative to using that land; and
- (2) the program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

### 4.2 PROPOSED ACTION

The Proposed Action is to purchase approximately 10 acres of the Downtown BNSF Rail Yard, remove the tracks, buildings, and associated features, and make the land available for economic redevelopment, consistent with the City's master plans for downtown. Additionally, two siding tracks would be constructed near the northeast edge of Sioux Falls. The project's Purpose and Need are explained in **Chapter 1**, the Proposed Alternative and other alternatives considered are described in **Chapter 2**. Detailed descriptions of the environmental impacts of the Proposed Alternative are in **Chapter 3**.

### 4.3 SECTION 4(F) PROPERTIES

#### 4.3.1 PUBLICLY OWNED PARKS AND RECREATION AREAS

Numerous parks, recreation areas, and historic sites are present in the vicinity of the study area for the Proposed Alternative; however, no wildlife or waterfowl refuges were identified in or near the study areas. Publicly owned parks in the vicinity of Study Area 1 and Study Area 2 are illustrated on **Figure 4.1** and **Figure 4.2**, respectively. Only those that would potentially be impacted are described below.

**Beadle Greenway**, owned by the City of Sioux Falls, is located from approximately 10<sup>th</sup> Street to Cliff Avenue, along both sides of the Big Sioux River. Beadle Greenway provides approximately 42.7 acres of open space along the Big Sioux River, and includes an accessible basketball court, playground, and soccer field on the south side of the river near 8<sup>th</sup> Avenue. Additionally, two segments of the Sioux Falls Bike Trail (described further below) run through the park along the north and south sides of the river. The bike trail on the south side of the river (also known as the Fawick Park to Cherry Rock Park Segment)

connects to two other adjacent parks, and provides a crossing over the Big Sioux River via a pedestrian bridge located in an adjacent park to the east (River Boulevard Greenway). The bike trail on the north side of the river connects to the Big Sioux River Greenway and Falls Park to the north and Cherry Rock Park to the south, among other parks throughout Sioux Falls. Pedestrian access to Beadle Greenway is provided by sidewalks and the bike trail, as there is no separate parking area. The portion of the park located south of the river is likely used more frequently than the north side as it offers more recreational opportunities within the park. No planned facilities in the area of the park to be impacted by the proposed project have been identified.

Additionally, Beadle Greenway includes areas that were developed under Section 6(f) of the Land and Water Conservation Fund Act (LWCFA).

*This property is a publicly owned park, is used for recreation, and all the alternatives under consideration would affect Beadle Greenway; therefore further consideration of this park as a Section 4(f) resource is warranted. Additionally, because this property received Land and Water Conservation Fund assistance, further consideration of this park as a Section 6(f) resource is also warranted.*

**Sioux Falls Bike Trail**, owned by the City of Sioux Falls, consists of over 19 miles of bicycle and pedestrian trails along the Big Sioux River that loops around the City. This bike trail extends through multiple park facilities, including Beadle Greenway. The trail is a popular resource which is frequently used by the public, and is accessible from numerous points throughout the city.

*The Sioux Falls Bike Trail is a publicly owned recreational feature that passes through and extends outside of the project area; therefore, further consideration of the trail as a Section 4(f) resource is required.*

#### 4.3.2 HISTORIC PROPERTIES

Cultural resources evaluations were conducted for the entire study area, and concluded that there are a number of listed and eligible historic properties in the vicinity. The SHPO has concurred with the determinations of eligibility for potentially affected resources that were not already listed on the NRHP. Properties determined eligible for listing that may be affected by the alternatives considered are illustrated on **Figure 4.1** and **Figure 4.2** and are explained in greater detail below.

The **Downtown BNSF Rail Yard** is located approximately between just north of 6<sup>th</sup> Street on the north, to just south of 10<sup>th</sup> Street on the south, and between Weber Avenue on the east, and Reid Street on the west. The yard is a linear property, and is part of the larger historic resource of the BNSF railroad through South Dakota (Site 39MH2000), which is eligible for listing on the NRHP.

The Rail Yard is a contributing part of a historic property (39MH2000 BNSF Railroad) throughout South Dakota. The Rail Yard itself is a combination of many rail lines and accessory uses that are associated with the broad patterns of development in the region, as the intersection of several early railroads that gave rise to the location of the City of Sioux Falls itself. The Rail Yard is not a unique representation of



construction, nor does it have any association with any particular individuals, nor does it provide for any future research. Therefore, it is eligible for the NRHP under Criterion A.

*This property is a privately owned historic property that is eligible for listing on the NRHP, and all of the alternatives under consideration would adversely affect it; therefore further consideration of it as a Section 4(f) property is warranted.*

The **Great Northern Railway Depot** is located between 8<sup>th</sup> Street and 10<sup>th</sup> Street within the Downtown Yard, and is eligible for listing in the NRHP under Criterion A due to its association with history of railroad transportation and commerce in Sioux Falls. Currently, the building is used as office space for BNSF personnel.

*This property is a privately owned historic property that is eligible for listing on the NRHP, and several alternatives under consideration would adversely affect it; therefore further consideration of it as a Section 4(f) property is warranted.*

The **Great Northern Freight House Addition** is located just west of N. Weber Avenue between 6<sup>th</sup> Street and 8<sup>th</sup> Street within the Downtown BNSF Rail Yard. The building is eligible for listing on the NRHP under Criterion A because it retains historic integrity and is associated with the rail yard, which is associated with the history of railroad transportation and commerce in Sioux Falls.

*This property is a privately owned historic property that is eligible for listing on the NRHP, and all of the alternatives under consideration would adversely affect it; therefore further consideration of it as a Section 4(f) property is warranted.*

#### **4.4 IMPACTS TO SECTION 4(F) PROPERTIES**

##### Beadle Greenway

All of the alternatives under consideration would require the realignment of the E&E railroad line on the south end of the yard (just south of 11<sup>th</sup> Street) to retain connection between the E&E tracks and the BNSF mainline tracks. This realignment would involve minor (less than 1/10 of one acre), temporary grading impacts to Beadle Greenway, immediately adjacent to the existing BNSF ROW. There would be no impacts to accessibility, air quality, water quality, wildlife, or the facilities, functions, and/or activities of the park. Visual and noise impacts are expected to be temporary and would only result from construction activities. The temporary use of property within the limits of Beadle Greenway has been determined to be exempt from the requirements of Section 4(f) because 1) the duration of construction activities would be temporary and there would be no change in ownership of the land, 2) the scope of work would be minor (minor grading temporarily impacting 0.08% of the 42.7 acre park), 3) no permanent adverse impacts would occur, and none of the protected activities, features, or attributes of the property would be interfered with, 4) the land would be fully restored to its original use. The City of Sioux Falls Parks and Recreation Department, the official with jurisdiction, has concurred with the above determination (letter from J. Peterson to D. Kearney dated June 26, 2013 and concurred on June 26, 2013).

Additionally, because Beadle Greenway has received assistance from Land and Water Conservation Funds, it is subject to the requirements of Section 6(f) of the Land and Water Conservation Fund Act (LWCFA) (16 USC 460I-4 et seq., 36 CFR 59.1). Minor grading activities would occur in the park, but no ROW would be acquired. The SDDOT sent a letter to the SDGFP to request a determination that Beadle Greenway would not require a “temporary non-conforming use” permit from the National Park Service (NPS). According to the SDGFP, a permit from the NPS is not required (letter from T. Keller to R. Kittle dated May 6, 2013 and concurred on May 28, 2013).

#### Sioux Falls Bike Trail

The realignment of the E&E railroad line occurs near the segment of the Bike Trail that passes through Beadle Greenway. There will be no permanent impacts to the Sioux Falls Bike Trail, and none of the construction activities would directly interfere with the use of the trail. During construction, there may be construction related impacts, such as visible construction equipment and increased noise; however, these impacts would be temporary and would cease upon the completion of construction. Additionally, there would be no constructive use<sup>27</sup> (within the meaning of Section 4(f)) of the trail because no proximity effects (e.g. noise, visual) would be impacted to a point where the protected qualities of the trail are impaired.

#### Downtown BNSF Rail Yard

All of the alternatives under consideration would require removal of a portion of the Downtown Rail Yard and ultimately, conversion to other uses, including commercial, office, and retail land uses, along with parking, which constitutes a **direct use** of a Section 4(f) property. Most of the railroad infrastructure (i.e. numerous rail lines, one freight building, and several loading docks) which constitutes the Downtown Rail Yard and contributes to its historic significance would be removed, resulting in an “adverse effect” to a historic property protected under Section 4(f). Because the Purpose and Need of this project is to provide economic redevelopment opportunities by removing the Downtown Rail Yard, there are no feasible and prudent avoidance alternatives for this property. Adverse effects to this historic property will be mitigated in accordance with the MOA between FHWA and SHPO.

#### Great Northern Railway Depot

The Proposed Alternative would leave the Great Northern Depot in place. FHWA has determined there would be “no adverse effect” to this property because the redevelopment of the surrounding land to other uses such as commercial, retail, office, and parking lots would not affect the listing criteria for this property. Additionally, there would be no indirect effects to this property that would create a constructive use of the property.

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<sup>27</sup> Under the definitions of Section 4(f), a constructive use occurs when the proximity impacts of a proposed project adjacent to, or nearby, a Section 4(f) property result in substantial impairment to the property's activities, features, or attributes that qualify the property for protection under Section 4(f).

#### Great Northern Freight House Addition

All of the previous alternatives under consideration (including the Proposed Alternative) would have resulted in the removal of the Great Northern Freight House Addition, which constitutes an “adverse effect” to a historic property, and therefore a **direct use** of this Section 4(f) property. Leaving the Freight House Addition in place would hinder the redevelopment of the Downtown Rail Yard area; therefore, leaving this building in its place would not meet the project Purpose and Need. Because the Purpose and Need of the proposed project is to remove the Downtown Rail Yard and its associated features to allow for redevelopment, there are no feasible and prudent avoidance alternatives for this property. Adverse effects to this historic property will be mitigated in accordance with the MOA between FHWA and SHPO.

### **4.5 ALTERNATIVES CONSIDERED**

Because there are proposed uses of Section 4(f) properties, avoidance alternatives must be considered. These may include the No-Action Alternative, alternative locations, alternative actions, alignment shifts, or design changes.

However, because the primary purpose of the proposed project is to remove the Downtown Yard, including the Great Northern Freight House Addition, there are no feasible and prudent alternatives that would avoid the use of these Section 4(f) properties.

#### No-Action Alternative

The No-Action Alternative would not have any Section 4(f) impacts; however this alternative does not meet the project’s Purpose and Need. The No-Action Alternative would not allow for economic redevelopment in downtown Sioux Falls.

### **4.6 MEASURES TO MINIMIZE HARM**

The Proposed Alternative leaves the Great Northern Railway Depot in place, as well as some siding tracks along the BNSF mainline track.

Mitigation of adverse effects to historic properties, developed through consultation with SHPO, will include: 1) a redevelopment plan to maintain the historic integrity of the surrounding historic structures; 2) signage regarding the historic railroad and its role in the development of downtown Sioux Falls to be placed for public consumption; and 3) recordation of the current state of the rail yard prior to any changes taking place to the tracks or the freight house building.

### **4.7 OTHER PARKS, RECREATIONAL FACILITIES, AND HISTORIC PROPERTIES EVALUATED**

The purpose of this discussion is to address Section 4(f) requirements relative to other parks, recreational facilities, wildlife refuges, and historical properties in the project vicinity not discussed elsewhere in this document. These areas are illustrated on **Figure 4.1** and **Figure 4.2**. None of the alternatives under consideration cause a Section 4(f) use of these other properties by (1) permanently incorporating land into the project, (2) by temporarily occupying land that is adverse to the features that

protect a resource under Section 4(f), or (3) by constructively using land from the resource (i.e. proximity impacts). It is expected that the proposed project would improve the surrounding area by decreasing noise brought about by the rail yard and enhancing the downtown area through redevelopment.

#### **4.8 AGENCY COORDINATION**

The SHPO has concurred with the Section 106 determination of adverse effect, and the mitigation measures have been coordinated with the SDSHS, the Sioux Falls Board of Historic Preservation, and the Siouxland Heritage Museums.

The City of Sioux Falls' Parks and Recreation Department concurred with the determination that the temporary use of property within the limits of Beadle Greenway is exempt from the requirements of Section 4(f).

#### **4.9 SUMMARY**

This Section 4(f) Statement describes potential impacts from the proposed Downtown Rail Yard Redevelopment Project, which will provide approximately ten acres of property in downtown Sioux Falls, thus increasing economic development opportunities. The Proposed Alternative includes constructing two siding tracks near Timberline Avenue and Rice Street for the interchange of BNSF and E&E trains, and realigning the connection between the E&E tracks and the BNSF mainline at the south end of the Downtown Yard. The Proposed Alternative would leave the Great Northern Railway Depot in place, which is eligible for listing in the (NRHP), along with the mainline and several siding tracks downtown, to maintain BNSF operations (i.e. movements between the three subdivisions).

Because the primary purpose of the project is to remove the rail yard and its associated features for economic development, there are no avoidance alternatives available that would avoid impacts to this Section 4(f) property entirely; nor are there avoidance alternatives available that would avoid impacts to the Great Northern Railway Freight House Addition. FHWA, SDDOT, SDSHPO, the City, and local preservation groups have coordinated to develop a MOA that provides mitigation measures for the adverse effects to the Downtown Yard and the Great Northern Freight House Addition.

The need to realign the connection between the E&E tracks and the BNSF mainline at the south end of the Downtown Rail Yard would include the temporary use of lands at Beadle Greenway. However, these impacts are considered so minor as to not constitute a use under Section 4(f). In addition, there would be a temporary use of an area that has been assisted by Land and Water Conservation Funds. No lands would be acquired from Beadle Greenway; therefore, there would be no conversion of a Section 6(f) LWCFA assisted property. Because these impacts have been determined to be very minor, the SDGFP determined that a "temporary non-conforming use" permit would not be needed from the NPS for the construction activities at Beadle Greenway.

