

# TRUCK ROUTE FEASIBILITY STUDY

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**Prepared for:**

**CITY OF DAVENPORT**

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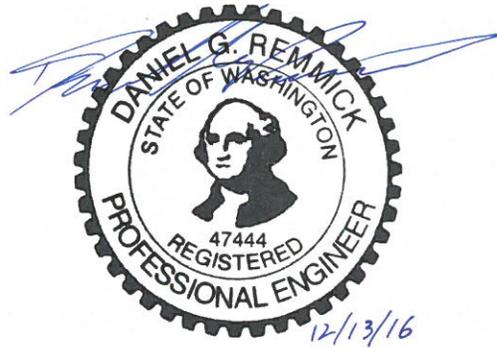


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**December 2016**

# City of Davenport

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**CWEC Project Number 30208.028.01**

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## 1. INTRODUCTION

### A) OVERVIEW

In the City of Davenport, there has been a need for a truck route through the industrial area in the south of town for many years. The area immediately north of the railroad, houses several large grain storage facilities, and other commercial and industrial sites that generate a high volume of truck traffic. The City has designated a truck route along Jefferson Street and an alleyway, informally called Industrial Road, however, the right-of-way (ROW) of this truck route is in question, and the segment between 7<sup>th</sup> Street and 3<sup>rd</sup> Street is unimproved. This section of the City is shown in Figure 1 below.

**Figure 1 – City of Davenport General Truck Route Area**



### B) PURPOSE

This study is intended to look at possible truck route alignments, compare their attributes, and determine feasibility of establishing a truck route in this area. The scope of work includes performing a boundary survey along the current alignment, evaluation of several alignment alternatives, conducting a public meeting to allow for community input, estimating improvement costs for the various alternatives, and providing a recommendation for future improvements.

### C) INTENDED BENEFITS

The primary benefit of developing a truck route is to provide a path for vehicles to access commercial sites along Industrial Road without crossing private property. The improvements will also reduce ongoing maintenance costs to the City that are associated with a gravel road. Additional benefits include providing for smoother traffic flow between State Route 28 and 3rd Street, and diverting truck traffic away from the downtown business core area.

## **D) CURRENT CONDITIONS**

Currently, from Highway 3, trucks access the grain elevators and other commercial points by traveling along Jefferson Street, making a sweeping right turn at 7th Street, then making another sweeping left turn onto the alley, (also referred to herein as Industrial Road). The alley then continues to the east, connecting to 3rd Street. However, over the years, the traveled path has widened and wandered away from the alley. The platted alleyway has a width of only 15 feet, while the gravel road now being used is 25 to 30 feet wide, and only marginally follows the alley.

## **2. RECORD OF SURVEY**

### **A) SURVEYING WORK**

There is little or no monumentation in the area of the alley to indicate property corners. Additionally, because the traveled path varied, it was difficult to even estimate property lines. A survey was required to determine the true position of the City's legal right-of-way (ROW) in the alley. Landtek LLC, a licensed surveying firm, conducted a survey. The survey included researching historical documents, completing calculations, conducting a field survey, installing block corner monuments for the properties along the alley, and filing a Record of Survey with Lincoln County. A copy of the record of survey is provided in Appendix E.

### **B) RESULTS**

The survey had some surprising results. In general, the City's ROW was further south than most people expected. In fact, in several locations, the traveled path is completely outside the ROW, and in two locations, significant structures were found to be on the City's ROW. One such structure is a short concrete retaining wall at a grain elevator loading platform. The other encroachment is consists of a loading ramp and HVAC equipment serving a commercial building.

The survey emphasizes the need for the City to address the truck route, as the roadway that is being used crosses multiple private properties without permission. Any one of these property owners could legally install a fence or other barrier and completely block truck traffic through the area.

### 3. ALIGNMENT ALTERNATIVES

Three possible alignments were considered for the truck route. The roadway will be assumed to be 30 feet wide allowing for one 12-foot travel lane and a 3-foot paved shoulder in each direction. No curbs or sidewalks would be included.

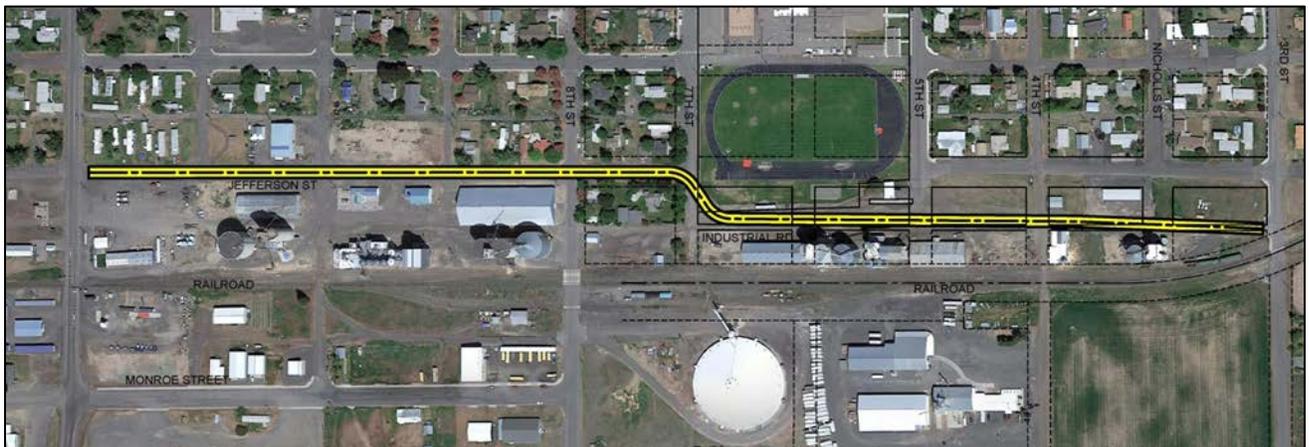
The focus of this level of study is to look at the approximate fit for the proposed road configuration within the existing public right of ways and the possibilities of City right-of-way acquisition, which will be discussed further for each of the alignments.

#### A) ALIGNMENT 1

##### 1. Alignment Description

Alignment 1 generally follows the existing travel path that trucks are currently using. From SR 28, northbound trucks will travel east on Jefferson Street to 7th Street. At 7th, an S-curve will be designed to transition the trucks onto Industrial Road, without completing two full 90-degree turns. The alignment then continues east the full length to 3rd Street, where northbound trucks will make a left turn, and continue north. Southbound traffic from SR 2 and 3rd Street will follow the same alignment in reverse.

**Figure 2 – Truck Route Alignment 1**



This alignment would be the simplest to adopt, as it is the path that is already familiar to most of the truck drivers, and also provides access to all of the commercial facilities along Industrial Road. Alignment 1 is also the straightest path, which makes it the safest and easiest for trucks to navigate.

Jefferson Street is already paved, however, it was not constructed as a truck route, and so improvements to the pavement section may be needed. The encroachments onto the existing alley block a portion of the existing right of way, so that either the encroachments must be

removed, or additional ROW must be acquired to avoid the encroachments. Either way, additional ROW must be acquired to provide the width needed.

Advantages:

- Most familiar path to truck drivers
- Access to all commercial sites along Industrial Road
- Further away from residences on the east end of the project.
- Straightest path available.
- Some properties may be acquired by lot line adjustment

Disadvantages:

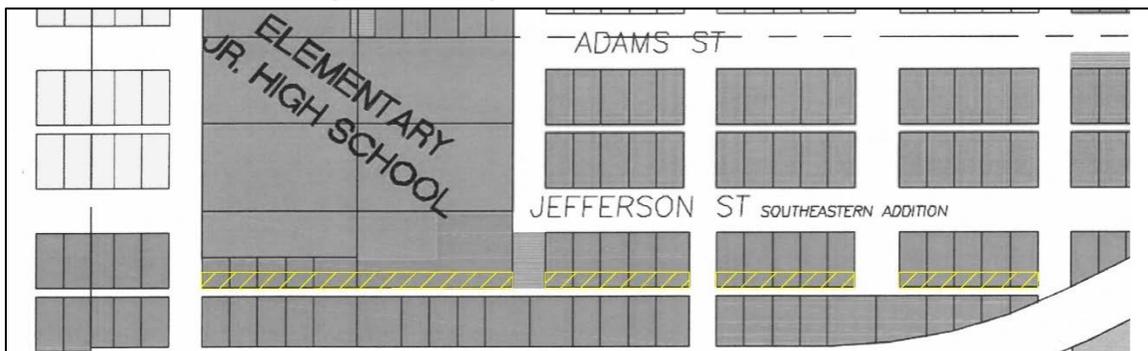
- Right-of-way encroachments restrict road width.
- Close to residences along Jefferson on west end of project.
- Jefferson Street should be improved to handle additional truck traffic.