Figure 4.1 – Section 4(f) Properties at Study Area 1

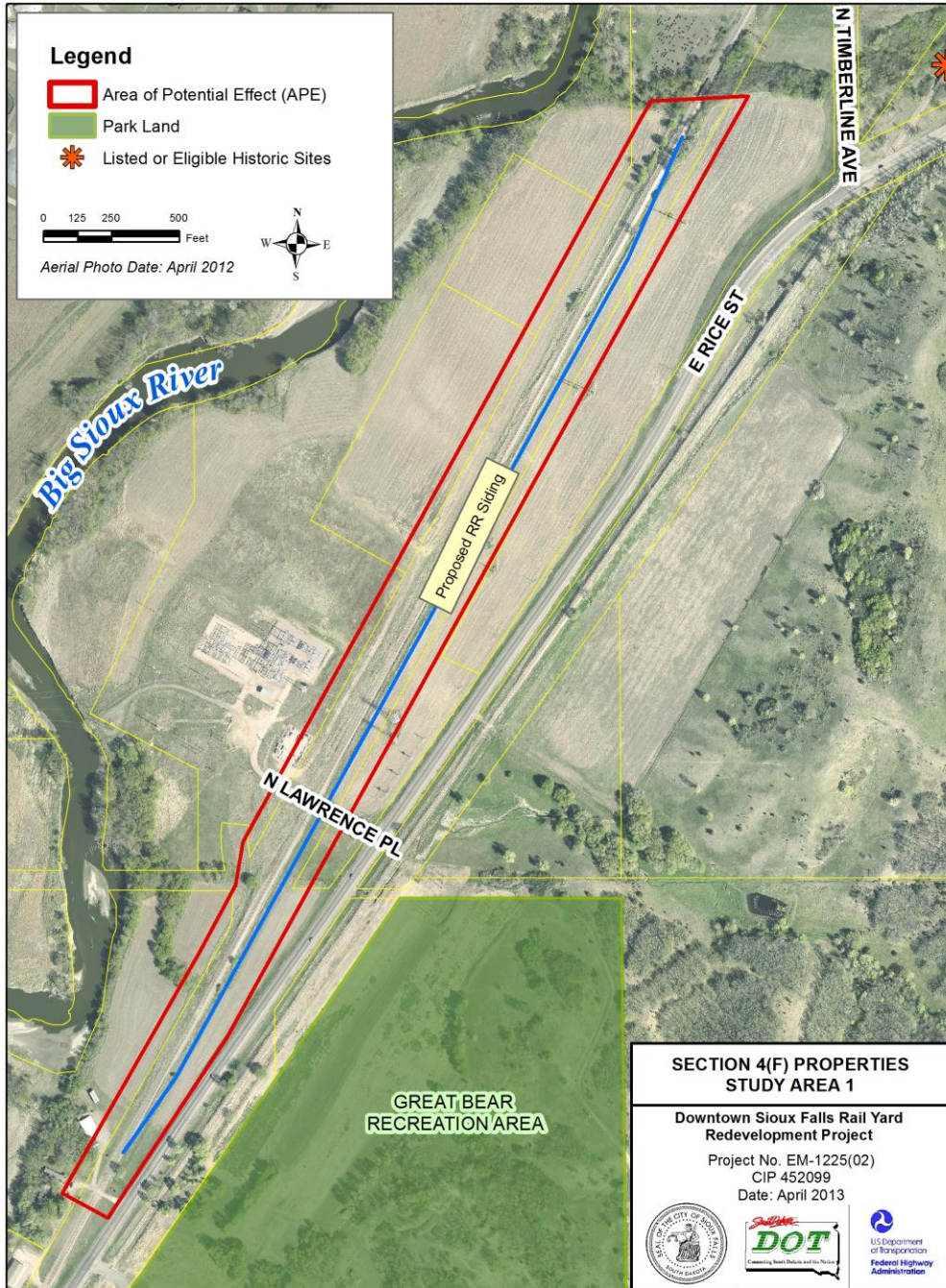


Figure 4.2 – Section 4(f) Properties at Study Area 2



## CHAPTER 5 AGENCY COORDINATION AND PUBLIC INVOLVEMENT

In accordance with NEPA, and guidelines provided by FHWA, SDDOT, and the City of Sioux Falls, multiple approaches were used for the public and resource agency involvement including: agency meetings, steering committee oversight, property owner workshops, public hearings, open houses, public meetings, City Council presentations, and a project website. In addition, utilities were contacted for potential issues. A list of the utilities contacted is in **Section 3.11**. EJ issues were considered and are discussed further in **Section 3.3**. This early and continuous involvement helped develop the alternatives considered, the potential for impacts, as well as preliminary design modifications and enhancements for the Proposed Alternative.

### 5.1 STEERING COMMITTEE

The Steering Committee was formed with members from the City of Sioux Falls, SDDOT, BNSF, E&E, and FHWA to discuss technical merits of alternatives and to manage the public participation process. Other groups represented on the Steering Committee included: Congressional representatives, the City of Sioux Falls Planning Department, the Mayor's Office, the Minnehaha County Economic Development Association, and a citizen of Sioux Falls. The kickoff meeting for the committee was July 13, 2006. This committee met intermittently throughout the EA process including April 22, 2009, March 25, 2011, July 6, 2011, October 25, 2011, August 1, 2012, January 16, 2013, and before and after public meetings to discuss current issues. The Steering Committee pursued different avenues of public participation, continued public outreach while updating all the parties as the project progressed, and kept the project progressing throughout the process. They helped to develop the purpose and need, identify and provide input on alternatives considered and the environmental impacts of each, reviewed the MOU, and reviewed and commented on information provided to citizens at public meetings.

### 5.2 AGENCY COORDINATION

#### Early Scoping Letters

Agency scoping letters were sent in June 2006 to introduce the project to the resource agencies and inform them of the agency scoping meeting. Letters were sent again in June 2013 to gain input on the Proposed Alternative. More details regarding the content and coordination resulting from individual letters can be found in the various sections throughout **Chapter 3**.

#### Agency Meetings

Agency meetings were held periodically throughout the EA process. The lead agency was FHWA and the cooperating agencies were SDDOT and the City. Agencies that were requested to participate<sup>28</sup> were the USACE, EPA Region 8, USFWS, SDDENR, SDGFP, and invited tribes. **Table 5.1** outlines the various agency meetings that were held throughout the EA process, the agencies that attended, and information discussed.

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<sup>28</sup> "Participating" agencies are those agencies that are consulted with under special guidelines defined by Section 6002 of SAFETEA-LU.

**Table 5.1 Agency Meetings**

Date	Location	Agencies	Information Discussed
July 26, 2006	Video Conference	USACE, SDGFP, USFWS, FHWA, EPA, and SDDOT	The proposed project was introduced. The purpose and need of the project were discussed, as well as potential resource issues/impacts, and to facilitate agency cooperation.
April 5, 2007	Conference Call	SDDENR, USACE, FHWA, SDGFP, SDDOT, USFWS, and EPA	The status of the EA process and schedule to complete the EA were reviewed. Comments were provided on Chapters 1, 2, and 3 including, The Purpose and Need, Environmental Evaluation, and the Alternatives Considered including Study Area 1 (Alternatives 1-A and 1-B) and Study Area 2 (Alternatives 2-A, 2-B, 2-C).
January 29, 2008	Pierre, SD	SDDOT, FHWA, SDGFP, SHPO, USFWS, and USACE	Several projects were discussed including the Sioux Falls relocation project. An opportunity was provided to comment on the Purpose and Need, Alternatives Considered, and Environmental Impacts.
July 5, 2011	Sioux Falls, SD	USFWS, SDDENR, SHPO, SDGFP, USACE, SDDOT, FHWA, Flandreau Tribe	Pictures of historic properties were taken and other issues with the project were discussed. Four locations were visited including: the Corson Subdivision between Rice St. and Timberline Ave., the existing downtown rail yard with the subdivision interchange and Falls Park, the E&E railroad north of Rice Street and east of Timberline Ave., and the BNSF Canton Subdivision mainline near 57 <sup>th</sup> St. to County Highway 106.
October 16, 2012	Pierre, SD	SHPO, SDDENR, USACE, SDDOT, and USFWS	A status update was given and the current proposed alternative was introduced and discussed.

### 5.3 PUBLIC PARTICIPATION

Public meetings were held on: July 26, 2006, January 17, 2007, April 3, 2008, October 9, 2008, February 27 and 28, 2012, and January 31, 2013. Letters were sent to affected residents at first, and as the project was developed, to a list of citizens who provided their mailing information to the City. Information about the public meetings, including a list of all the comments received at each of the meetings, affidavits, public notices, meeting agendas and minutes, the presentations, and sign-in sheets are available on the City of Sioux Falls website. A summary of each of the meetings and the public comments received is provided below.

#### July 26, 2006

This was the first public open house. Postcards were sent to residents and the meeting was held at the Great Bear Chalet from 5:00 pm to 7:00 pm. Approximately 30 people were in attendance along with the City, their consultant, SDDOT, FHWA, and BNSF. No formal presentation was given, but FAQ handouts were available and maps of the study area and constraints were on display. The purpose of



this meeting was to introduce the project to the public and request public input on the review and evaluation of potential alternatives. No public comments were received at this meeting.

January 17, 2007

Approximately 185 people attended this public hearing. The meeting was held at the Sioux Falls Convention Center from 5:30 pm to 7:30 pm. This was a public hearing for both the East Side Corridor (SD 100) project and the rail yard relocation. There was a general update and public comments were solicited. Opportunity was provided for public input on the evaluation of potential environmental and cultural impacts, the alternatives most likely to advance, including Alternatives A and B in Study Area 1, and Alternatives A, B, and C in Study Area 2, and a schedule to provide the public with a Preliminary Draft EA. A preferred alternative had not been identified yet.

According to the public comments Alternative B, the Wye track in Study Area 2, was generally supported. Business and landowner comments were concerned about impacts from the proposed project such as the projects' effect on Falls Park, the closure of Timberline Avenue and traffic back-ups. Other matters were safety, how impacts were going to be mitigated for, effects on Kilian Community College, relocation of telecommunication cables, and how specific property owners would be affected by the Alternative.

April 3, 2008

An informational meeting was held that presented information on multiple projects to be constructed in Sioux Falls in 2008, one of which was the railroad relocation project. Only a general project update was given. Approximately 60 people attended the meeting. No public comments were received at this meeting.

October 9, 2008

Approximately 78 people attended the public open house meeting held at Carnegie Town Hall from 5:30 pm to 7:30 pm. The presentation included project overview, overview of alternatives including existing rail operations, Alternatives A and B in Study Area 1, and Alternatives A, B, and C in Study Area 2, and the EA status.

For the Wye track in Study Area 2, many of the public comments received supported Alternative B because it would be the least disruptive to businesses, BNSF, and Falls Park and would be the most cost effective. Several residents addressed concerns about noise and how property values would be impacted from the project. Comments also included concerns about closures on Timberline Avenue and how the project would impact growth to the City of Brandon.

February 27 & February 28, 2012

The February 27<sup>th</sup> meeting was held in Sioux Falls, at the Orpheum Theater Center, and the February 28<sup>th</sup> meeting was held in Brandon, SD, at the Brandon Municipal Golf Course. The meeting in Sioux Falls had over 250 people in attendance and the meeting in Brandon had over 200 people attend. Many people from Brandon attended the meeting held in Sioux Falls. The three bridge alternatives and two siding

alternatives, and the new yard locations at Rice and Timberline and the E&E site near Brandon, SD were presented.

In general, the comments from the Sioux Falls public meeting were in opposition to the south siding. The comments expressed concern about decreased property values, safety, noise, business impacts, vibration, wetland impacts, health issues, and impacts to bike trails. A few of the comments supported the new yard location at Rice and Timberline and the E&E site near Brandon. Some of the comments suggested the no build option or to move the project away from residential neighborhoods. Many of the comments expressed that moving the rail yard near Brandon would be moving Sioux Falls' problems to a different city.

The Brandon public meeting comments generally did not support relocating the rail yard to Brandon. Several comments expressed anger, frustration, and concern over several issues with relocating the rail yard to Brandon such as increase in noise, safety, air quality, traffic delays, and the project being close to a daycare. These comments also expressed that moving the rail yard to Brandon would be moving Sioux Falls problems to a different city and did not know how it would benefit Brandon. Overall the comments were negative for the alternatives that were introduced, especially for the effects on the town of Brandon.

#### January 31, 2013

Approximately 95 people were in attendance at this meeting, which was held at the Sioux Falls Convention Center from 5:30 pm to 7:30 pm. At this public meeting there was a 30-minute presentation with a question and answer session afterwards. The project's background and previous alternatives were reviewed and the new Proposed Alternative discussed in this EA was introduced. Impacts from the Proposed Alternative were discussed including effects on historic resources, park and recreational facilities, and wetlands.

Overall, the comments from the public supported the Proposed Alternative. There were also a few comments suggesting that quiet zones and gates be included as part of the project.

## **5.4 CITY COUNCIL PRESENTATIONS**

Formal presentations were made to the Sioux Falls City Council throughout the process. Informational presentations were also given to the Brandon City Council and the Minnehaha County Commission. Generally, formal presentations were given to the City Council that were informational in nature, and typically included project progress and schedule updates. All City Council meetings in Sioux Falls are videotaped and available from the City. **Table 5.2** summarizes the various presentations that were given.

**Table 5.2** City Council Presentations

Date	City Council	Information Presented
February 26, 2007	Sioux Falls	The background of the project was explained, as were descriptions of the alternatives at Study Area 1 and Study Area 2.
December 15, 2008	Sioux Falls	Informational meeting where proposed alternatives were discussed.
November 15, 2010	Sioux Falls	An update to the council members was given on the alternatives being considered and an overview of the NEPA process.
April 4, 2011	Sioux Falls	A progress update was presented.
July 5, 2011	Sioux Falls	A progress update was presented.
October 3, 2011	Sioux Falls	Presented the newly proposed alternatives for the new rail yard (Study Area 1-A and 1-B; and Study Area 3).
October 17, 2011	Brandon	Presented the newly proposed alternatives for the new rail yard (Study Area 1-A, 1-B; and Study Area 3) and the public was able to ask questions.
October 25, 2011	Minnehaha County	Presented the newly proposed alternatives for the new rail yard (Study Area 1-A and 1-B; and Study Area 3).
February 27, 2012	Sioux Falls	A new alternative was presented, along with a draft of the MOU between BNSF and the City of Sioux Falls.
September 18, 2012	Sioux Falls	An update was presented, along with a draft of the (MOU between BNSF and the City of Sioux Falls.
December 11, 2012	Sioux Falls	The operations plan, the final MOU, and an update on the EA were presented. Additional details of the new alternative were also presented.

## 5.5 PROJECT WEBSITE

The City of Sioux Falls developed a project website in 2006 which can be found at <http://www.siouxfalls.org/railroad>. This project website was developed so the public could access information about the project at any time and keep current on new information. The website was regularly updated with project information, graphics, public meeting presentations and handouts, and frequently asked questions.

Beginning in 2011, the public was able to submit comments on the website. The majority of these comments were received after the February 27 and 28, 2012 public meetings. Overall there were several specific questions relating to safety, traffic, property values, noise, environmental resources, etc. for the different alternatives. In addition, there were negative comments about the alternative that involved relocating the rail yard near Brandon. There were many specific questions about the operation of the railroad. Public comments from the website pertaining to the Proposed Alternative included comments such as, what factors were used in the NEPA process when analyzing environmental impacts. Other concerns included: economic impacts, concerns about decreasing property values, noise impacts, types of chemicals transported on the railroad line and chemical spills, and impact to the floodplain.

## 5.6 OTHER COORDINATION

Property owner workshops were also held with directly affected landowners, to discuss preliminary alternatives, identify potential impacts, and to receive feedback as to how impacts could be mitigated.

Several Park Board meetings were held in Sioux Falls on the following: February 6, 2006; August 15, 2006; January 16, 2007; February 20, 2007; April 24, 2007; April 18, 2008, May 6, 2008; October 28, 2008; August 16, 2011; and December 18, 2012.

Presentations were also given to the following organizations to present background information on the project, and to discuss the alternatives being considered:

- Chamber of Commerce on May 3, 2006
- Business Transportation Committee on May 17, 2006 and Spring 2007
- Main Street Sioux Falls on August 14, 2006
- Convention and Visitors Bureau on August 24, 2006
- Sioux Falls Development Foundation on September 20, 2006
- American Society of Civil Engineers on September 20, 2007
- Downtown Development Committee in April 2008 and March 2011
- Brandon Chamber of Commerce on August 26, 2010 and June 23, 2011
- MPO Presentations on January 19/20, 2011, March 14 and 15, 2012, and January 16/17, 2013
- Downtown Sioux Falls Developers on March 24, 2011
- Brandon City Administration Presentation on September 27, 2011
- Public Parking Advisory Board on December 7, 2012

## **CHAPTER 6 LIST OF ACRONYMS, ABBREVIATIONS, AND TERMS**

### **IN ORDER OF APPEARANCE**

Federal Highway Administration (FHWA)  
United States Department of Transportation (USDOT)  
South Dakota Department of Transportation (SDDOT)  
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)  
Environmental Assessment (EA)  
National Environmental Policy Act of 1969 (NEPA)  
Council of Environmental Quality (CEQ)  
Code of Federal Regulations (CFR)  
Burlington Northern and Santa Fe Railway (BNSF)  
Ellis and Eastern Railroad (E&E)  
Dakota and Iowa Railroad (D&I)  
Central Business District (CBD)  
Toltz, King, Duvall, Anderson (TKDA)  
Department of Housing Urban and Development (HUD)  
Environmental Protection Agency (EPA)  
Tax Increment Financing (TIF)  
Environmental Impact Statement (EIS)  
Categorical Exclusion (CE)  
Operational, Safety, and Health Administration (OSHA)  
Western Area Power Administration (WAPA)  
Memorandum of Understanding (MOU)  
Purchase and Sale Agreement (PSA)  
United States Code (USC)  
right-of-way (ROW)  
Mobile Source Air Toxics (MSAT)  
Clean Air Act (CAA)  
Long Range Transportation Plan (LRTP)  
Metropolitan Planning Organization (MPO)  
Sioux Area Metro (SAM)  
Executive Order (EO)  
Environmental Justice (EJ)  
Americans with Disabilities Act (ADA)  
Architectural Barriers Act (ABA)  
National Historic Preservation Act of 1966 (NHPA)  
Advisory Council on Historic Preservation (ACHP)Area of Potential Effect (APE)  
National Register of Historic Places (NRHP)  
State Historic Preservation Officer (SHPO)

South Dakota State Historical Society (SDSHS)  
Tribal Historic Preservation Officer (THPO)  
United States Army Corps of Engineers (USACE)  
Clean Water Act (CWA)  
Nationwide Permit (NWP)  
Best Management Practices (BMPs)  
South Dakota Department of Environment and Natural Resources (SDDENR)  
Stormwater Pollution Prevention Plan (SWPPP)  
Farmland Protection Policy Act (FPPA)  
Natural Resource Conservation Service (NRCS)  
Federal Emergency Management Agency (FEMA)  
Flood Insurance Rate Map (FIRM)  
National Flood Insurance Program (NFIP)  
Mean Sea Level (MSL)  
Endangered Species Act of 1973 (ESA)  
United States Fish and Wildlife Service (USFWS)  
South Dakota Game Fish and Parks (SDGFP)  
Migratory Bird Treaty Act (MBTA)  
South Dakota Natural Heritage Database (SDNHD)  
Federal Transit Administration (FTA)  
A-weighted decibels (dBA)  
Recognized Environmental Conditions (RECs)  
Environmental Data Resources, Inc. (EDR)  
Environmental Site Assessment (ESA)  
American Society for Testing and Materials (ASTM)  
Manufactured Gas Plant (MGP)  
Contaminants of concern (COC)  
Semivolatile Organic Compounds (SVOCs)  
Polynuclear Aromatic Hydrocarbons (PAHs)  
Polychlorinated Biphenyls (PCBs)  
Volatile organic Compounds (VOCs)  
Total Petroleum Hydrocarbons (TPH)  
National Pollutant Discharge Elimination System (NPDES)  
Notice of Intent (NOI)  
Notice of Termination (NOT)  
National Park Service (NPS)  
Finding of No Significant Impact (FONSI)

## CHAPTER 7 REPORTS, SURVEYS, AND COORDINATION

The following reports and surveys developed during the development of this project are mentioned throughout this document, and are available for review upon request from the City. Documents with an asterisk (\*) are available on the City of Sioux Falls website at: <http://www.siuoxfalls.org/railroad>.

\*Alfred Benesch & Company. Technical Memorandum: "Rail Noise and Vibration at Proposed E&E Interchange." April 26, 2013 (Benesch 2013a).

Alfred Benesch & Company. *30% Plan Review E&E Interchange Plans*. April 11, 2013 (Benesch 2013b).

Alfred Benesch & Company. *30% Plan Review E&E Connection Plans*. April 11, 2013 (Benesch 2013c).

Alfred Benesch & Company. "Cultural Resources Identification and Evaluation for the Downtown Sioux Falls Rail Yard Redevelopment Project." April 2013 (Benesch 2013d).

\*Alfred Benesch & Company. Technical Memorandum: "Downtown Sioux Falls Rail Yard Redevelopment Project - Alternatives Analysis." June 12, 2013 (Benesch 2013e).

\*Alfred Benesch & Company. Technical Memorandum: "Downtown Sioux Falls Rail Yard Redevelopment Project – Environmental Justice." June 21, 2013 (Benesch 2013f).

\*BNSF. "Sioux Falls Operations Plan." November 30, 2012.

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City of Sioux Falls. "Downtown Yard Redevelopment Plan." March 29, 2013.

City of Sioux Falls. Zoning Code 160.417 "Design Review Overlay Districts Enumerated." Draft July 2013

Geotek Engineering and Testing Services, Inc. "Phase II Environmental Site Assessment Sampling and Analysis Report, BNSF Railway Company Rail Yard Relocation Project - Study Area 2 - 5<sup>th</sup> to 11<sup>th</sup> Streets, Sioux Falls, South Dakota." October 13, 2008.

Geotek Engineering and Testing Services, Inc. "Additional Assessment for Sioux Falls Rail Yard Economic Development Project." January 24, 2013.

HWS Consulting Group, Inc. "Phase 1 Environmental Site Assessment Sioux Falls Railroad Relocation project Study Area 1 – Rice Street & Timberline Avenue Sioux Falls, Minnehaha County, South Dakota." October 2008 (HWS 2008a)

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Letter from P. Gober (USFWS) to R. Tusa (HWS). "Transportation Improvement, Proposed BNSF Rail Yard Relocation Project." August 11, 2006.

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September 12-14, 2006.

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Letter from D. Backlund (SDGFP) to R. Tusa (HWS). (South Dakota Natural Heritage Database). May 21, 2007.

Letter from P. Gober (USFWS) to R. Tusa (HWS). "Sioux Falls Rail Yard Relocation Study and Environmental Assessment." June 6, 2007.

Letter from J. Peterson (City of Sioux Falls) to S. Dhuru (BNSF). "Downtown Sioux Falls Rail Yard Development Project, Alternatives That Do Not Meet BNSF's Operational Requirements." February 27, 2013

Letter from L. Johnson (ACHP) to M. Barber (FHWA). "Proposed Sioux Falls Rail yard Redevelopment Project." April 1, 2013.

Letter from D. Peterson (USDA-NRCS) to J. Engelbart (Benesch). "Prime Farmland Question." April 8, 2013.

Letter from J. Weston (Flandreau Santee Sioux Tribe) to SDDOT. "Sioux Falls Rail Yard Relocation Project/Brandon, SD Concurrence." April 16, 2013.

Letter from A. Rubingh (SDSHPO) to T. Keller (SDDOT). "Re: Section 106 Project Consultation." May 31, 2013.

Letter from T. Keller (SDDOT) to N. Gates (USFWS). "Re: EM-1224(02), PCN 00UH, CIP 452099 Downtown Sioux Falls Rail Yard Redevelopment Project." June 18, 2013.

Letter from J. Mulloy (Ellis & Eastern Company) to J. Peterson (City of Sioux Falls). "BNSF-Ellis & Eastern Matters." June 24, 2013.

Letter from S. Naylor (USACE) to T. Keller (SDDOT). (USACE Response to June 13, 2013 Letter). June 25, 2013.

Letter from D. Kearney (Sioux Falls Parks and Recreation Department) to J. Peterson (City of Sioux Falls). June 26, 2013.

Letter from K. McIntosh (SDDENR) to S. Dhuru (BNSF). "Contamination identified during Phase II Assessment of the BNSF rail yard in downtown Sioux Falls, SD." July 3, 2013.

Letter from K. McIntosh (SDDENR) to T. Keller (SDDOT). "Downtown Sioux Falls Rail Yard Redevelopment Project." July 3, 2013.

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## CHAPTER 8 REFERENCES

The following background documents, reports, guidance, regulations, and technical information were used throughout the development of this project, are referenced in the Draft EA, and are available for review upon request from the City. Documents with an asterisk (\*) are available on the City of Sioux Falls website at: <http://www.sioxfordfalls.org/railroad>.

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"Archeological and Historic Preservation Act of 1960, as amended." (*16 U.S.C. § 469-470*). 1960.

"Architectural Barriers Act of 1968." (*Pub.L. 90-480, 82 Stat. 718, 42 U.S.C. § 4151 et seq.*). August 12, 1968.

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"Executive Order 11988 - Floodplain Management ." (*42 FR 26951*). May 24, 1977.

"Executive Order 11990 - Protection of Wetlands ." (*42 FR 26961*). May 24, 1977.

"Executive Order 12898 - Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, as amended." (*59 FR 7629*) . February 11, 1994.

FEMA. Minnehaha County, South Dakota: Flood Insurance Study. November 16, 2011.

"Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 ." 1970.

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HDR. "City of Sioux Falls Brownfield Site Remediation Project Summary." August 2006.

"Migratory Bird Treaty Act of 1918, as amended." (16 U.S.C. § 703-712: Chapter 128). July 13, 1918.

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# Appendix A

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# **Sioux Falls Operations Plan**

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# BNSF SIOUX FALLS OPERATIONS PLAN

## SUMMARY

This document describes the current BNSF operations in Sioux Falls and potential future operations if the BNSF were to sell a portion of the yard to the city for purposes of redevelopment. The approximate portion of the rail yard that would be sold is shown in Exhibit 1. The changes in operations described below are based on the current rail operations and market conditions. Additional operations changes, outside of this project, may be required by BNSF based on future market conditions.

There are no operational benefits to BNSF in selling all or any part of our existing infrastructure in Sioux Falls. BNSF is assuming all risk of maintaining current and future operations and expects rail traffic in the Sioux Falls area to increase, especially with recent increases in construction and future growth in agricultural traffic.

## CURRENT OPERATIONS

### Inbound/Outbound Trains

Regional service in Sioux Falls peaks at approximately 10 unit trains (approximately 50 cars each with two engines) per week arriving and departing at the downtown yard. These trains enter and leave Sioux Falls on the Corson Subdivision (see Exhibit 2). Most of these trains are interchanged to the Ellis and Eastern Railroad (E&E) for handling to their final destination.

### Local Service

Local rail service involves the delivery and pickup of rail cars between the rail yard and customers in Sioux Falls and the surrounding region (Madison, Canton, etc.). Cars are transported between the rail yard and customers along all 3 BNSF subdivisions; Madison, Canton, and Corson. Local service along the Madison subdivision averages at around 7 trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week. Local service along the Canton subdivision averages at around 4 trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week. Finally, the Corson subdivision averages at around 5 trains (usually 25 cars but can range from 20 to 125 cars each with two engines) per week.

### Through Unit Trains

There are also unit trains that enter the downtown yard to move between the Madison and Corson subdivisions. These unit trains do not stop in the yard for switching. The train enters the yard from one subdivision and pulls through the yard so that the tail end is south of 6<sup>th</sup> Street. A switch engine connects to the north end of the train and pulls it out of the yard to the north. The switch engine is disconnected and the main engines are run around to the new lead end of the train at the existing sidings along the Madison and Corson subdivisions. On average, 4 unit trains (usually 110 cars but can range from 98 to 120 and 3 engines), 2 loaded and 2 empty, make this movement per week.

The D&I Railroad also has on average 1 to 2 through unit trains (usually 75 cars but can be as long as 110 and 3 engines) that run through Sioux Falls per day. Trains enter from the north on the D&I rail line which intersects with the Madison Subdivision by the airport. They run through the yard on the mainline and leave to the south on the Canton Subdivision. D&I will not be impacted by this project.

## INFRASTRUCTURE CHANGES IN SIOUX FALLS

The west group of tracks in the Sioux Falls yard will be removed. These tracks consist of 5 switching tracks, 1 team track (infrequent trans-load track for local customers), and 1 bad order track (temporary storage of cars/engines in need of repair). The east group of tracks (2 crossing 6<sup>th</sup> Street and 3 crossing 8<sup>th</sup> Street) will remain.

Proposed new infrastructure (pending agreement between BNSF and E&E):

- Construction of an interchange where BNSF and E&E can transfer rail cars. This will consist of 2 tracks, each approximately 3,400 feet in length. The proposed location for this interchange is north of Rice Street and west of Timberline Avenue (see Exhibit 3).
- A new connection will be constructed for the E&E mainline that connects to the south end of the switch yard. The connection will be moved from the southwest corner of the existing yard to the mainline tracks on the east side of the yard (see Exhibit 1).

## FUTURE OPERATIONS PLAN

### Inbound/Outbound Trains

The number of unit trains entering/leaving Sioux Falls would not change. The majority of unit trains, estimated at 6 per week, will stop at the E&E interchange site along Rice Street. E&E will then shuttle these cars to/from the final customers. Street crossing impacts will not change except for the 6<sup>th</sup> Street and 8<sup>th</sup> Street crossings. The 6<sup>th</sup> and 8<sup>th</sup> Street crossing impacts will be reduced. Currently, unit trains that are interchanged with E&E need to be broken into 4 sections for storage at the downtown yard. By moving this storage to the new E&E interchange site, the crossing impacts required to breaking up and building these unit trains will be eliminated.

Approximately 4 unit trains would continue into town but would not stop downtown. These trains would either continue directly to their final customers or would be stored on the existing siding track along the Corson Subdivision between Webber Street and Lowell Avenue until ready for delivery.

### Local Service

Local service will not change with this project. To allow for removal of the yard, BNSF will modify their operations to perform blocking of rail cars off site. Blocking is a process of sorting and positioning rail cars for efficient delivery to customers. Blocking in locations other than the existing downtown switching yard will eliminate the need for repositioning of rail cars in downtown Sioux Falls. This may require additional operations such as additional switch engines and/or crews in offsite locations. Because this will occur within existing rail yards and will not require additional infrastructure improvements, this project will have minimal impact in these communities.

### Through Unit Trains

Through unit trains will not change with this project.