**II. Row Acquisition**

Alignment 1 requires additional right-of-way for the full length of Industrial Road. Between 7th Street and 3rd Street, the City owns a 15-foot wide alley. To make the truck route, an absolute minimum width of 30 feet is required, but some additional width is generally needed to allow for ditches, drainage structures, signage and roadside clear zones. It is recommended that the City acquire an additional 30 feet of width to make the alley useable as a truck route. The additional width would be acquired from the lots on the north side of the alley, and would generally utilize the property that is currently being driven over with the existing traveled path.

Alignment 1 right-of-way acquisition will require the City to acquire right-of-way from Blocks 15, 16, 17, 18, and 19 of the Southeastern Addition to Davenport. Ownership among these blocks includes the Odessa Union Warehouse, Huwe Properties, and others. Additional information and cost breakdown of the acquisition for each alignment can be found in Section 5.

**Figure 3 – Alignment 1 ROW Acquisition**



For some of the properties, one option for acquiring the property is to adjust the lot lines, rather than reducing the size of the lots. The existing lots meet the conforming size of 100 feet by 50 feet. If 30 feet was removed from the lot length, they would be considered nonconforming lots, and would be ineligible for future development. If the lot lines were adjusted, 30 feet would be

removed from the south end of the lots, and 30 feet would be added to the north end of the lot, thereby keeping the lots the conforming size of 100' by 50'. The 30 feet added to the north side of the lots would come from the Jefferson Street right-of-way. There are some existing utilities within this ROW, so easements would be needed to allow continued City access.

### **III. Improvements**

The first leg of Alignment 1 runs along Jefferson Street, between SR 28 and 7th Street. Although this segment is already paved, it does not have the pavement structure to stand up to long term use as a truck route. The WSDOT design manual recommends a minimum pavement thickness of 5 inches for this type of arterial roadway.

The most cost effective way to bring Jefferson Street up to the required standard is to complete a Full Depth Reclamation (FDR) of the street. The FDR process uses a large grinding machine to grind up the existing asphalt, and mix it with the top layer of gravel under the asphalt. This ground-up asphalt and gravel is then used as the gravel base for the new asphalt pavement. The process minimizes the amount of waste material that must be hauled off, and also minimizes the amount of gravel that must be imported. Depending on conditions, additional treatments can be used to strengthen the subgrade, such as mixing cement into the base. Approximately 1,600 feet of Jefferson Street would be reconstructed with FDR.

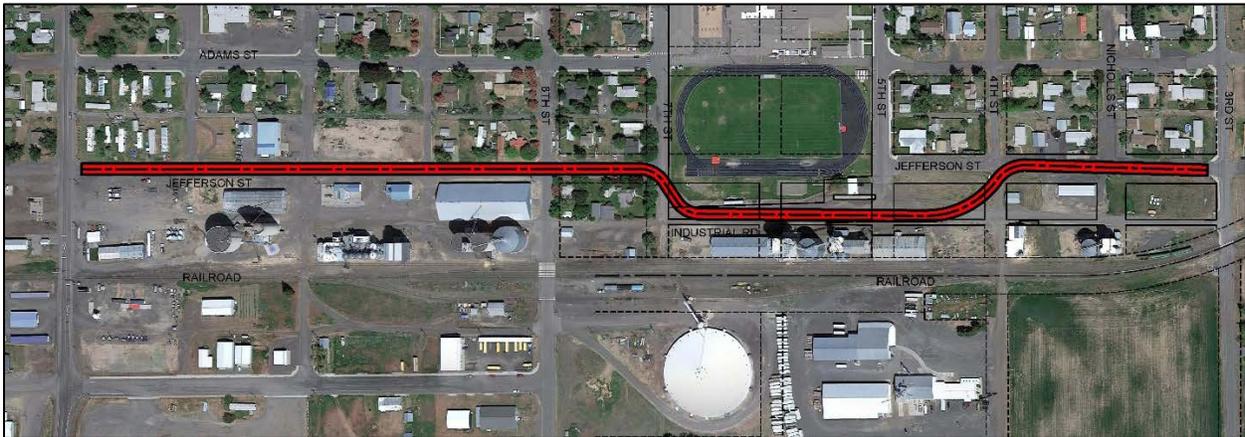
From the intersection of Jefferson and 7th Streets, through to 3rd Street, the new truck route will require new road construction. The existing roadway will be graded to a crown, and shallow ditches will be established to provide drainage. Well graded crushed gravel will be hauled in, compacted, and graded. Finally, a 5-inch asphalt section will be laid in two lifts. This will provide a long-lasting surface that will hold up to the demands of an active truck route. Approximately 1,600 feet of the alley would be built up to truck route standards.

## B) ALIGNMENT 2

### I. Alignment Description

Alignment 2 will follow the same path as Alignment 1 on the west end of the project, but changes at the east end. As in Alignment 1, from SR 28, trucks travel east on Jefferson Street to 7th Street, and at 7th Street an S-curve will be designed to route the trucks onto Industrial Road. The difference in Alignment 2 occurs as the route approaches 4th Street. Near the intersection of 4th Street and Industrial Road, another S-curve will direct traffic north on 4th Street, and then immediately east onto Jefferson Street prior to reaching 3rd Street.

**Figure 4 – Truck Route Alignment 2**



By transitioning traffic back up to Jefferson, several advantages are realized. First is that the significant obstructions that have encroached on the alley would be avoided. The obstructions that block the entire existing 15-foot ROW occur immediately east of 4th Street, so diverting traffic back to Jefferson would avoid this encroachment. Secondly, the number of properties affected by right-of-way encroachment is reduced compared to Alignment 1. Jefferson Street already has a 80-foot ROW, so no additional ROW would be needed east of 4th Street.

Unfortunately, Alignment 2 results in some other concerns. Most significant is that the commercial properties fronting the alley between 3rd Street and 4th Street would not benefit from the improvements. They would still be limited to the existing 15-foot alley ROW. This alignment would also move traffic closer to residences on the north side of Jefferson Street, which would be a nuisance. And finally, the additional curves would make the route more difficult for trucks to navigate.

#### Advantages:

- Avoids encroachments east of 4<sup>th</sup> Street.
- Less ROW acquisition or lot line adjustment required.
- Takes advantage of existing ROW on Jefferson Street

Disadvantages:

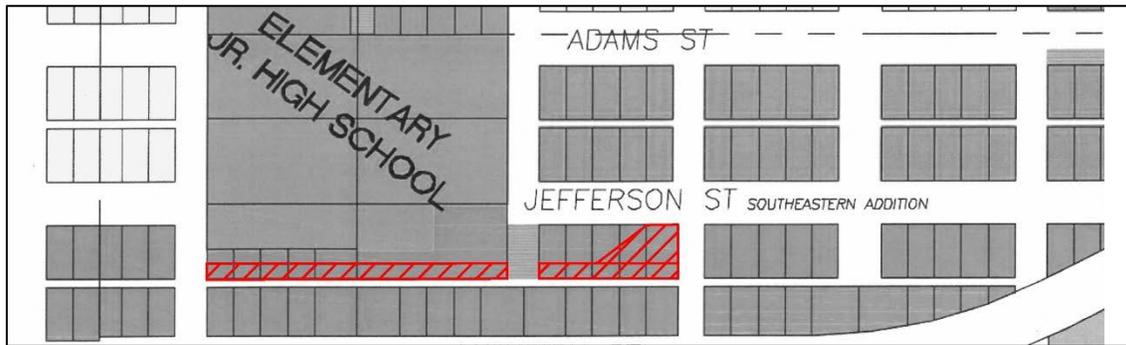
- Bypasses truck delivery sites east of 4<sup>th</sup> Street.
- More curves to negotiate.
- Close to residences along Jefferson on both ends of project.