## CROSSING CHANGES

6<sup>TH</sup> STREET



- Currently has 6 tracks crossing road
- Will only have 2 tracks remaining

8<sup>TH</sup> STREET



- Currently has 8 tracks crossing road
- Will only have 3 tracks remaining

At-Grade Crossings	Impacts to Crossings
Corson Sub Crossings West of New Interchange: Webber Ave (N of 3 <sup>rd</sup> St), Lowell Ave (S of Rice St), Cleveland Ave (S of Rice St), Bahnson Ave (S of Rice St), Richard Pl (S of Rice St), and Rice St (W of Timberline Ave)	Total rail traffic along this line will not change. Unit trains that currently travel to the downtown yard will stop at the new interchange site. Smaller length trains will then transport these rail cars to and from the final customers. The total number of rail cars impacting these at-grade crossings will not change. More frequent smaller trains will travel through the crossings instead of less frequent longer trains.
Corson Sub Crossings East of New Interchange: Timberline Ave (N of Rice St)	The project will not impact traffic along this line. Impacts to the at-grade crossings will not change due to this project.
Madison Sub Crossings: Minnesota Ave (S of 60 <sup>th</sup> St N) and 60 <sup>th</sup> St N (W of Minnesota Ave)	The project will not impact traffic along this line. Impacts to the at-grade crossings will not change due to this project.
Canton Sub Crossings: Cliff Ave (S of 12 <sup>th</sup> St), Cherry Rock Ave, 18 <sup>th</sup> St (W of Southeastern Ave), 26 <sup>th</sup> St (W of Southeastern Ave), Marson Dr (W of Southeastern Ave), 48 <sup>th</sup> St (W of Southeastern Ave),	The project will not impact traffic along this line. Impacts to the at-grade crossings will not change due to this project.
Downtown Yard Crossings: 6 <sup>th</sup> Street and 8 <sup>th</sup> Street	Crossing impacts will be reduced. Impacts caused by the breakup of unit trains into 4 segments, pickup for delivery to customers, return from customers, and build of unit trains will be eliminated since this will now be performed at the interchange site. Four crossings will be eliminated at 6 <sup>th</sup> Street and five crossings will be eliminated at 8 <sup>th</sup> Street.
South Yard Crossings: 14 <sup>th</sup> St (E of 6 <sup>th</sup> Ave), 17 <sup>th</sup> Street (E of 7 <sup>th</sup> Ave),	There will be a slight increase in blocked crossings. Rail traffic that utilizes the team track and bad order track will be moved to the existing track in the South Yard. On average, this increase will be 2 to 5 rail cars per month.
Ellis and Eastern Line Between Sioux Falls and Brandon Crossing: Rice St (E of Timberline Ave)	The project will not impact traffic along this line. Impacts to the at-grade crossing will not change due to this project.

## MAINTENANCE CHANGES

- Engine fueling is currently performed in the rail yard and will not change under the new plan.
- Light repairs of rail cars and locomotives are performed in the rail yard and will not change under the new plan. Repairs will be made utilizing the tracks that remain.
- Materials are currently stored on site for track maintenance. These materials will be stored at another existing location which is yet to be determined.

## CHANGES SUMMARY

	<b>Current Average Estimated Traffic</b>	<b>Average Estimated Traffic After Plan Implementation</b>
Inbound/Outbound Trains – Corson Sub	10 unit trains per week	10 unit trains per week. 6 will stop at E&E interchange.
Local Service – Corson Sub	5 trains per week	5 trains per week
Local Service – Madison Sub	7 trains per week	7 trains per week
Local Service – Canton Sub	4 trains per week	4 trains per week
Through Unit Trains – Between Madison and Corson Subs	2 unit trains per week	2 unit trains per week
D&I Unit Trains – Between Madison and Canton Subs	1 to 2 trains per day	1 to 2 trains per day

## FUTURE CONDITIONS

The above rail traffic numbers are based on the current average traffic. Traffic will vary during the year due to customer needs. It is anticipated that rail traffic will increase with the growth of industry serviced by rail. BNSF will continue to use market conditions to determine local service levels.

# Proposed Land for Purchase

A portion of Outlot 1 Manitoba Addition and a portion of C & NW RR SW 1/4 16-101-49  
±1.1 acres

6th Street ROW  
±0.35 acres

Portions of C & NW RR SW 1/4 16-101-49;  
Tracts 18 & 19 SW 1/4 16-101-49;  
Tract 5 SE 1/4 16-101-49;  
and Trackage & Depot abutting both sides  
of 8th Street SW 1/4 16-101-49  
±3.7 acres

8th Street ROW  
±0.45 acres

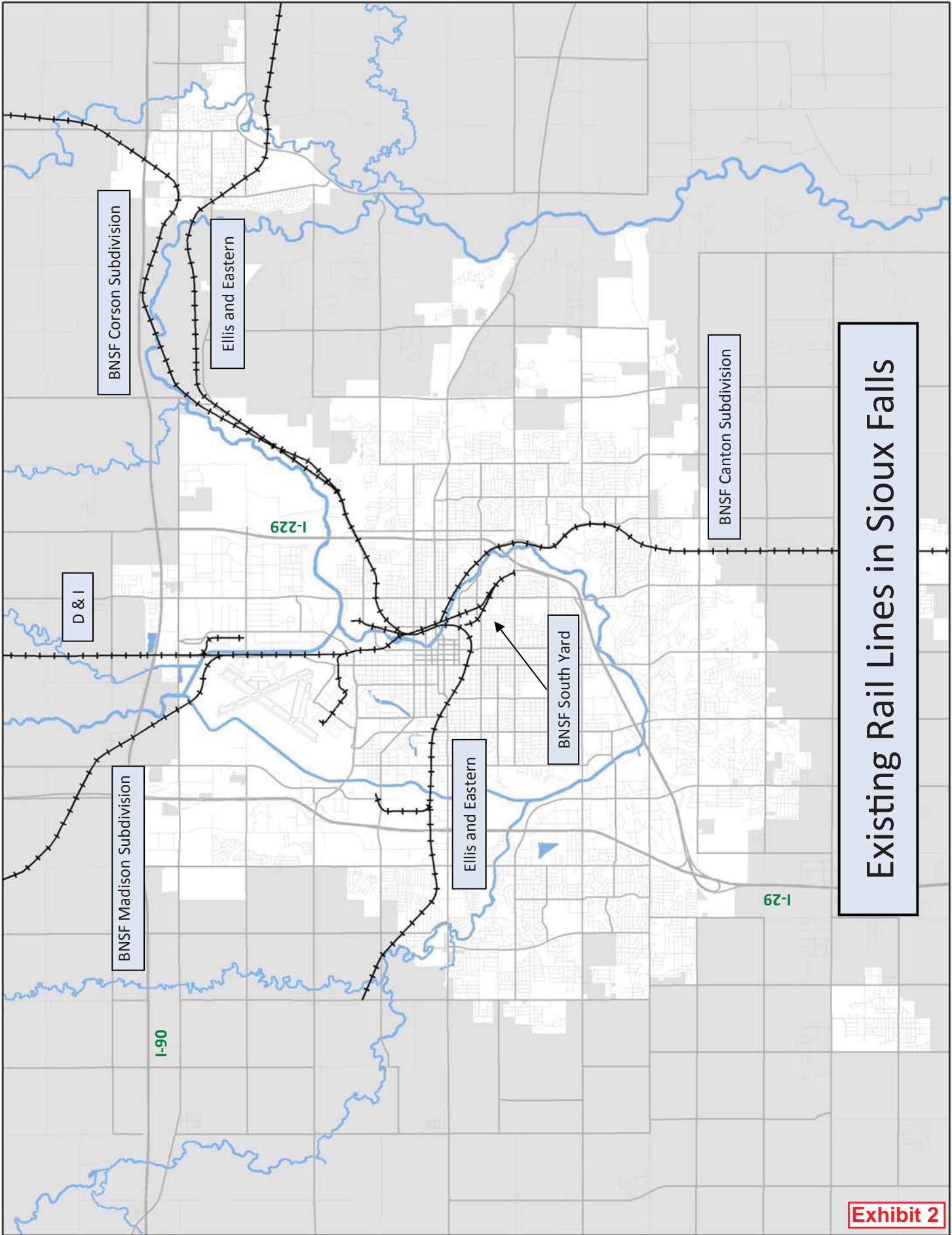
Trackage & Depot abutting both sides  
of 8th St SE 1/4 16-101-49;  
A portion of C & NW Railroad Right-of-way  
(ex PE-1 & PE-2) SE 1/4 16-101-49;  
and a portion of Tract 6 SE 1/4 16-101-49  
±4.3 acres

A portion of C & NW Railroad Right-of-way  
(ex PE-1 & PE-2) SE 1/4 16-101-49  
±0.3 acres

Map Date: December 6, 2012  
Image Date: April 2012

- Proposed New E&E Connection
- Track to be Removed
- Proposed for Redevelopment (9.5 total acres more or less)
- Proposed Land for ROW (0.8 total acres more or less)
- Other Property Line

enr\public\work\rail\relocation\proposed\bnf\land sale



Existing Rail Lines in Sioux Falls





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**Downtown Sioux Falls Rail Yard  
Redevelopment Project - Alternatives  
Analysis**

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## Technical Memorandum

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**TO:** Joshua Peterson (City of Sioux Falls)  
**FROM:** Craig Mielke (Benesch)  
**CC:** Terrence Keller (SDDOT), Marion Barber (FHWA)  
**SUBJECT:** Downtown Sioux Falls Rail Yard Redevelopment Project - Alternatives Analysis  
**DATE:** June 12, 2013

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### Section 1 Introduction

The purpose of this Technical Memorandum is to document the process by which numerous alternatives for the Downtown Sioux Falls Rail Yard Redevelopment Project were evaluated and eliminated from further consideration. The alternatives considered include options that were technically feasible and reasonable, and met the project purpose and need at the time they were presented. Other options presented by the public, the Steering Committee, project stakeholders or agencies that did not meet the purpose and need, or that were not technically feasible or reasonable, were not considered in this evaluation. It should be noted that as the project progressed from early concepts to more refined alternatives, BNSF's operational and engineering requirements became clearer, and the purpose and need for the project was refined by the Steering Committee. Therefore, some alternatives in this evaluation no longer meet the approved purpose and need.

Through the process of early scoping with regulatory agencies, local governments, the public, and public and private utility providers, numerous resources were identified for the comparison and evaluation of alternatives, including some particularly sensitive resources, which, if adversely affected, could result in significant impacts (e.g. parkland, floodplains, wetlands, right-of-way, and historic resources). As early concepts from the 2001 and 2002 TKDA reports were refined, and as new information became available, additional alternatives were developed. Various environmental studies and engineering analyses of the alternatives were also performed. While the detailed results of these studies and analyses are not presented in this document for each of the alternatives, the reports are contained in the administrative record for the project. A list of these reports is included in **Section 3** of this document.

The development and screening of alternatives was heavily influenced by BNSF's internal policies and engineering design standards for its tracks (e.g. minimum/maximum curves, profiles, grades), safety of its workers and the travelling public (e.g. train speeds, crossing limits, Operational, Safety, and Health Administration (OSHA) standards), and maintenance or operational requirements of its equipment (e.g. train speeds, working times), as well as federal railroad requirements.

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In addition, many of these alternatives were presented to the public, the Steering Committee, project stakeholders, and agencies throughout the course of project development, and their views and concerns were also considered.

## Section 2 Alternatives Considered and Eliminated

This section describes the alternatives that were eliminated because they did not meet BNSF's operational requirements, including various engineering, design, safety, or operational standards, and/or because they had unacceptable environmental or social impacts that were considered significant when compared to the Proposed Alternative. See the attached letter from the City of Sioux Falls to BNSF that documents BNSF's concurrence on the elimination of several of these alternatives.

Early in the development of the EA, several of the Wye track concepts from the TKDA reports were eliminated because other improvement projects had since been constructed in the area, or because more detailed information rendered them unfeasible from an engineering or logistics standpoint. Some early yard locations were also eliminated due to agency concerns, BNSF/City requirements, or inconsistency with local and regional land use plans. Later on, alternatives that had significant impacts to parks or historic resources were also eliminated from further consideration. **Figure 1** shows the general location of these preliminary alternatives. The primary reasons for eliminating the various alternatives from further consideration are summarized below.

### Yard Alternatives

#### New Yard locations along the Madison and Canton Subdivisions

- Yard locations along the Madison and Canton Subdivisions would not be as operationally efficient as the Corson Subdivision, because the Corson Subdivision is the primary route to access these routes from the BNSF mainline east of Sioux Falls.
- These locations would extend "yard operations"<sup>1</sup> beyond BNSF's acceptable limits.
- These locations would increase distances travelled/operational costs beyond BNSF's acceptable limits.
- These locations would increase the number of at-grade road crossing conflicts.
- These locations would be outside the jurisdiction of the City of Sioux Falls.

#### New Yard locations along the Corson Subdivision east of Timberline Avenue

- These locations would extend "yard operations" beyond BNSF's acceptable limits.
- These locations would increase distance travelled/operational costs beyond BNSF's acceptable limits.
- These locations would be outside the jurisdiction of the City of Sioux Falls.

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<sup>1</sup> The term "yard operations" refers to the operating limits of BNSF personnel, equipment, and other factors affecting the ability of BNSF to maintain compliance with union agreements.

New Yard location along the Corson Subdivision west of Timberline Avenue (Study Area 1, Alternative A)  
**(Figure 2)**

- This yard would require the relocation of approximately 12 electrical transmission towers.
- This yard would impact the floodplain of the Big Sioux River.
- This yard would have resulted in three residential relocations and one business relocation.
- This yard would have required additional right-of-way.
- Timberline Avenue and Rice Street would have been blocked for additional time as trains entered and exited the yard to switch between yard tracks.
- This location would have required additional tracks to be built through the Timberline Avenue crossing to provide enough track length in the yard, resulting in the closure or relocation of Timberline Avenue.
- This location would have resulted in additional wetland impacts.
- This yard would have required the relocation of the access road for the Western Area Power Administration (WAPA) electrical substation just east of Timberline Avenue.

New Yard location along the Corson Subdivision west of Timberline Avenue (Study Area 1, Alternative B)  
**(Figure 3)**

- This location would have required additional tracks to be built through the Timberline Avenue crossing to provide enough track length in the yard, resulting in the closure or relocation of Timberline Avenue.
- The transition at the west end of the yard to tie into the existing mainline would have required a curve that does not meet design standards.
- Timberline Avenue and Rice Street would have been blocked for an additional amount of time as trains entered and exited the yard to switch between yard tracks.
- This yard would have required the relocation of approximately 25 electrical transmission towers.
- This yard would have impacted the floodplain of the Big Sioux River.
- This yard would have resulted in residential and business relocations.
- This yard would have required additional right-of-way.
- This yard would have required the realignment of Rice Street.
- This yard would have resulted in additional wetland impacts.
- This yard would have required the relocation of the access road for the WAPA electrical substation just east of Timberline Avenue.

Ellis and Eastern (E&E) Yard near Brandon – new yard along E&E tracks, north of Rice Street (Study Area 3)  
**(Figure 4)**

- Trains would have been required to enter this yard backwards from the Corson Subdivision to the E&E line.
- There is approximately 50-foot elevation difference from the Corson Subdivision to the E&E mainline, which would have resulted in steep grades and tight curves that would exceed operational standards.

- There would have been a steep grade out of the yard to the east that would exceed the maximum allowable grade.
- Approximately seven electrical transmission towers would have been relocated.
- This yard location was opposed by the City of Brandon and the public.
- This location was outside the jurisdiction of the City of Sioux Falls.
- This yard would have resulted in impacts to the floodplain of the Big Sioux River.
- This yard would have required shifting the existing E&E line.
- This yard would have required the relocation of the access road for the Xcel Energy Pathfinder Facility and electrical substation north of Rice Street and Six Mile Road.

### **Subdivision Connection Alternatives**

Wye Bridges (new bridges) – over Big Sioux River in four locations: Far North option (one bridge north of Falls Park Drive), two bridges through the Sioux Steel Property (Study Area 2, Alternative A), one bridge north of the existing bridge (Study Area 2, Alternative B), and two bridges south of the existing bridge (Study Area 2, Alternative C) (Figures 5 and 6)

- These new bridges would not meet minimum design criteria for grades or curvature (i.e. the grades are too steep, or the curves are too tight).
- BNSF preferred not to maintain two bridges over the Big Sioux River.
- One of these alternatives would have impacted Sioux Steel (Alternative C).
- Some of these alternatives would have required a new bridge over Phillips Avenue.
- Several of these alternatives required extraordinary engineering solutions, including considerable fill and extensive retaining walls (Far North in particular).
- One of these bridges (Far North) would have required several residential relocations.
- These alternatives would have resulted in extensive Section 4(f) and 6(f) impacts to Falls Park.
- These bridges would have resulted in impacts to the Big Sioux River (i.e. new piers) and floodway.

Wye Bridge (existing bridge) – install new switch and bridge extension on existing bridge over Big Sioux River (Study Area 2) (Figure 7)

- This alternative would have resulted in increased operational costs for BNSF.
- There were unacceptable safety concerns for BNSF crews to operate the switch on bridge.
- This alternative would not meet design criteria for grades or curvature.
- There were very difficult constructability issues to modify the existing bridge to add the switch.
- There would have been extensive Section 4(f) and 6(f) impacts to Falls Park.
- The eastern connection had engineering feasibility and operational difficulties from connecting to the Weber siding, rather than the mainline of the Corson Subdivision.
- This bridge would have resulted in impacts to the Big Sioux River (i.e. new piers) and floodway.



South Siding - two possible options along the Canton Subdivision between 57<sup>th</sup> Street and 271<sup>st</sup> Street (Co Hwy 106) (Study Area 4) (Figures 8 and 9)

- These alternatives would have resulted in noise impacts to residential properties.
- The sidings would have resulted in increased wetland impacts.
- The siding would have impacted the floodplain and floodway along Spring Creek.
- These alternatives had public opposition.
- There would have been additional blocked crossings between downtown and the siding.
- The southern option (B) would have required an overpass at 85<sup>th</sup> Street.

Downtown Runaround Alternative – several options for a new siding between Cliff Avenue and 18<sup>th</sup> Street, south of the existing yard (Figures 10, 11, and 12)

- These alternatives would have resulted in additional blocked crossings, including East Cherry Rock Park Ave and Cliff Ave that would have exceeded acceptable time limits.
- This alternative had a less than desirable length of siding, resulting in additional blocked crossings at 6<sup>th</sup> Street, 8<sup>th</sup> Street, and 18<sup>th</sup> Street that would have also exceeded allowable time limits.
- There would be no access road along the siding due to ROW limitations.
- There were geometric constraints with adjacent properties that would affect construction (i.e. this alternative would have either required residential takings to be constructed, or would not have included an access road for BNSF).
- The potential for noise impacts was greatly increased.
- There would have been floodplain impacts along the Big Sioux River.
- There could have been Section 4(f) impacts to Cherry Rock Park.

### Section 3 Supporting Documentation

Numerous studies and analyses were conducted for the evaluation of the alternatives. In addition, other documentation was developed throughout the process such as cost estimates, preliminary Draft EAs, agency coordination, public involvement, and other correspondence. Below is a summary of the major reports completed for the preliminary alternatives; additional documentation not included in this list is contained in the administrative record for the project.

**Table 1 - Summary of Reports for Previous Alternatives**

Title	Author/Date
Cultural Resources Evaluation, Study Area 1 and 2	Cultural Heritage Consultants, December 2007
Hydrology and Hydraulics Analysis (Study Area 1 and 2)	HWS, March 2008
Draft Railroad Noise Study for Railroad Relocation Environmental Assessment (Study Area 1 and 2)	HWS, September 2008
Phase I for Study Areas 1 and 2 (Downtown and Rice/Timberline Yard)	HWS, October 2008

<b>Title</b>	<b>Author/Date</b>
Phase II ESA for Study Area 2	GeoTek, October 2008
Engineers Design Memorandum for the Construction of the Study Area 1 Rail Yard Facilities	Benesch, April 2011
Engineers Design Memorandum for Construction of a 9,000 foot Siding on the Canton Subdivision (South Siding)	Benesch, June 2011
Engineers Design Memorandum for Construction of Wye Bridge Over the Falls (modify existing bridge in Study Area 2)	Benesch, October 2011
Engineers Design Memorandum for Construction of the Ellis & Eastern Rail Yard Facilities (Study Area 3)	Benesch, October 2011
Study Areas 3 and 4 Wetland Technical Memorandum (E&E and South Siding)	Benesch, October 2011
Hazardous Substances Memorandum Ellis & Eastern Railroad Alternative (Study Area 3)	Benesch, October 2011
Hazardous Substances Memorandum South Siding Alternative (Study Area 4)	Benesch, October 2011
Level III Cultural Resources Survey of the Sioux Falls Rail Relocation Project (E&E Yard and South Siding)	Edward J. Lueck, October 2011
Draft Railroad Noise Study for Railroad Relocation Environmental Assessment, South Siding Alternative (Downtown to South Siding)	Benesch, April 2012
Draft Railroad Vibration Study for Railroad Relocation Environmental Assessment, South Siding Alternative (Downtown to South Siding)	Benesch, April 2012

## Section 4 Conclusions

After the consideration of numerous alternatives in light of potential environmental impacts, agency concerns, public comments, BNSF, E&E, and City requirements, and engineering feasibility, a Proposed Alternative was developed that avoided major impacts to the natural and social environment, and was ultimately accepted by the railroads and the City. A Memorandum of Understanding (MOU) was signed between the City and BNSF on January 9, 2013 that outlined the general agreements for the Proposed Alternative. Whereas the previously considered alternatives focused on the construction of major infrastructure improvements (i.e. new rail yards, new sidings, new bridges) that would be transferred to BNSF, and having BNSF make land within the Downtown Yard available for economic development, the Proposed Alternative consists of a direct sale of land within the Downtown Yard from BNSF to the City, and construction of other minor infrastructure improvements to maintain current railroad operations.

The Proposed Alternative consists of the City purchasing approximately ten acres of the Downtown Yard property from BNSF; constructing an interchange along the Corson Subdivision to allow BNSF and the E&E Railroad to transfer railcars; re-configuring the connection between the E&E tracks and the BNSF mainline at the south end of the Downtown Yard (i.e. just north of the Big Sioux River); and making minor modifications to BNSF's regional operations. The BNSF mainline and siding tracks along the eastern edge of the Downtown Yard,

as well as the BNSF depot building south of 8<sup>th</sup> Street, would remain, allowing BNSF to continue to make the Madison to Corson movement by utilizing the Canton Subdivision, using staff and engines staged downtown.

While the Proposed Alternative does not include construction of a new rail yard, removal of all operations from the Downtown Yard, or construction of a direct Wye track connection between the three subdivisions, it does constitute a “functional replacement” for the lost railroad operations within the Downtown Yard, provides for economic development in downtown Sioux Falls, and is supported by the City of Sioux Falls, E&E, and BNSF.

Based on the results of this analysis, the Environmental Assessment should be limited to assessing the environmental impacts of the Proposed Alternative and the No-Action Alternative.