**II. Row Acquisition**

Alignment 2 requires additional right-of-way for a three-block length of Industrial Road. As discussed in Alignment 1, the City owns the 15-foot wide alley between 7th Street and 3rd Street. It is recommended that the City acquire an additional 30 feet of width to make the alley useable as a truck route. For Alignment 2, this additional ROW is only needed between 7th Street and 4th Street. The properties to the east of 4th Street would not be affected. The additional width would be acquired from the lots on the north side of the alley, and would generally utilize the property that is currently being driven over with the existing traveled path.

Alignment 2 right-of-way acquisition will require the City to acquire right-of-way from Blocks 17, 18, and 19 of the Southeastern Addition to Davenport. Additional information and cost breakdown of the acquisition for each alignment can be found in Section 5.

**Figure 5 – Alignment 2 ROW Acquisition**



**III. Improvements**

As described in Alignment 1, the first leg of Alignment 2 runs along Jefferson Street, between SR 28 and 7th Street. Although this segment is already paved, it does not have the pavement structure to stand up to long term use as a truck route and should be rebuilt to a higher use standard. Approximately 1,600 linear feet of Jefferson Street between SR 28 and 7th Street would be rebuilt with the FDR process.

The second leg of Alignment 2, from the intersection of Jefferson and 7th Streets, along the Industrial Road alley, and through the S-curve at 4th Street to Jefferson Street, the truck route will require new road construction. Construction will include shallow ditches, repairing soft spots, importing and compacting gravel subgrade, and laying a 5-inch asphalt section in two lifts. This second leg of the alignment is approximately 1,070 feet in length.

Finally, the third leg of Alignment 2, extends along Jefferson Street from 4th to 3rd. This segment is already paved, but similar to the first leg on Jefferson, the existing pavement section

is not designed to handle extensive truck traffic. This segment would receive the same FDR treatment and 5-inch overlay as the first leg of Jefferson, for an approximate length of 580 feet.

## C) ALIGNMENT 3

### I. Alignment Description

Alignment 3 differs from the other alignments in that it doesn't utilize Jefferson Street. From SR28, trucks travel east on Monroe to 8th Street. At 8th, they would turn north and cross the railroad tracks. Immediately after the tracks, the path curves to the east, and rejoins Industrial Road at 7th Street. Trucks continue east to 3rd Street, following the alignment of Alternative 1.

**Figure 6 – Truck Route Alignment 3**



This alignment takes advantage of Monroe Street and 8th Street, which are in good condition, and will handle truck traffic without reconstruction. This alignment would also reduce truck traffic on Jefferson Street, reducing the nuisance to residences.

One of the difficulties with Alignment 3 is that a hard corner is located immediately north of the railroad crossing. The combination of the curve and the crossing could cause a congestion point for 2-way traffic. Other disadvantages are similar to Alignment 1 regarding ROW needs and obstructions in the alley. Also, because this route is significantly different than the existing path, many drivers may continue to use the old route on Jefferson.

#### Advantages:

- Monroe Street does not require improvements.
- Lower construction costs.
- Avoids residential areas along Jefferson Street.
- Maintains truck access to commercial points along Industrial Road.

#### Disadvantages:

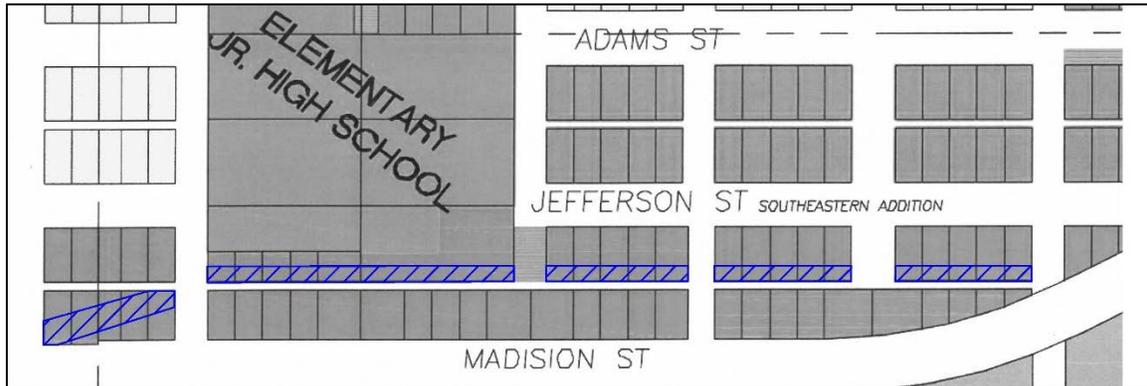
- Possible congestion point at railroad crossing.
- New route may not be used by drivers used to the old route.
- ROW acquisition needs similar to Alignment 1

## II. Row Acquisition

Alignment 3 requires additional right-of-way for the full length of Industrial Road, from 7th Street to 3rd Street, just as required for Alignment 1. In addition, ROW would be needed between 8th Street and 7th Street. Due to the curved nature of this segment, the City would need to acquire nearly all of the property south of the alley, between 7th and 8th. For several lots on the east end of the alignment, ROW could be acquired through lot line adjustments.

Alignment 3 right-of-way acquisition will require the City to acquire right-of-way from Blocks 15, 16, 17, 18, 19, and 20 of the Southeastern Addition to Davenport. Additional information and cost breakdown of the acquisition for each alignment can be found in Section 5.

**Figure 7 – Alignment 3 ROW Acquisition**



## III. Improvements

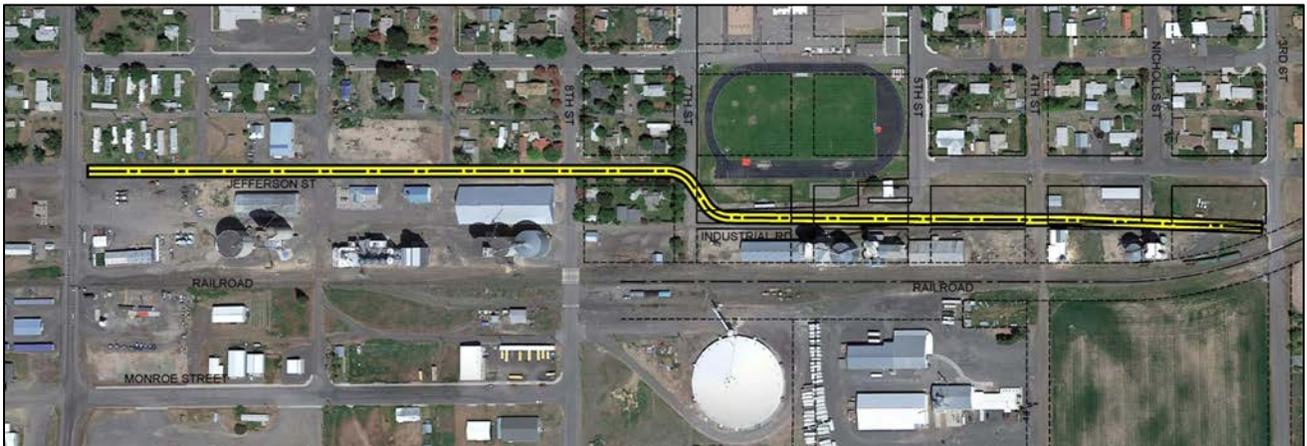
The first leg of Alignment 3 consists of Monroe Street and 8th Street. These roads are adequately constructed to handle truck traffic without additional improvements. Immediately north of the railroad, the alignment crosses unimproved property between 7th and 8th that would require completely new road construction. The remainder of the alignment, between 7th and 3rd, would also require construction as described in Alignment 1. The approximate length of improvements for Alignment 3 is 1,870 feet.

## D) ALTERNATIVE 4: NO ACTION

### I. Alternative Description

A fourth alternative to be considered is the “No Action” alternative. As implied by the name, this alternative assumes that the City would take no action towards developing a truck route. It also assumes that the City would limit maintenance on the path to include only the area within the legal right-of-way. It is expected that truck traffic would generally continue using the path as defined in Alignment 1, utilizing Jefferson Street, the intersection at 7th Street, and continuing on the current path between 7th Street and 3rd Street.