FIGURE 1

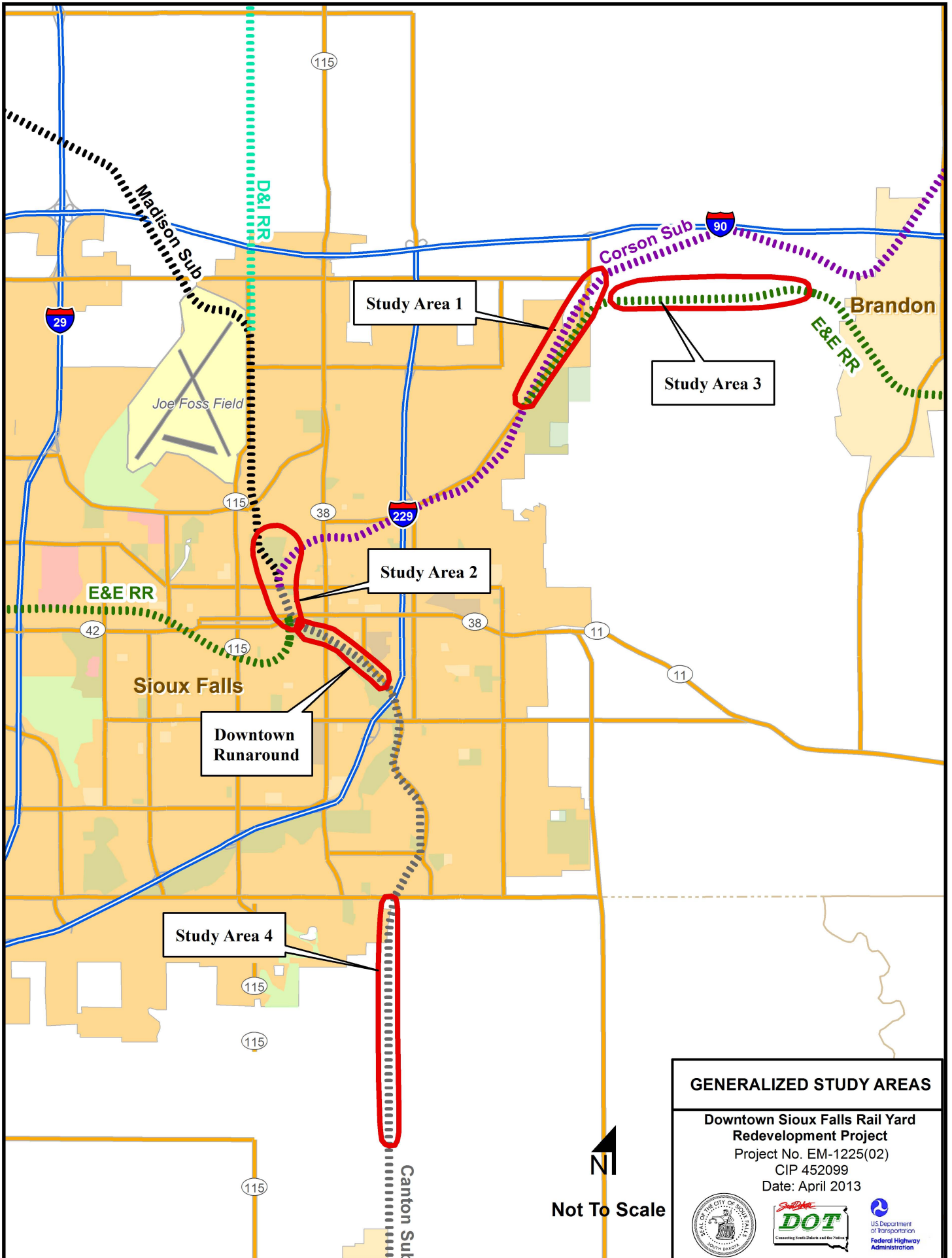


FIGURE 2

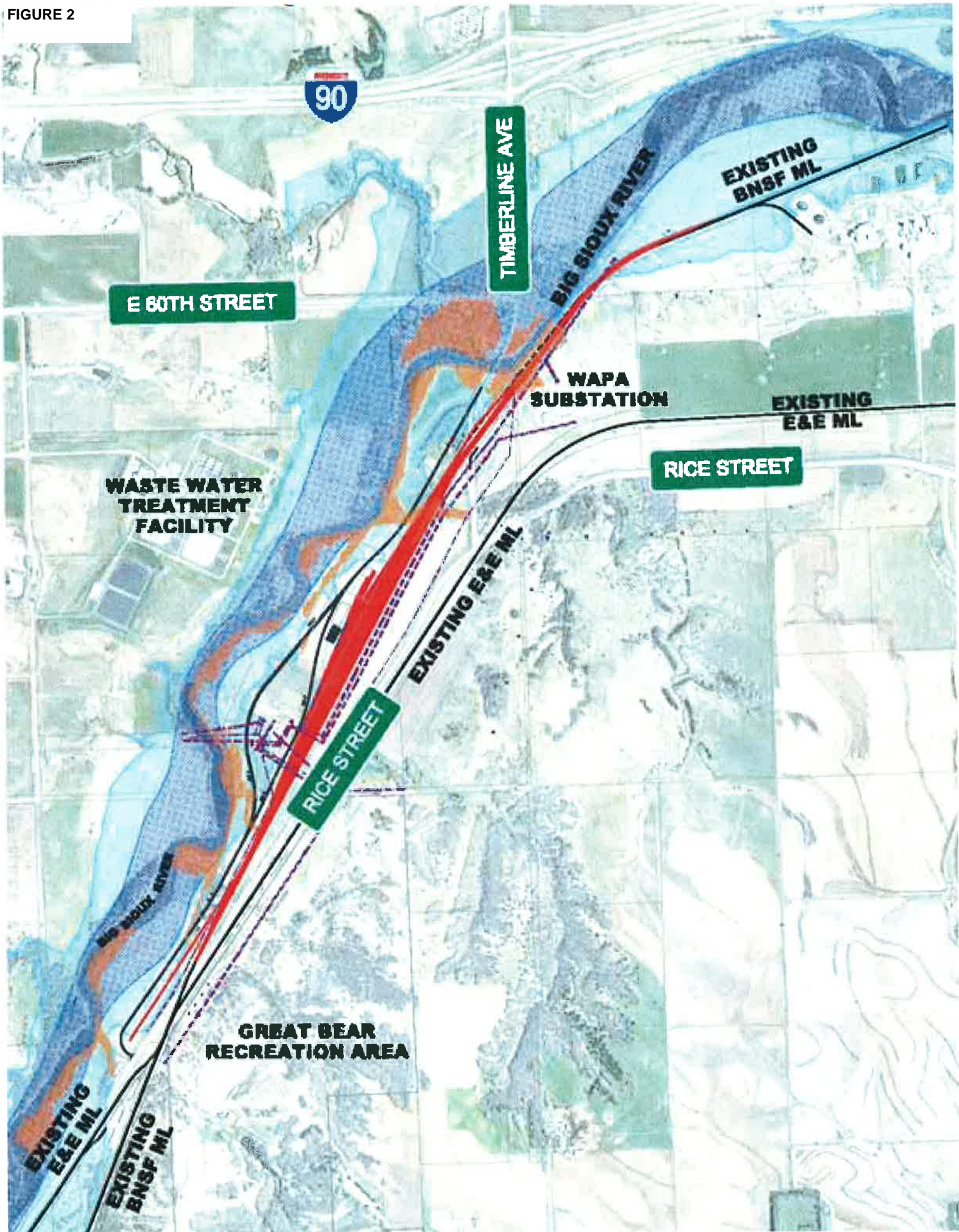


FIGURE 3

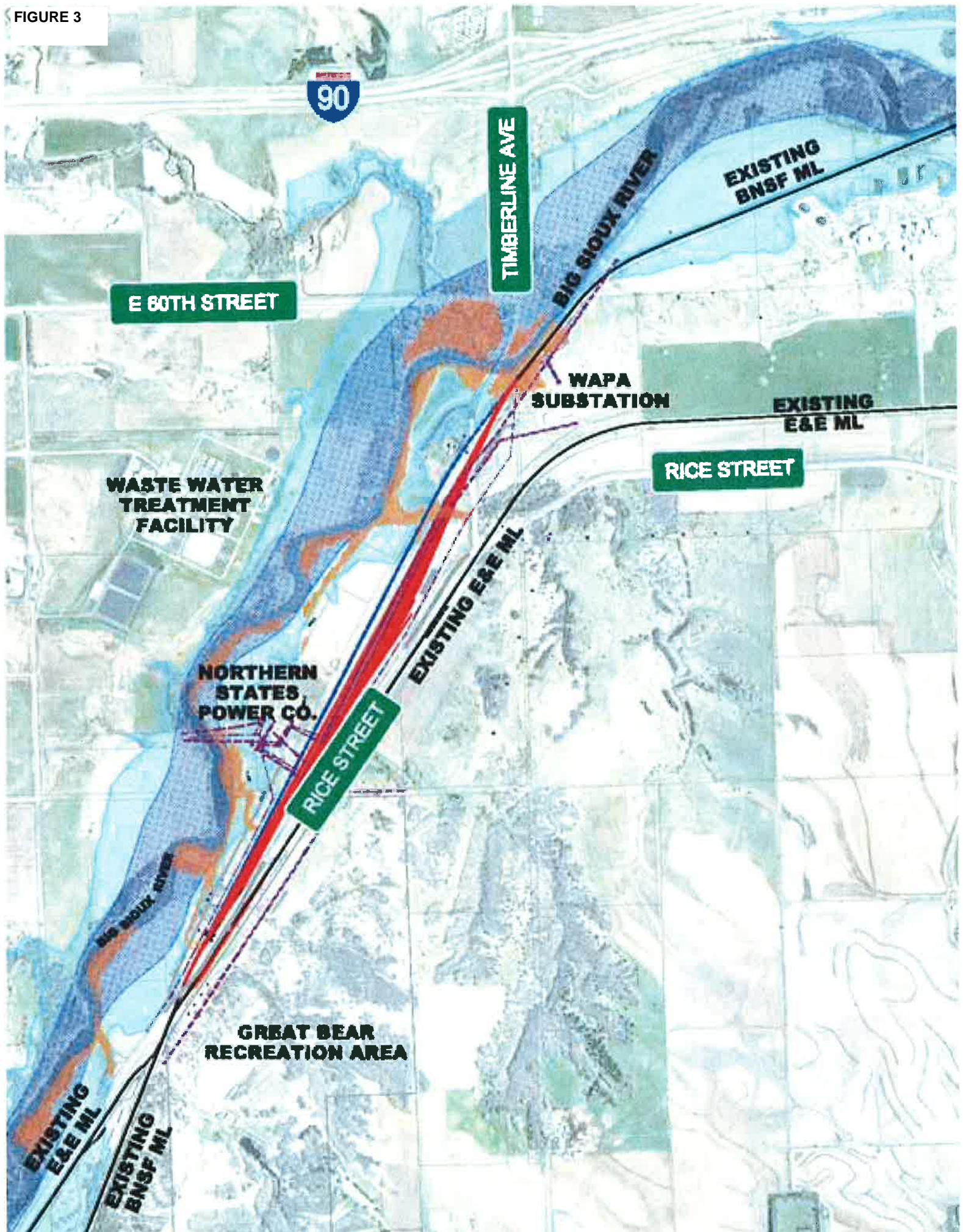




FIGURE 5

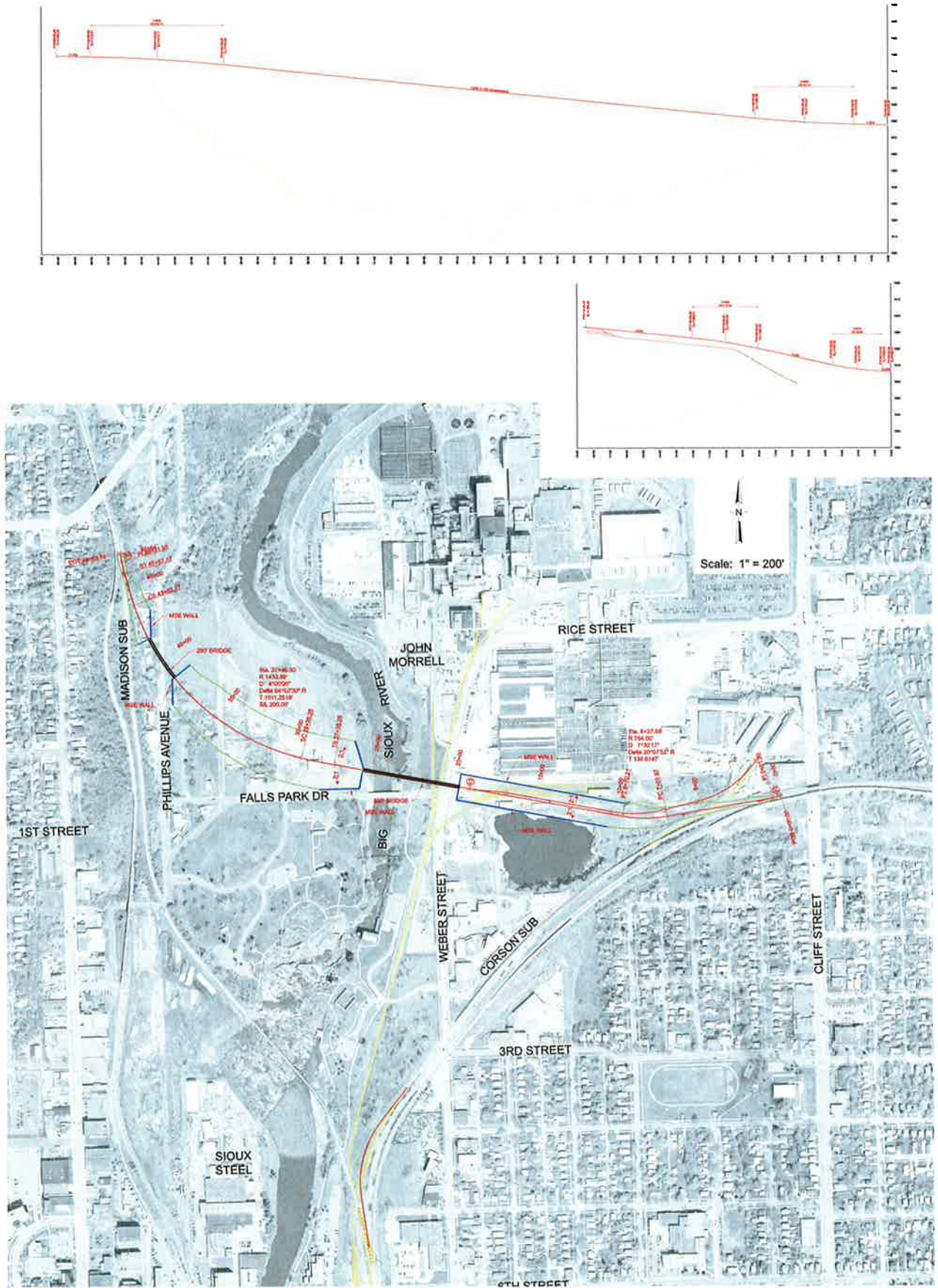






FIGURE 7

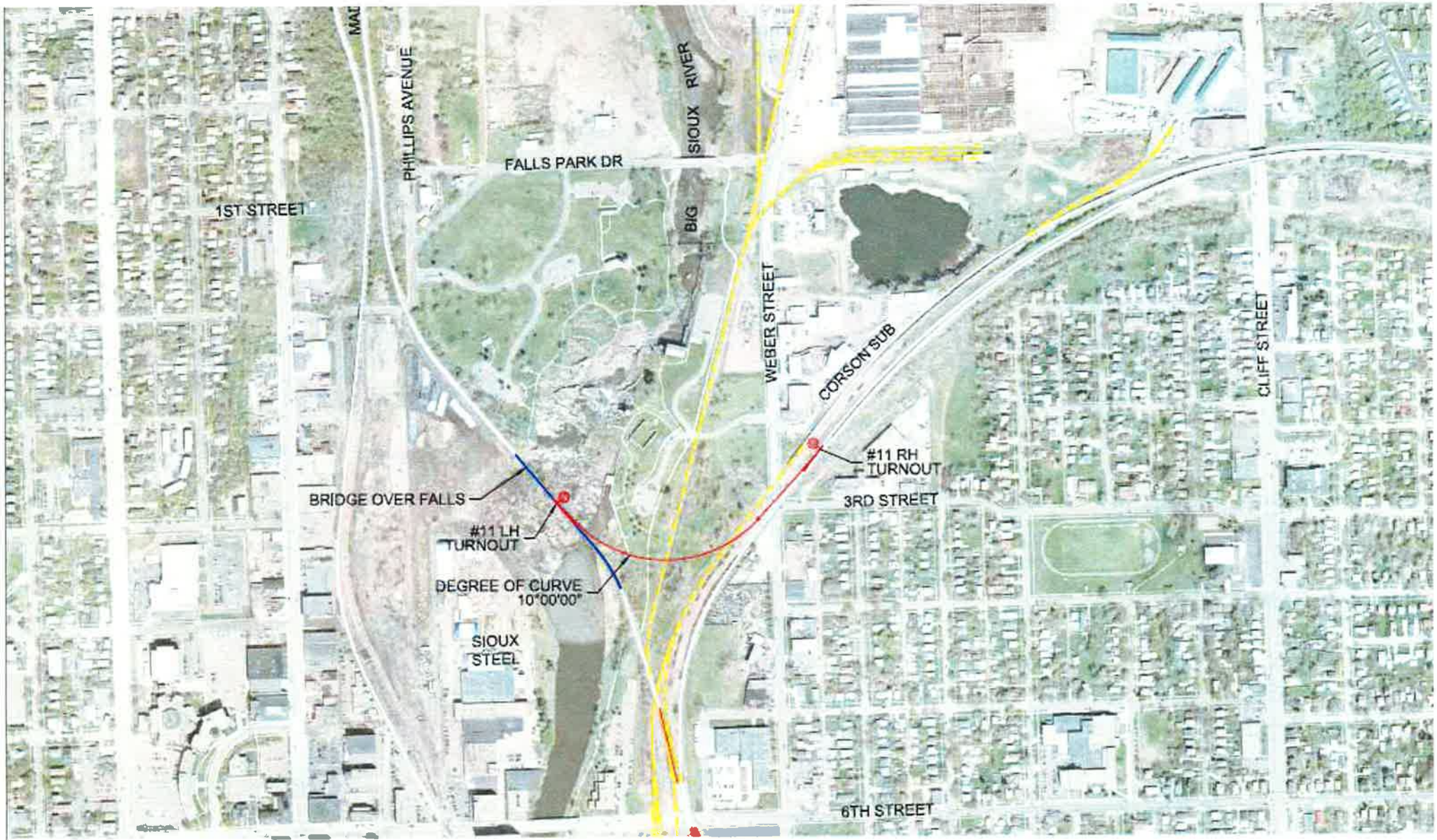
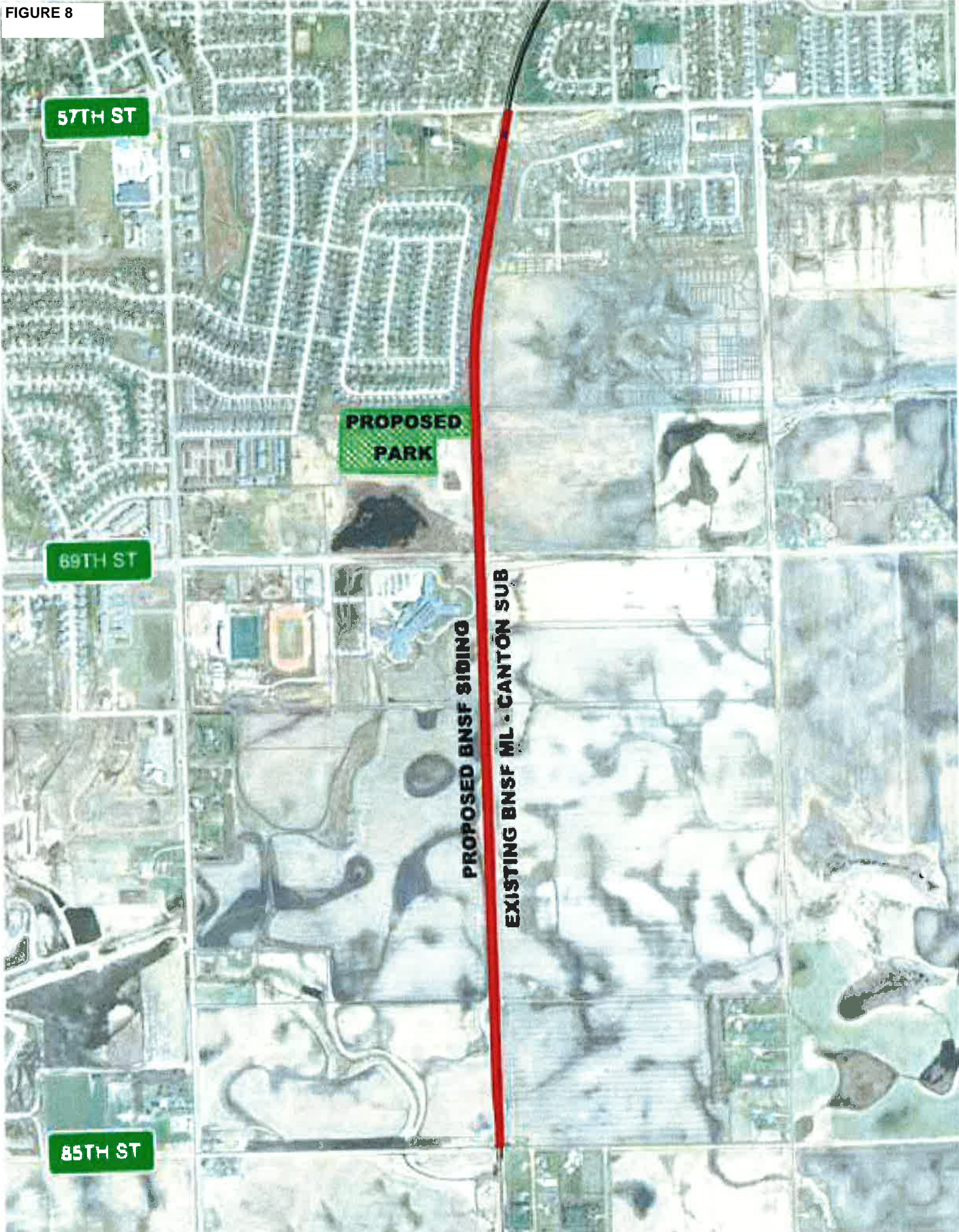