**Figure 8 – Truck Route “No Action” Alternative**



As previously discussed, between 7th Street and 3rd Street, the currently traveled path does not stay within City right-of-way. In fact, most of the traveled path is over private property. The advantages of No Action option would be the reduction of maintenance on the alley as well as the elimination of the need for ROW acquisition and capital costs to complete a true truck route for the City. It is anticipated however, that capital improvement costs could largely be covered by grant funding.

However, there are many disadvantages to this alternative. Most significantly, access to commercial locations along the route could not be guaranteed. The City would no longer endorse the use of the existing alleyway for truck traffic and would not support vehicles using the alleyway. Trucks would use the existing route at their own risk by trespassing onto private property. The City cannot condone the use of the route that passes over private property. The majority of truck traffic, especially during seasonal peaks, is generated by the grain elevator facility between 7th Street and 4th Street. The traveled path in this area crosses property owned by the grain elevator, so it could be assumed that the company will allow trucks to continue crossing its property to access the elevator. However, without a legal easement, the company has no obligation to allow other vehicles to pass through its property, which could restrict access for the other commercial facilities to the east.

The property owners between 4th Street and Nicholas Street have no vested interest in providing access to the commercial locations to their south. In fact, the presence of the current roadway over their property has significantly reduced the amount of the property that is available for use, and is also likely to impact their property value. These property owners could erect a fence or other obstruction around, or on their property at any time, and essentially close off the current roadway.

In addition to interrupting commercial traffic, if the route is closed off by any of the property owners, it would also slow or prevent access for emergency vehicles. Access concerns could also become an issue for the sale or the value of properties currently using the roadway, and could limit future commercial development in the area.

Other concerns with the No Action alternative include the loss of any grant funding to that would make improvements to the roadway, including Jefferson Street. Without improvements, trucks will continue using Jefferson, and will cause accelerated wear on the road surface, because it was not built to handle a high volume of truck traffic.

Advantages:

- No immediate capital/ROW cost to the City.
- Reduced maintenance cost to the City.

Disadvantages:

- Access to commercial locations is not guaranteed
- Various property owners could close off through-traffic at any time
- Potential loss of access for emergency response
- Accelerated wear on Jefferson Street
- Travel path will degrade without maintenance
- Limits future development due to access
- Loss of grant funding for improvements

## **II. Row Acquisition**

The No Action Alternative assumes no property or ROW would be acquired by the City.

## **III. Improvements**

This alternative assumes no capital improvements will be made to the alignment.

#### 4. TURNING RADIUS CONSIDERATIONS

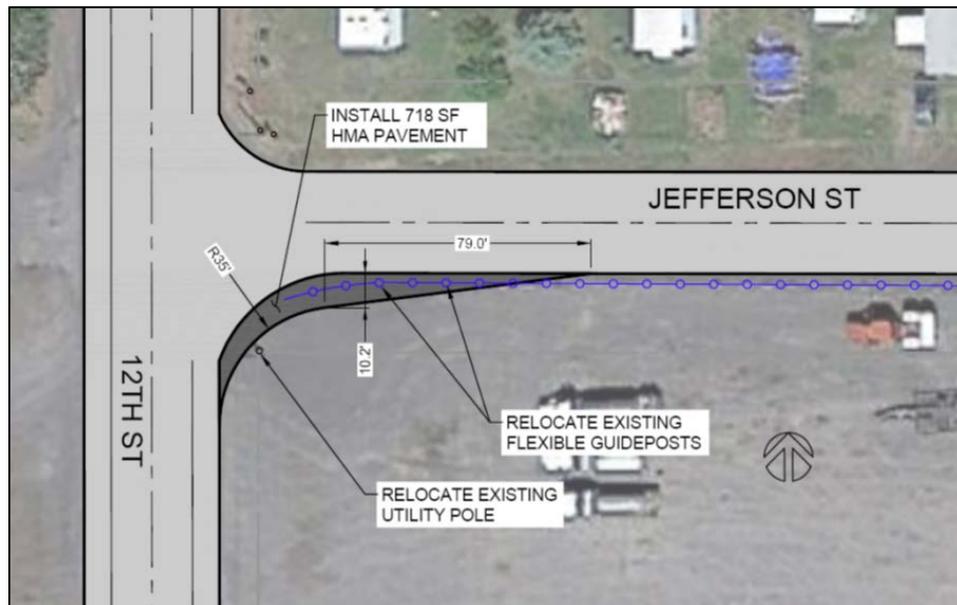
Beyond the basic alignment and asphalt structure, there are additional design aspects that should be considered. One such consideration is the turning radius that is required for trucks to travel a designated truck route. For the purpose of this feasibility study, an intermediate semitrailer (WB-50) design vehicle was selected to evaluate turning movements at each of the possible intersections. The WB-50 is equivalent to a conventional semi-tractor pulling a 42.5-foot trailer, having an overall length of 55 feet, and a wheel base of 50 feet.

Each alignment option considered has multiple intersections which have been modeled to show how the design vehicle can be accommodated by each of the alignments. Information regarding necessary intersection modifications and construction considerations is provided below for each alignment.

##### A) ALIGNMENT 1

##### Intersection of 12<sup>th</sup> & Jefferson

The southeast corner requires a right-turn curve-taper. In addition, in order to make room for the curve-taper, an existing utility pole and flexible guideposts should be removed and relocated.



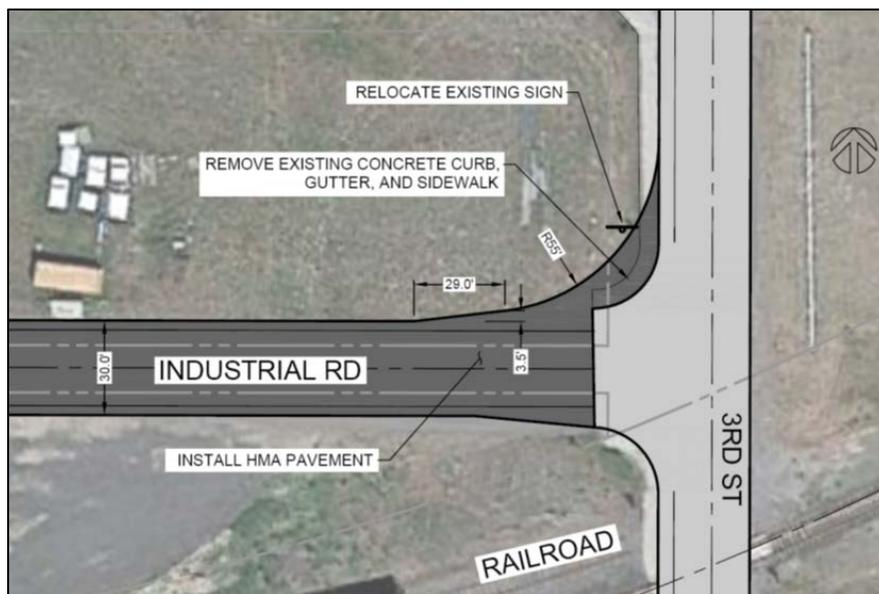
### Intersection of Jefferson & 7th

The southwest corner requires reconstruction. In order to make room for the new curve, an existing fire hydrant and stop sign must be relocated. In addition, a tree within the right-of-way may need to be removed.



### Intersection of Industrial & 3rd

The northwest corner requires a larger edge of pavement radius. To make room for the additional pavement, a portion of existing curb, gutter, and sidewalk may need to be removed. Also, a speed limit/truck route sign must be relocated.



## B) ALIGNMENT 2

### S-Curve from Industrial to Jefferson

An existing fire hydrant and railroad sign may need to be relocated. The northwest corner of Industrial and 4th and the southeast corner of 4th and Jefferson require right-turn curve-tapers.



### Intersection of 3rd & Jefferson

The northwest corner requires a larger edge of pavement radius. To make room for the additional pavement, a portion of existing curb, gutter, and sidewalk is to be removed. Also, a street sign must be relocated.



### C) ALIGNMENT 3

#### Intersection of 8th & Industrial

An existing utility pole and guy wire anchor must be relocated. The southeast corner of 8th and Industrial requires a right-turn curve-taper.

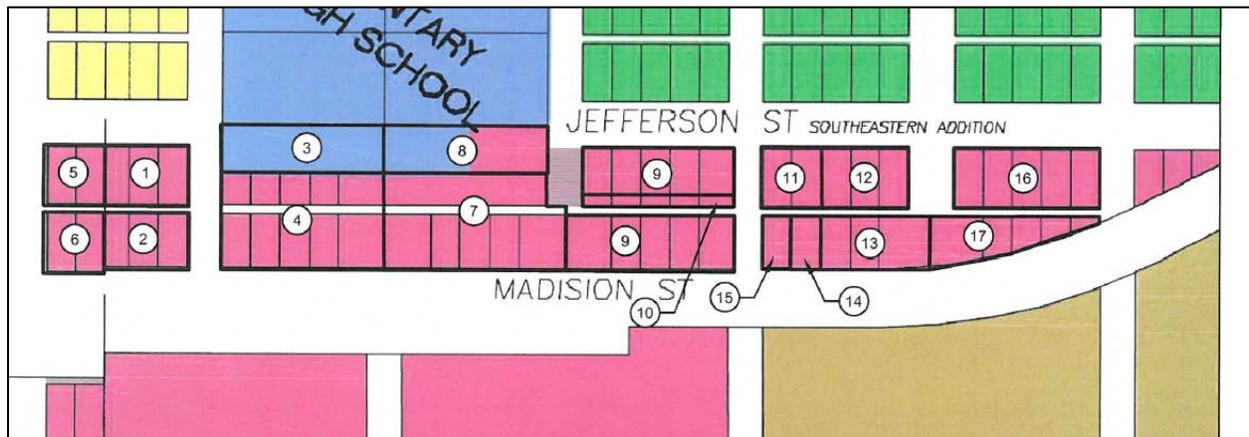


Turning path diagrams have been completed and are located in Appendix F. These diagrams show the path of the design vehicle when negotiating the intersection.

## 5. RIGHT-OF-WAY ACQUISITION SUMMARY

Each of the potential alignments considered will require the City to acquire some right-of-way from land owners in the vicinity. The parcel map shown in Figure 8, below is outlined by property owner. Each of the numbered areas are owned by separate owners. These numbers correspond to the property owner list in Table 1. The City will not need to acquire the entire property area from the owners, but merely a portion of it for right-of-way purposes. Table 1 shows the area (in square feet) of property needed from each property owner, and the approximate value of that property based on assessed values.

**Figure 8 – ROW Acquisition Summary**



The property acquisition required for Alignment 1 affects four separate land owners. The City also owns a narrow 5-foot wide parcel, labeled as #10. For some properties, the value of the land may be less important, as the additional width could be obtained through lot line adjustments, rather than outright acquisition.

TABLE 1: ALIGNMENT 1, ESTIMATED PROPERTY VALUES				
PROPERTY LABEL #	OWNER	AREA OF PROPERTY NEEDED	% OF PROPERTY NEEDED	LAND VALUE
4	Odessa Union Warehouse Co	9884	25%	\$ 1,552.78
3	Davenport School District	1685	12%	\$ -
7	Odessa Union Warehouse Co	8530	22%	\$ 1,738.35
9	Odessa Union Warehouse Co	6947	26%	\$ 2,304.15
10	City of Davenport	1336	100%	\$ -
11	Janett, Chris C	2803	30%	\$ 2,425.26
12	Huwe Properties LLC	4707	30%	\$ 3,640.14
16	Odessa Union Warehouse Co	7550	30%	\$ 6,097.31
<b>TOTAL VALUE</b>				<b>\$17,758.00</b>

Alignment 2 would affect far fewer property owners. In fact, nearly all of the property is owned by the Odessa Union Warehouse Company.

<b>TABLE 2: ALIGNMENT 2, ESTIMATED PROPERTY VALUES</b>				
PROPERTY LABEL #	OWNER	AREA OF PROPERTY NEEDED	% OF PROPERTY NEEDED	LAND VALUE
4	Odessa Union Warehouse Co	9884	25%	\$ 1,552.78
3	Davenport School District	1685	12%	\$ -
7	Odessa Union Warehouse Co	8530	22%	\$ 1,738.35
9	Odessa Union Warehouse Co	12256	47%	\$ 4,065.02
10	City of Davenport	1336	100%	\$ -
<b>TOTAL VALUE</b>				<b>\$ 7,356.15</b>

Alignment 3 impacts four separate land owners. Due to the curved path of Alignment 3, an existing structure on property 6 may be impacted, which would result in greater costs for acquisition.

<b>TABLE 3: ALIGNMENT 3, ESTIMATED PROPERTY VALUES</b>				
PROPERTY LABEL #	OWNER	AREA OF PROPERTY NEEDED	% OF PROPERTY NEEDED	LAND VALUE
6	Davenport Union Warehouse Co	3004	35%	\$ 883.53
2	Davenport Union Warehouse Co	3795	29%	\$ 1,749.12
4	Odessa Union Warehouse Co	8441	22%	\$ 1,326.09
7	Odessa Union Warehouse Co	8530	22%	\$ 1,738.35
9	Odessa Union Warehouse Co	6947	26%	\$ 2,304.15
10	City of Davenport	1336	100%	\$ -
11	Janett, Chris C	2803	30%	\$ 2,425.26
12	Huwe Properties LLC	4707	30%	\$ 3,640.14
16	Odessa Union Warehouse Co	7550	30%	\$ 6,097.31
<b>TOTAL VALUE</b>				<b>\$14,066.63</b>

A larger parcel map and a detailed breakdown of the property values is found in Appendix B.

## 6. COST SUMMARY

A cost estimate for the construction of each alignment has been prepared. The estimates were prepared assuming that the truck route will be constructed with a 5-inch asphalt concrete pavement section, per current WSDOT design standards. In areas that are already paved, such as Jefferson Street, it is assumed that the project will utilize Full Depth Reclamation (FDR), which recycles the existing pavement as base material, and reduces the cost compared to traditional construction. As this area is industrial in nature, the costs do not include curbing and sidewalks.

Table 1, below, summarizes the total estimated construction costs for each of the alignments. Detailed cost estimates are located in Appendix C.

Alignment 1	\$752,100
Alignment 2	\$755,700
Alignment 3	\$481,300

## 7. PUBLIC INVOLVEMENT

A public meeting was held on July 27, 2016 at Davenport City Hall to provide an opportunity for comment on the alignment alternatives. Information on the public meeting is provided in Appendix D. Notification for the meeting was published in the Davenport Times ahead of the meeting. Property owners and other stakeholders were also given special notice of the meeting. The meeting was well attended by concerned citizens and users of the current alley way. City Council members on the City’s Street Committee and the Mayor also attended the meeting.

The meeting began with a brief presentation by Dan Remmick, P.E. of Century West Engineering to introduce the project, and explain the three alignments including their advantages and disadvantages. Following the presentation, questions and comments were taken from the audience. Many of the questions and comments were similar in nature, and so the comments are summarized below, along with the general response provided at the meeting.

**Question:** The road has been working fine for decades. Why does anything need to be done?

**Response:** Trucks and other vehicles using the current road between 7<sup>th</sup> Street and 3<sup>rd</sup> Street are driving on private property. The property owners could block the road at any time with a fence or other structure and block all traffic.

**Question:** Why does the road need to be paved?

**Response:** For the same reason any other road is improved. The paved road reduces dust, eliminates washboard and potholes, and does not turn to mud in the spring.

Maintenance costs are reduced because the road surface does not need to be regraded and graded several times a year.

**Question:** Pavement causes more wear on truck tires than gravel. Does the road need to be paved?

**Response:** As with all improved roads, the paved road surface is considered more durable and less maintenance than a gravel road. While we are not trying to cause more wear on tires, the difference is probably not really noticeable.

**Question:** Are you sure the property corners are correct?

**Response:** The survey was completed by a Professional Licensed Surveyor. He thoroughly researched county records and used existing monumentation in the field to determine the true positions of the block corners. The results of the survey are recorded with Lincoln County as a Record of Survey.

**Question:** How will the City go about acquiring the necessary right-of-way?

**Response:** The City is specifically not discussing methods of property acquisition at this time. This meeting is to discuss the alignment alternatives, and to allow an opportunity for public comment.

**Question:** How will the improvements be paid for?

**Response:** The City will pursue funding opportunities, including TIB grants. We have scheduled a meeting with the TIB Regional Engineer to discuss funding opportunities.