FIGURE 8



57TH ST

PROPOSED  
PARK

69TH ST

PROPOSED BNSF SIDING  
EXISTING BNSF ML - CANTON SUB

85TH ST

FIGURE 9

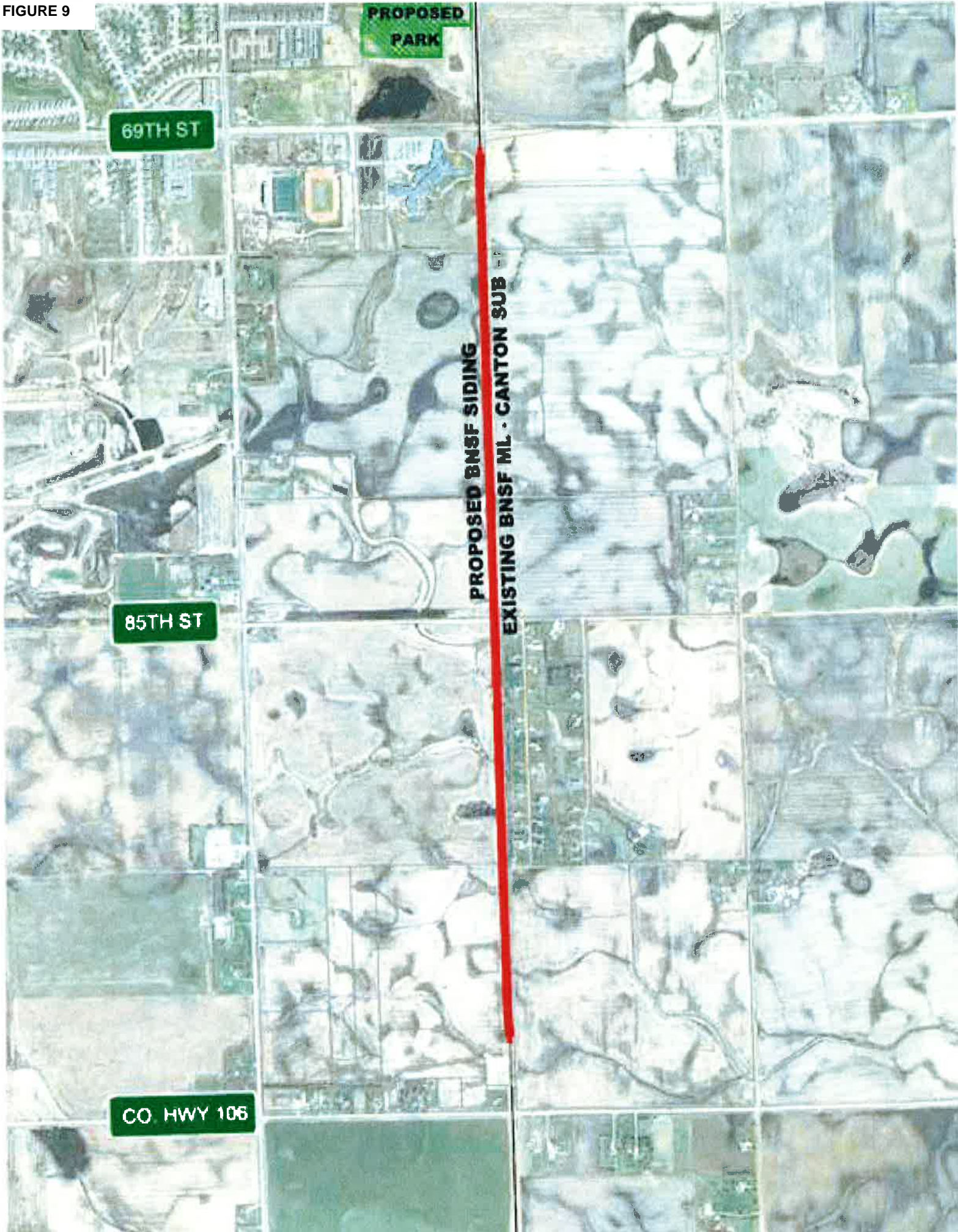


FIGURE 10

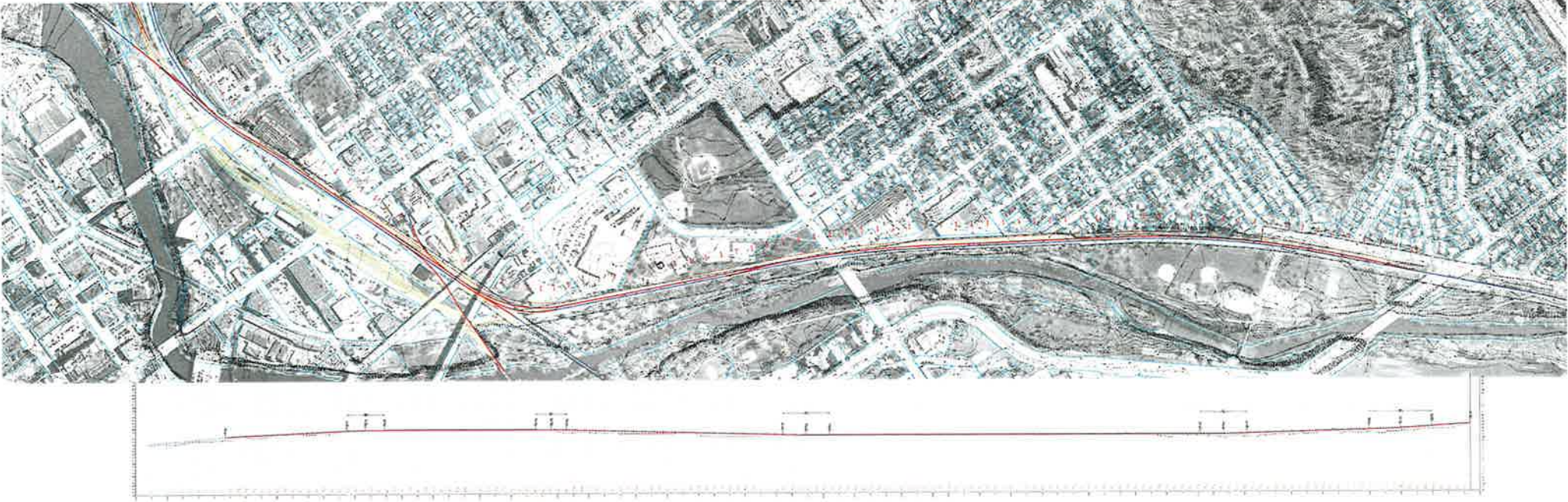


FIGURE 11

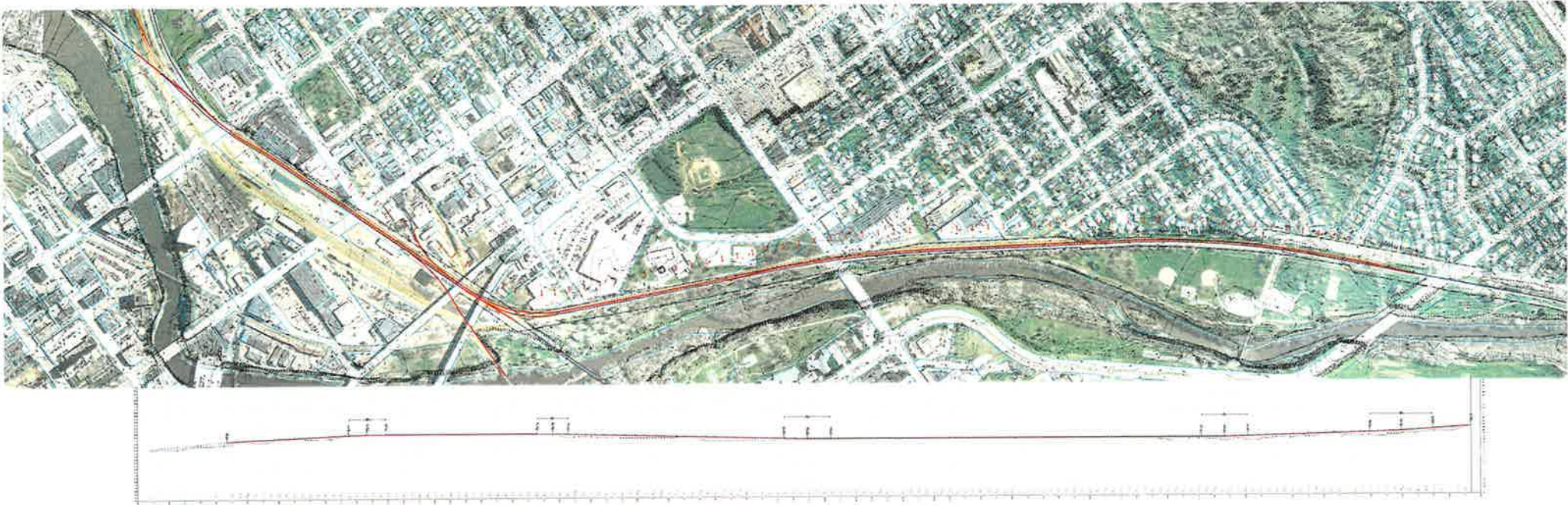


FIGURE 12



#### Administration/GIS

224 West Ninth Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-8600 F: 367-4605

February 27, 2013

#### Engineering/Real Estate

224 West Ninth Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-8601 F: 367-4310

Sarod Dhuru  
BNSF Railway  
2500 Lou Menk Dr  
Fort Worth, TX 76131

#### Environmental

1203 North Western Avenue  
Sioux Falls, SD 57104-1201  
T: 605-367-8276 F: 367-4886

#### Fleet Management

1000 East Chambers Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-7170 F: 367-7421

#### Household Hazardous Waste Facility

1015 East Chambers Street  
Sioux Falls, SD 57104-7200  
T: 605-367-8695 F: 367-4993

#### Landfill

224 West Ninth Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-8162 F: 526-3371

#### Light

2000 North Minnesota Avenue  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-7006 F: 367-8306

#### Street

1000 East Chambers Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-8255 F: 367-7010

#### Utility Billing

1201 North Western Avenue  
P.O. Box 7401  
Sioux Falls, SD 57117-7401  
T: 605-367-8131 F: 367-7341

#### Utility Maintenance

668 West Algonquin Street  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-7020 F: 367-7883

#### Water Purification

2100 North Minnesota Avenue  
P.O. Box 7402  
Sioux Falls, SD 57117-7402  
T: 605-367-7025 F: 367-8475

#### Water Reclamation

4500 North Sycamore Avenue  
Sioux Falls, SD 57104-9612  
T: 605-367-8188 F: 367-8484

Re: Downtown Sioux Falls Rail Yard Redevelopment Project  
Alternatives That Do Not Meet BNSF's Operational Requirements

Mr. Dhuru:

As you are aware, the City of Sioux Falls and the BNSF Railway have been working together for over ten years to identify alternatives and develop a plan to remove all or most of BNSF's Downtown Rail Yard, in order to facilitate increased economic development in the downtown area.

Through previous coordination with BNSF, it is our understanding that there are essentially four primary operational requirements that need to be met to allow this project to successfully move forward. These items are as follows:

- **OPERATE REGIONAL TRAINS** – The ability to continue to operate regional trains arriving and departing Sioux Falls.
- **E&E INTERCHANGE** – The ability to continue to interchange with the E&E Railroad
- **CONNECT SUBDIVISIONS** – The ability to maintain the connection between the Canton, Corson, and Madison Subdivisions for all traffic.
- **SERVICE LOCAL BUSINESSES** – The ability to continue to provide local service to commercial and industrial customers in and around Sioux Falls.

Throughout this project, you have assisted us in identifying potential alternatives for the project to evaluate whether they would meet BNSF's operational requirements. After further evaluation of these alternatives, it has been determined that some of these alternatives would not meet various engineering, design, safety, or operational standards. The purpose of this memorandum is to document our determination of alternatives that are not feasible because they do not meet these standards, and therefore, do not meet BNSF's operational requirements. Below is a list of these alternatives, with a brief description of their engineering, design, safety, and operational limitations.



## **New Yard Alternatives**

### New Yard locations along the Madison and Canton Subdivisions

- These yard locations are not operationally efficient.
- They extend “yard operations” beyond BNSF’s acceptable limits.
- They increase distances travelled/operational costs beyond BNSF’s acceptable limits.

### New Yard locations along Corson Subdivision east of Timberline Avenue

- This yard extends “yard operations” beyond BNSF’s acceptable limits.
- This yard increases distance travelled/operational costs beyond BNSF’s acceptable limits.

### New Yard location along Corson Subdivision west of Timberline Avenue (Study Area 1, Alternative B)

- Additional tracks must be built through the Timberline Ave crossing to provide enough track length in the yard.
- The transition at the west end of the yard to tie into the existing mainline requires a curve that does not meet design standards.
- Timberline Ave and Rice Street would be blocked for a significant amount of time as trains enter and exit the yard to switch between yard tracks.

### Ellis and Eastern Yard near Brandon (Study Area 3)

- Trains must enter this yard backwards from Corson Subdivision to E&E line.
- There is a 50-60 foot grade difference from Corson Subdivision to E&E line, which results in a 1.5% grade on a 15 degree radius, which would exceed operational standards.
- There would be a 1.6% grade out of the yard to the east, which exceeds the 1.5% maximum allowable grade.

## **Subdivision Connection Alternatives**

### Wye Bridges (new bridges) – over Big Sioux River in four locations: Far North Option (one bridge north of Falls Park Drive), two bridges through the Sioux Steel Property (Study Area 2, Alternative A), one bridge north of the existing bridge (Study Area 2, Alternative B), and two bridges south of the existing bridge (Study Area 2, Alternative C)

- These new bridges don’t meet minimum design criteria for profiles, grades, or curvature (i.e. the curves are too tight, and the profiles/grades are too steep).
- It would not be desirable to BNSF to maintain two bridges.

Wye Bridge (existing bridge) – install new switch and bridge extension on existing bridge over Big Sioux River

- This alternative would result in increased operational costs.
- There are unacceptable safety concerns for crews to operate the switch on bridge.
- This alternative doesn't meet design criteria for profiles, grades, or curvature.
- There are constructability issues to modify the existing bridge to add the switch.

Downtown Runaround Alternative (a siding between Cliff Ave and 18<sup>th</sup> Street)

- There would be additional blocked crossings, including East Cherry Rock Park Ave and Cliff Ave that would exceed acceptable time limits.
- This alternative has a less than desirable length of siding, resulting in additional blocked crossings at 6<sup>th</sup>, 8<sup>th</sup>, and 18<sup>th</sup> Streets that would also exceed allowable time limits.
- There would be no access road along siding due to ROW limitations.
- There are geometric constraints with adjacent properties that affect construction.

If you concur with the summary above, please indicate by signing below.