Overall, there was mixed reaction in the audience ranging from resistance to do anything, to support for routing trucks away from the downtown area. Regardless of support for the project, there was relative agreement that Alignment 1 was the best of the alternatives presented.

## 8. SUMMARY AND ALIGNMENT RECOMMENDATION

A high volume of grain trucks and other commercial vehicles pass through the south end of Davenport, between State Route 28, and 3rd Street. The traveled path that has been used for decades is not on City right-of-way, and the alleyway which the City does own has been encroached upon to the point that the full width is obstructed in some locations. A designated truck route with adequate right-of-way, and pavement improvements would facilitate truck movements through the City and preserve vital access for commercial properties, while reducing truck traffic through the downtown area.

Three potential alignments have been considered for the new truck route. Alignment 1 follows the general path that is currently being used by trucks, and from SR 28 moves east along Jefferson Street to an S-curve at 7th Street, and then parallels the alley (Industrial Road) to the east, ending at 3rd Street. Alignment 2 follows along the same route through Jefferson, 7th, and Industrial Road, but at 4th Street, the alignment goes through another S-curve to transition back to Jefferson Street, and continues on Jefferson to 3rd Street. The third alignment follows Monroe Street to the east, then turns north at 8th Street to cross the railroad tracks. After the tracks, the alignment turns northeast on a path that takes traffic onto Industrial Road, and then continues east and follows the same path as Alignment 1 until reaching 3rd Street.

All of the alternatives evaluated as part of this study are feasible, and all have advantages and disadvantages. After considering costs, useability, property acquisition, and public comments, it is recommended that Alignment 1 be pursued for development as an official truck route.

**APPENDIX A**  
**ALIGNMENT MAPS**



11/20/16 Project: Davenport Truck Route Feasibility Study Drawing: 0228.01.dwg

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NO.	DATE	BY	APPR	REVISIONS

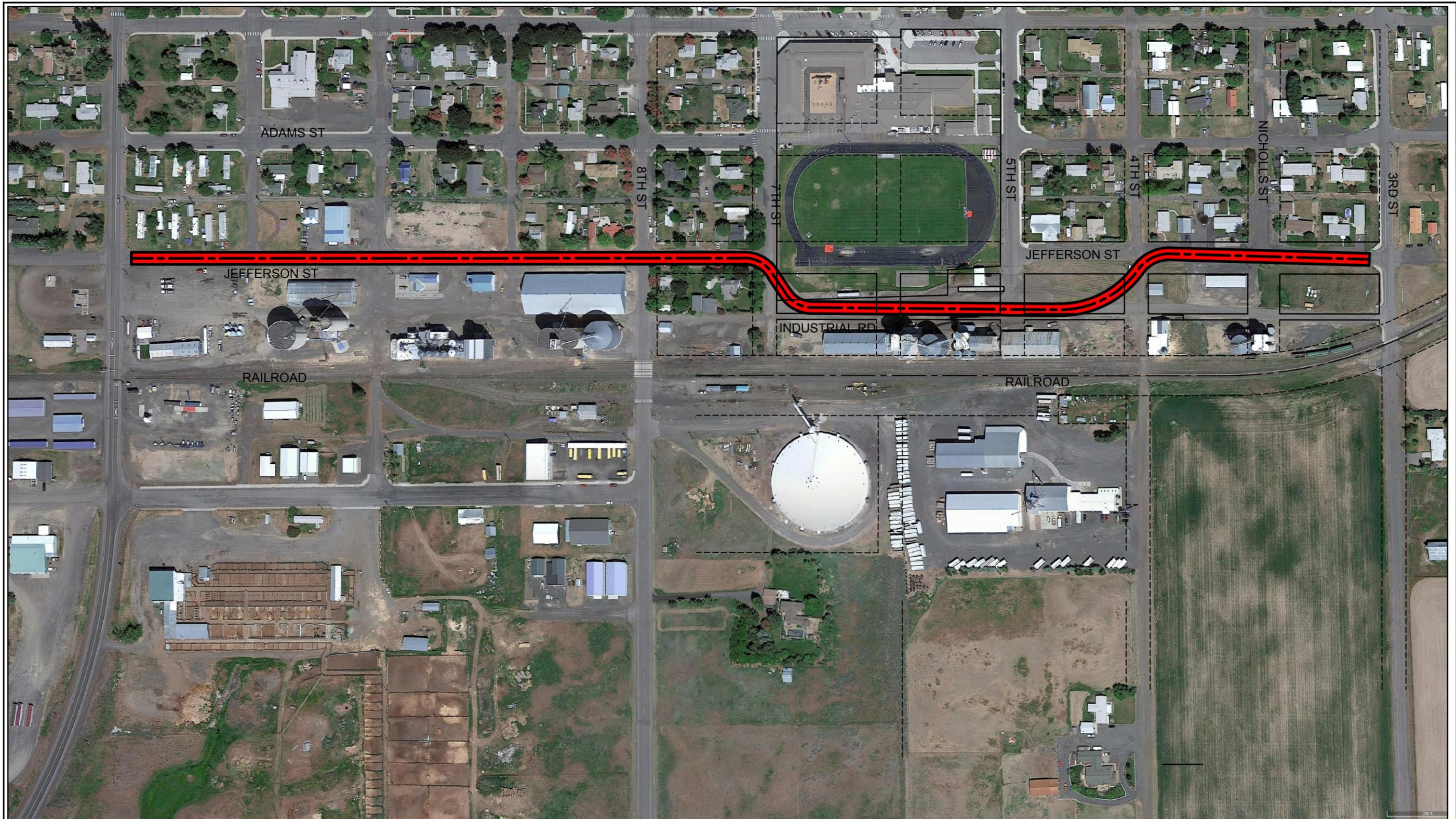
**CENTURY WEST ENGINEERING**  
 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99037  
 509.826.3070  
 509.826.3366 FAX

DATE: JUNE 2016      PROJECT NO.: 30208.028.01

DESIGNED BY: DGR  
 DRAWN BY: NDN  
 CHECKED BY: DGR  
 SCALE: NTS

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 ALIGNMENT 1

DRAWING NO. 1  
 SHEET NO. 1 OF 3



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 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99037  
 509.826.3070  
 509.826.3366 FAX

DATE: JUNE 2016      PROJECT NO.: 30208.028.01

DESIGNED BY: DGR  
 DRAWN BY: NDN  
 CHECKED BY: DGR  
 SCALE: NTS

CITY OF DAVENPORT  
 TRUCK FEASIBILITY STUDY  
 ALIGNMENT 2

DRAWING NO. 2  
 SHEET NO. 2 OF 3



11/20/16 Project: Davenport Truck Feasibility Study - Alignment 3.dwg  
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NO.	DATE	BY	APPR	REVISIONS


**CENTURY WEST ENGINEERING**  
 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99036  
 509.826.3070  
 509.826.3366 FAX

DATE: JUNE 2016  
 PROJECT NO.: 30208.028.01

DESIGNED BY: DGR  
 DRAWN BY: NDN  
 CHECKED BY: DGR  
 SCALE: NTS

CITY OF DAVENPORT  
 TRUCK FEASIBILITY STUDY  
 ALIGNMENT 3

DRAWING NO. 3  
 SHEET NO. 3 OF 3

**APPENDIX B**  
**PROPERTY ACQUISITION**

Estimated Property Values								
Lot # on Property Acquisition Map	Parcel Number	Owner	Land Cost	Improvement Cost	Total Area of Property Owned	Area of Property Needed (Alignment 1)	Area of Property Needed (Alignment 2)	Area of Property Needed (Alignment 3)
5	0303036001030	Palmer, Martin S - 719 Jefferson St	12140	28900	10787	0	0	0
6	0303036002000	Davenport Union Warehouse Co	2500	1170	8500	0	0	3004
1	0307020001000	Hannemann, Leslie J - 1302 7th St	23960	87040	16570	0	0	0
2	0307020002000	Davenport Union Warehouse Co	6000	1000	13018	0	0	3795
4	0307019001000	Odessa Union Warehouse Co	6090	26000	38765	9884	9884	8441
3	0307019001500	Davenport School District	EXEMPT		13870	1685	1685	0
7	0307018001000	Odessa Union Warehouse Co	7900	160000	38765	8530	8530	8530
8	0307018001500	Davenport School District	EXEMPT		13870	0	0	0
9	0307017001000	Odessa Union Warehouse Co	8740	8000	26351	6947	12256	6947
10	0307017001500	City of Davenport	EXEMPT		1336	1336	1336	1336
11	0307016001000	Janett, Chris C	8000	8000	9246	2803	0	2803
12	0307016002010	Huwe Properties LLC	12000	30800	15517	4707	0	4707
13	0307016003111	Odessa Union Warehouse Co	5000	0	17380	0	0	0
14	0307016003120	Doohan, Maura A - 1305 4th St	3500	0	3903	0	0	0
15	0307016004100	Doohan, Maura A - 1305 4th St	4000	62850	3903	0	0	0
16	0307015001000	Odessa Union Warehouse Co	20000	0	24765	7550	0	7550
17	0307015002000	Odessa Union Warehouse Co	2180	46000	16745	0	0	0

**Property Acquisition Value By Alignment**  
**ALIGNMENT 1**

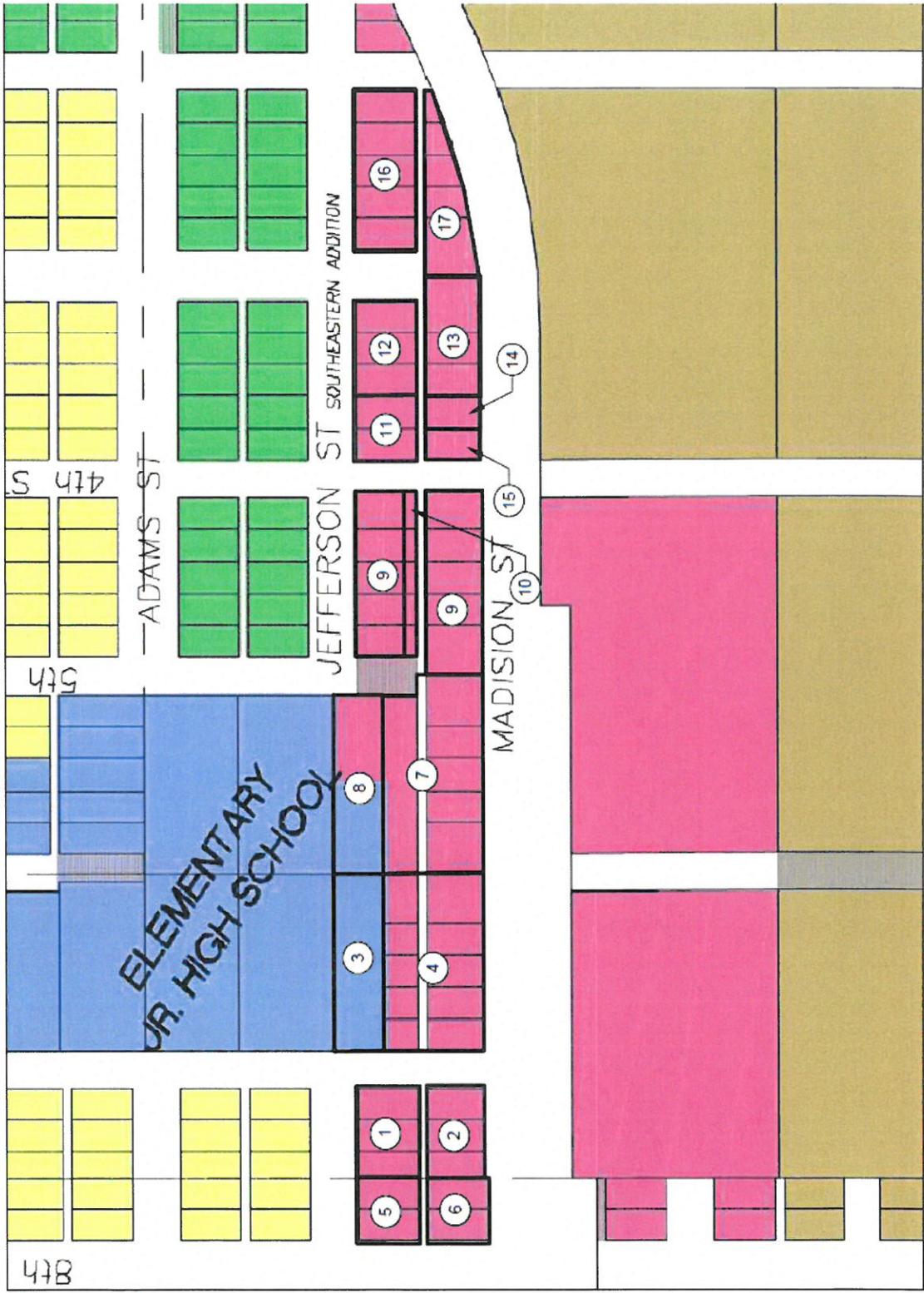
Lot # on Property Acquisition Map	Parcel Number	Owner	Land Cost	Improvement Cost	Total Area of Property Owned	Area of Property Needed	% of Property Needed	Cost	TOTAL VALUE
4	0307019001000	Odessa Union Warehouse Co	6090	26000	38765	9884	25%	\$ 1,552.78	
3	0307019001500	Davenport School District	EXEMPT		13870	1685	12%	\$ -	
7	0307018001000	Odessa Union Warehouse Co	7900	160000	38765	8530	22%	\$ 1,738.35	
9	0307017001000	Odessa Union Warehouse Co	8740	8000	26351	6947	26%	\$ 2,304.15	
10	0307017001500	City of Davenport	EXEMPT		1336	1336	100%	\$ -	<b>\$ 17,758.00</b>
11	0307016001000	Janett, Chris C	8000	8000	9246	2803	30%	\$ 2,425.26	
12	0307016002010	Huwe Properties LLC	12000	30800	15517	4707	30%	\$ 3,640.14	
16	0307015001000	Odessa Union Warehouse Co	20000	0	24765	7550	30%	\$ 6,097.31	

**ALIGNMENT 2**

Lot # on Property Acquisition Map	Parcel Number	Owner	Land Cost	Improvement Cost	Total Area of Property Owned	Area of Property Needed	% of Property Needed	Cost	TOTAL VALUE
4	0307019001000	Odessa Union Warehouse Co	6090	26000	38765	9884	25%	\$ 1,552.78	
3	0307019001500	Davenport School District		EXEMPT	13870	1685	12%	\$ -	
7	0307018001000	Odessa Union Warehouse Co	7900	160000	38765	8530	22%	\$ 1,738.35	<b>\$ 7,356.15</b>
9	0307017001000	Odessa Union Warehouse Co	8740	8000	26351	12256	47%	\$ 4,065.02	
10	0307017001500	City of Davenport		EXEMPT	1336	1336	100%	\$ -	

**ALIGNMENT 3**

Lot # on Property Acquisition Map	Parcel Number	Owner	Land Cost	Improvement Cost	Total Area of Property Owned	Area of Property Needed	% of Property Needed	Cost	TOTAL VALUE
6	0303036002000	Davenport Union Warehouse Co	2500	1170	8500	3004	35%	\$ 883.53	
2	0307020002000	Davenport Union Warehouse Co	6000	1000	13018	3795	29%	\$ 1,749.12	
4	0307019001000	Odessa Union Warehouse Co	6090	26000	38765	8441	22%	\$ 1,326.09	
7	0307018001000	Odessa Union Warehouse Co	7900	160000	38765	8530	22%	\$ 1,738.35	<b>\$ 14,066.63</b>
9	0307017001000	Odessa Union Warehouse Co	8740	8000	26351	6947	26%	\$ 2,304.15	
10	0307017001500	City of Davenport		EXEMPT	1336	1336	100%	\$ -	
11	0307016001000	Janett, Chris C	8000	8000	9246	2803	30%	\$ 2,425.26	
12	0307016002010	Huwe Properties LLC	12000	30800	15517	4707	30%	\$ 3,640.14	
16	0307015001000	Odessa Union Warehouse Co	20000	0	24765	7550	30%	\$ 6,097.31	



**APPENDIX C**  
**COST ESTIMATES**

**City of Davenport: Truck Route Feasibility Project**

Project Name: City of Davenport  
Truck Route Feasibility Study - Alignment 1 w/ Jefferson FDR