Joshua Peterson, City of Sioux Falls

2/27/13

Date



Concur: Sarod Dhuru, BNSF Railway

3/7/13

Date

# **Memorandum of Understanding**

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# MEMORANDUM OF UNDERSTANDING

## SIoux FALLS YARD

This Memorandum of Understanding (“**MOU**”) is entered into this 9<sup>th</sup> day of January, 2013 between the City of Sioux Falls, South Dakota (the “**City**”) and BNSF Railway Company, a Delaware corporation (“**BNSF**”). This MOU has been developed to provide the basic terms of the acquisition of private property by the City of Sioux Falls. The project is to purchase a portion of the rail yard allowing for redevelopment using Federal funds. The project must meet all applicable State and Federal requirements and procedures, which will be clearly laid out in subsequent binding agreements.

The purpose of this MOU is to establish the basic terms and conditions that BNSF and the City have agreed upon with respects to the sale of BNSF’s Sioux Falls Yard and conveyance of the underlying land and certain improvements to the City or approved designee (the “**Land Sale**”). BNSF has determined it is feasible to adapt its operations to account for the loss of this infrastructure. The terms and conditions of the sale of the yard are expected to be further defined in detail in a definitive agreement(s) based on BNSF’s standard purchase and sale agreement form (the “**Purchase and Sale Agreement**” or “**PSA**”), during the Term of this MOU.

The Land Sale is being considered for the benefit of the City for the purpose of economic development in the downtown area of Sioux Falls where the current Sioux Falls Yard is located. The City anticipates acquisition of all necessary rights-of-way, easements, or other interests in land by voluntary purchase if possible, or by condemnation if necessary, for the real property related to the Project. In order to avoid the expense and delay of such condemnation action by the City, BNSF is willing to quitclaim to City and City is willing to accept all of BNSF’s right, title and interest, if any, in and to the needed BNSF property in lieu of such condemnation action on the terms and conditions set forth herein. The City will perform due diligence to ensure marketable title is obtained. Title insurance will also be obtained for the transfer of ownership from BNSF to the City.

As indicated in Article 3, this MOU is NOT BINDING and does not create any obligations on the part of BNSF or the City with respect to the terms and provisions of the PSA, the Project, or the matters listed in Articles 1 or 2. However, Article 3 does list certain rights and obligations that are binding for the duration of the Project. It is expected that once both parties agree to all aspects of the project as defined in Articles 1 and 2 that a binding PSA would be entered into.

## ARTICLE 1: LAND SALE

The PSA will provide for the following: (i) The City will purchase the Sioux Falls yard as depicted on Exhibit 1 (attached), (ii) the purchase price for the defined property, and (iii) Ellis & Eastern rights forfeited.

36 1.1 PROPERTY DESCRIPTION

37 Exhibit 1 depicts approximately 10 acres of property BNSF proposes to sell to the City of Sioux  
38 Falls. The exact boundaries and acreage of the property will be specified in the PSA. The property  
39 to be transferred represents the Sioux Falls downtown yard excluding:

- 40 1. Depot building and property surrounding the depot building
- 41 2. Property on south end that would be required to construct a new connection
- 42 3. 50' buffer from the western most mainline track

43 The PSA will provide that BNSF will convey its interest in certain portions of the land underlying  
44 the Existing Yard (the "**Existing Property Rights**") to the City of Sioux Falls, or approved designee,  
45 in "**as is**" condition, with all faults (including without limitation any and all environmental faults,  
46 conditions or otherwise), via quitclaim, on or before December 31, 2013. The City will be  
47 responsible for identified environmental remediation as required by the Federal Highway funding  
48 requirements. Any necessary environmental remediation will be identified and addressed in the  
49 appraisal.

50 Unless otherwise determined by BNSF, upon the conveyance of the Existing Property Rights, all  
51 track materials and other improvements comprising the Existing Line Segments (other than any  
52 track or other improvements BNSF elects to retain and remove prior to conveyance of the Existing  
53 Property Rights) will be deemed abandoned in place by BNSF. BNSF shall retain no obligation to  
54 salvage the track materials or other improvements or otherwise restore the underlying land to any  
55 particular condition. Abandoned track or other improvements will become the property of the City  
56 and the City will assume and bear all responsibility therefor.

57 The building located between 6<sup>th</sup> and 8<sup>th</sup> St on the west side of the mainlines is situated on the  
58 proposed property line for this transaction. City will remove this building at the city's expense and  
59 BNSF will provide necessary agreements to allow City to perform that removal.

60 BNSF will continue to operate, as BNSF determines is necessary or desirable in its sole business  
61 discretion, on the downtown mainline tracks, maintaining local and regional service.

62 Grantor agrees that the Property is hereby restricted such that the City shall immediately build and,  
63 shall at all times in the future maintain, in good condition, a fence (at least 6-feet tall, located along  
64 the east property line of the land to be transferred.

65 The Grantor also agrees that should any future owner, developer or tenant of any portion of the  
66 Property construct any building or other structure on the property, then the following shall apply:

- 67 • Any such owner, developer or tenant shall be subject to an easement, which must be  
68 permitted, administered and enforced by the City of Sioux Falls, with respect to the  
69 Property, under which the following covenants, conditions and restrictions shall apply:
  - 70 ○ All present or future property owners and tenants, within the Property so  
71 encumbered, shall sign a written acknowledgment stating that such owners and  
72 tenants:

- 73                   ▪ have been notified that Grantee (its successors and assigns) has the right to
- 74                   full railroad and related operations on Grantor's Property; and
- 75                   ▪ waive any and all claims for damages due to the noise, vibration, and/or
- 76                   emissions caused, whether directly or indirectly, by Grantor's operations.
- 77           • The restrictions set forth herein shall be binding upon the heirs, successors and assigns of
- 78           Grantee and shall be covenants running with the land, for so long as Grantor continues to
- 79           operate on Grantor's Property or has not abandoned its rights to operate.

## 80   1.2   PURCHASE PRICE

81   BNSF is considering the option to sell the Sioux Falls yard property to the City for an amount to be  
82   determined. BNSF will provide a description to the City outlining the basis of the calculation.

83   The City requires an appraisal be performed in accordance with the "Uniform Relocation Assistance  
84   and Real Property Acquisition Policies Act of 1970"; the "Uniform Act". Any improvements to  
85   BNSF's facilities above what is considered to be a functional replacement based on current design  
86   standards will not be part of the purchase price and will be the sole responsibility of BNSF.

87   BNSF and the City understand the purchase price must be mutually agreed upon and agree to  
88   negotiate in good faith. If the offer of just compensation by the City falls below the amount BNSF  
89   will accept, the City understands that BNSF reserves the right to terminate this MOU. If the price  
90   determined by BNSF or the offer of just compensation by the City exceeds the remaining amount of  
91   Federal funds, BNSF understands that the City reserves the right to terminate this MOU.

## 92   1.3   ELLIS & EASTERN RIGHTS

93   BNSF will make all commercially reasonable efforts to resolve with Ellis & Eastern (EE) their right  
94   of first refusal on the yard property and provide the City with a letter from EE indicating an  
95   agreement between BNSF and EE that their claim to the land is satisfied and is free to be turned  
96   over to the City. BNSF acknowledges that before BNSF quitclaims any property rights it transfers to  
97   the City, BNSF will have made these efforts to have secured a statement from the EE that the  
98   property is not to be subject to any claim of the EE. BNSF shall disclose to the City any known  
99   encumbrances to the property.

## 100   1.4   LEASEBACK PROVISION

101   BNSF is willing to consider the sale of the Sioux Falls yard property only if the City will lease the  
102   property back to BNSF for a period of up to 2 years to provide time for BNSF to make required  
103   arrangements that account for the loss of the yard property and all abilities that it currently  
104   provides. Such lease shall be incorporated into the purchase price.

# 105   ARTICLE 2: IMPLEMENTATION

## 106   2.1   TIMELINE FOR IMPLEMENTATION

107   The parties intend to enter into the PSA upon completion of negotiations and agree to negotiate in  
108   good faith using commercially reasonable efforts to do so. In the event any target dates in this

109 transaction extend past December 31, 2013 (the "**Final Outside Target Date**"); either BNSF or the  
110 City may terminate all agreements relative to this transaction and have no further obligation to the  
111 other party after the Final Outside Target Date, except to the extent such provisions expressly  
112 survive termination and provided that any such termination does not relieve either party from  
113 liability incurred as a result of any breach of the provisions of Article 3 of this MOU. See Exhibit 2  
114 for a projected timeline of key milestones. The Final Outside Target Date may be adjusted as  
115 mutually agreed by BNSF and the City in writing.

## 116 2.2 GOVERNMENTAL APPROVALS

117 Each party will use good faith efforts to obtain those permits and governmental approvals it is  
118 responsible for obtaining, and will reasonably cooperate with the other party and use good faith  
119 efforts to assist the other party in obtaining those permits and governmental approvals the other  
120 party is responsible for obtaining.

121 If the approval of any governmental agency is required for all or part of the Land Sale, including,  
122 and without limitation, any approval or exemption from approval, of part or all of the Yard  
123 Relocation by the Surface Transportation Board and funding related requirements from South  
124 Dakota DOT and Federal Highway, it is understood and agreed that the obligations of the parties  
125 under this MOU and the PSA will be conditioned upon obtaining any such approvals on terms  
126 acceptable to the parties. Nothing in this MOU or the PSA or any other document specific to this  
127 project shall be deemed a submission by BNSF to the jurisdiction of any state or local body or a  
128 waiver of the preemptive effect of any state or federal law.

## 129 2.3 SERVICE TO SHIPPERS

130 The parties intend that shippers currently serviced by BNSF will not be impacted by this project.

# 131 ARTICLE 3: BINDING OBLIGATIONS

## 132 3.1 NON-BINDING NATURE OF ARTICLES 1 & 2

133 BNSF and the City agree that Articles 1 and 2 of this MOU constitute a statement of the current  
134 status of their negotiations with respect to the Project and do not contain all matters upon which  
135 agreement must be reached in order for the Project to be consummated. Binding commitments  
136 with respect to the Project will result only from execution of the PSA. However, the parties agree to  
137 negotiate in good faith using commercially reasonable efforts to reach agreement on the PSA for the  
138 Project consistent with the terms and conditions set forth above.

## 139 3.2 BINDING NATURE OF ARTICLE 3

140 BNSF and the City agree that the provisions of Article 3 of this MOU are fully binding upon the  
141 execution of this MOU for the Term of the MOU as defined below.

## 142 3.3 TERM

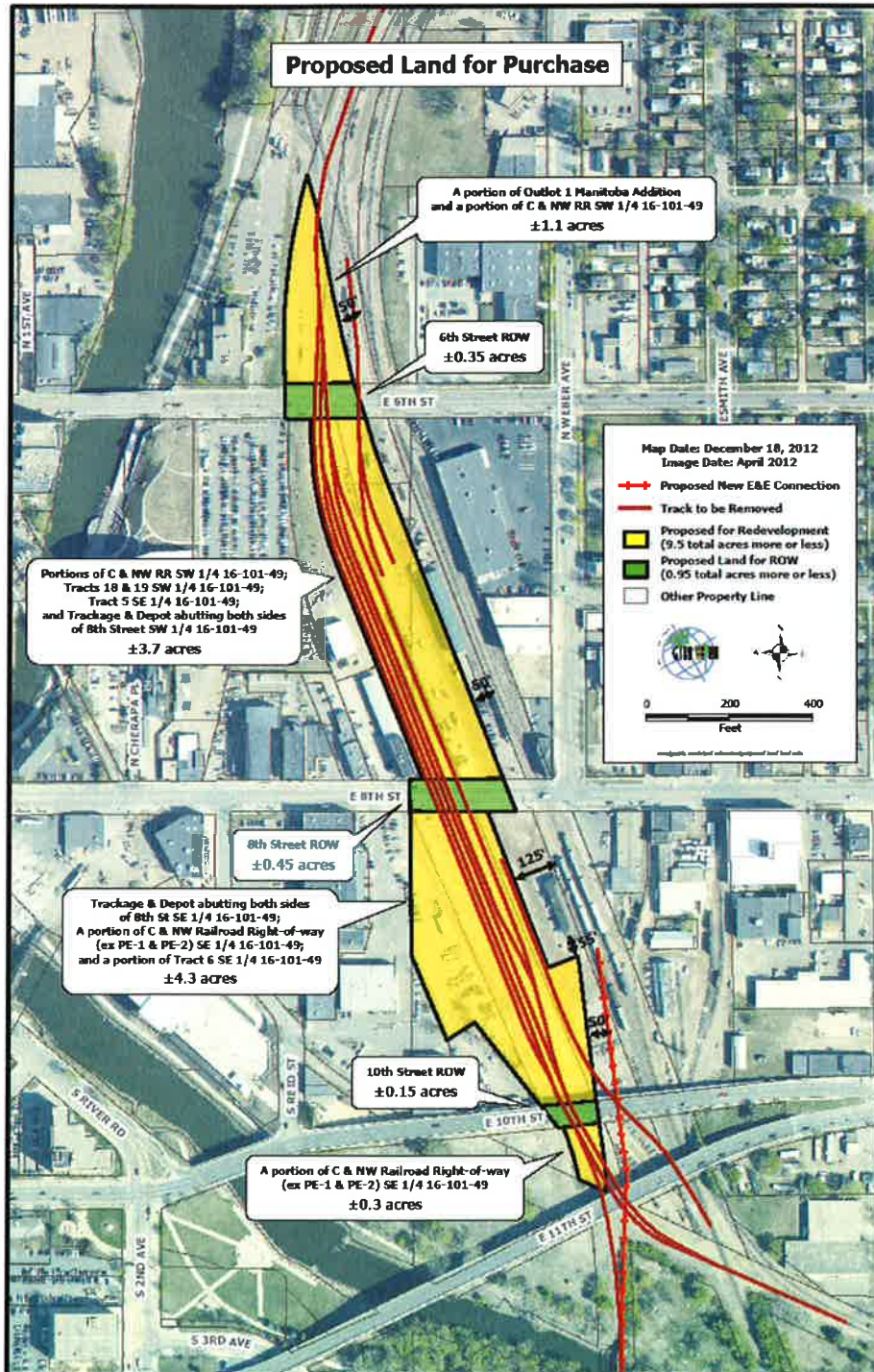
143 The term of this MOU (the "**Term**") will begin upon the date both BNSF and the City have executed  
144 and delivered this MOU, and expires on the date when one of the following occurs:





166 **EXHIBIT 1: CURRENT YARD**

167 The yellow and green highlighted areas on the below map shows an approximate depiction (subject  
 168 to further refinement by BNSF in the final PSA) of the BNSF Sioux Falls Yard property that is being  
 169 proposed to be sold to the City of Sioux Falls. The red line represents an approximate depiction of a  
 170 proposed new connection for the E&E.



172

**Exhibit 2**

173

**Timeline/key milestones**

174

<b>Task</b>	<b>Project completion date</b>
1. E&E preliminary release received	January 31, 2013
2. Draft PSA	March 29, 2013
3. Environmental assessment finalized/Finding of No Significant Impact (FONSI)	June 30, 2013
4. Appraisal ordered	July 31, 2013
5. PSA executed	December 31, 2013

175

Dates are estimates and subject to adjustment as the parties may mutually agree in writing.

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