Prepared By: Century West Engineering Corp.  
Preparation Date: October 10, 2016

ITEM #	ITEM DESCRIPTION	UNIT OF MEASURE	PLANNED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED ITEM PRICE
1	Mobilization	LS	1	\$ 54,000.00	\$ 54,000
2	Project Temporary Traffic Control	LS	1	\$ 10,000.00	\$ 10,000
3	Excavation Existing Surface	CY	600	\$ 25.00	\$ 15,000
4	FDR Excavation	CY	300	\$ 30.00	\$ 9,000
5	Pulverization	SY	5,400	\$ 3.00	\$ 16,200
6	Crushed Surfacing Top Course	TON	2,700	\$ 30.00	\$ 81,000
7	HMA, Class 1/2" PG 64-28, 5-inch Depth	TON	3,150	\$ 90.00	\$ 283,500
8	Erosion & Sediment Control	LS	1	\$ 10,000.00	\$ 10,000
9	Paint Lines	LF	9,600	\$ 1.10	\$ 10,560
10	Roadway Construction Surveying	LS	1	\$ 12,000.00	\$ 12,000
11					\$ -
12					\$ -
13					\$ -
14					\$ -
15					\$ -
16					\$ -
17					\$ -
18					\$ -
19					
20					
21					

<b>Sub-Total Base Amount</b>	<b>\$ 501,260</b>
<b>Contingency (20%)</b>	<b>\$ 100,252</b>
<b>Sub-Total with Contingency</b>	<b>\$ 601,512</b>
<b>Sales Tax 8.6%, Included in Unit Pricing</b>	<b>\$ -</b>
<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 601,600</b>
Engineering Design	\$ 72,200
Construction Management (less Const Survey)	\$ 78,300
<b>TOTAL ESTIMATED COST</b>	<b>\$ 752,100</b>

**City of Davenport: Truck Route Feasibility Project**

Project Name: City of Davenport  
Truck Route Feasibility Study - Alignment 2 w/ Jefferson FDR

Prepared By: Century West Engineering Corp.  
Preparation Date: October 10, 2016

ITEM #	ITEM DESCRIPTION	UNIT OF MEASURE	PLANNED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED ITEM PRICE
1	Mobilization	LS	1	\$ 54,000.00	\$ 54,000
2	Project Temporary Traffic Control	LS	1	\$ 10,000.00	\$ 10,000
3	Excavation Existing Surface	CY	400	\$ 25.00	\$ 10,000
4	FDR Excavation	CY	400	\$ 30.00	\$ 12,000
5	Pulverization	SY	7,300	\$ 3.00	\$ 21,900
6	Crushed Surfacing Top Course	TON	2,500	\$ 30.00	\$ 75,000
7	HMA, Class 1/2" PG 64-28, 5-inch Depth	TON	3,200	\$ 90.00	\$ 288,000
8	Erosion & Sediment Control	LS	1	\$ 10,000.00	\$ 10,000
9	Paint Lines	LF	9,750	\$ 1.10	\$ 10,725
10	Roadway Construction Surveying	LS	1	\$ 12,000.00	\$ 12,000
11					\$ -
12					\$ -
13					\$ -
14					\$ -
15					\$ -
16					\$ -
17					\$ -
18					\$ -
19					
20					
21					

<b>Sub-Total Base Amount</b>	<b>\$ 503,625</b>
<b>Contingency (20%)</b>	<b>\$ 100,725</b>
<b>Sub-Total with Contingency</b>	<b>\$ 604,350</b>
<b>Sales Tax 8.6%, Included in Unit Pricing</b>	<b>\$ -</b>
<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 604,400</b>
Engineering Design	\$ 72,600
Construction Management (less Const Survey)	\$ 78,700
<b>TOTAL ESTIMATED COST</b>	<b>\$ 755,700</b>

**City of Davenport: Truck Route Feasibility Project**

Project Name: City of Davenport  
Truck Route Feasibility Study - Alignment 3

Prepared By: Century West Engineering Corp.  
Preparation Date: October 10, 2016

ITEM #	ITEM DESCRIPTION	UNIT OF MEASURE	PLANNED QUANTITY	ESTIMATED UNIT PRICE	ESTIMATED ITEM PRICE
1	Mobilization	LS	1	\$ 38,000.00	\$ 38,000
2	Project Temporary Traffic Control	LS	1	\$ 10,000.00	\$ 10,000
3	Excavation Existing Surface	CY	700	\$ 25.00	\$ 17,500
4	FDR Excavation	CY	0	\$ 30.00	\$ -
5	Pulverization	SY	0	\$ 3.00	\$ -
6	Crushed Surfacing Top Course	TON	2,200	\$ 30.00	\$ 66,000
7	HMA, Class 1/2" PG 64-28, 5-inch Depth	TON	1,850	\$ 90.00	\$ 166,500
8	Erosion & Sediment Control	LS	1	\$ 8,000.00	\$ 8,000
9	Paint Lines	LF	5,610	\$ 1.10	\$ 6,171
10	Roadway Construction Surveying	LS	1	\$ 10,000.00	\$ 10,000
11					\$ -
12					\$ -
13					\$ -
14					\$ -
15					\$ -
16					\$ -
17					\$ -
18					\$ -
19					
20					
21					

<b>Sub-Total Base Amount</b>	<b>\$ 322,171</b>
<b>Contingency (20%)</b>	<b>\$ 64,434</b>
<b>Sub-Total with Contingency</b>	<b>\$ 386,605</b>
<b>Sales Tax 8.6%, Included in Unit Pricing</b>	<b>\$ -</b>
<b>TOTAL CONSTRUCTION COST</b>	<b>\$ 386,700</b>
Engineering Design	\$ 46,500
Construction Management (less Const Survey)	\$ 48,100
<b>TOTAL ESTIMATED COST</b>	<b>\$ 481,300</b>

**APPENDIX D**  
**PUBLIC MEETING**

# Public Meeting Sign-In

City of Davenport

## Truck Route Feasibility Study

Public Meeting of July 27, 2016; 6:00 PM

Davenport City Hall

Name	Address	Phone
	Box 895 Davenport WA	509-721-1101
Gene Johnson	312 Jefferson St Davenport	509-725-6561
Bob Snyder	318 Jefferson St. Davenport	509-725-0700
Mark Smith (Davenport Timur)	P.O. Box 66 Davenport	725-0101
Keith Bailey	P.O. Box 828 Davenport, WA	721-0650
Margie Hall	P.O. Box 1338 Davenport WA 99122	
GARRY ROSMAN	32529 LIEVRE RN DAVENPORT WA 99122	235-725-0086 721-
Maura Doshan	PO BOX 928 Davenport	725 6211
Marcia Smith	PO Box 1037, Davenport	725-7840

(Over)

# CITY OF DAVENPORT

## TRUCK ROUTE FEASIBILITY STUDY

**PUBLIC MEETING: JULY 27, 2016; 6:00 PM**

### **Background:**

Trucks have long used Industrial Drive to access grain elevators and other facilities along the southern edge of the City. Industrial Drive is actually an alley way, and is only 15' in width. Over the years, the travel path has wandered away from the right-of-way, and other properties have encroached onto the City right-of-way.

### **Purpose:**

The purpose of this study is to determine the existing boundaries of the City's right-of-way, and investigate the feasibility of developing a truck route, which would include widening and paving the route.

### **Existing Right-of-Way:**

Surveyors conducted a survey to monument corners for the blocks on the south side of Jefferson Street, between 3<sup>rd</sup> Street and 7<sup>th</sup> Street. The survey also recorded the location of the existing travel path, existing buildings and other structures along the path. The results of the survey show that the existing gravel road does not generally follow within the existing right-of-way. It is also shown that several structures encroach well into the City's right-of-way.

### **Alternative Development:**

All proposed routes approximately parallel Industrial Road, and provide a path from SR 28 to 3<sup>rd</sup> Street. All of the alternatives will require the City to acquire some right-of-way.

**Alternative 1:** Alternative 1 basically follows the existing travel path that trucks are currently using. From SR 28, trucks travel east on Jefferson to 7<sup>th</sup> Street. At 7<sup>th</sup>, turn south, and then immediately turn east on Industrial Road. Trucks continue east to 3<sup>rd</sup> Street, and turn north. In order to provide adequate right-of-way, the alignment must be widened, and also shifted to the north to avoid encroachments.



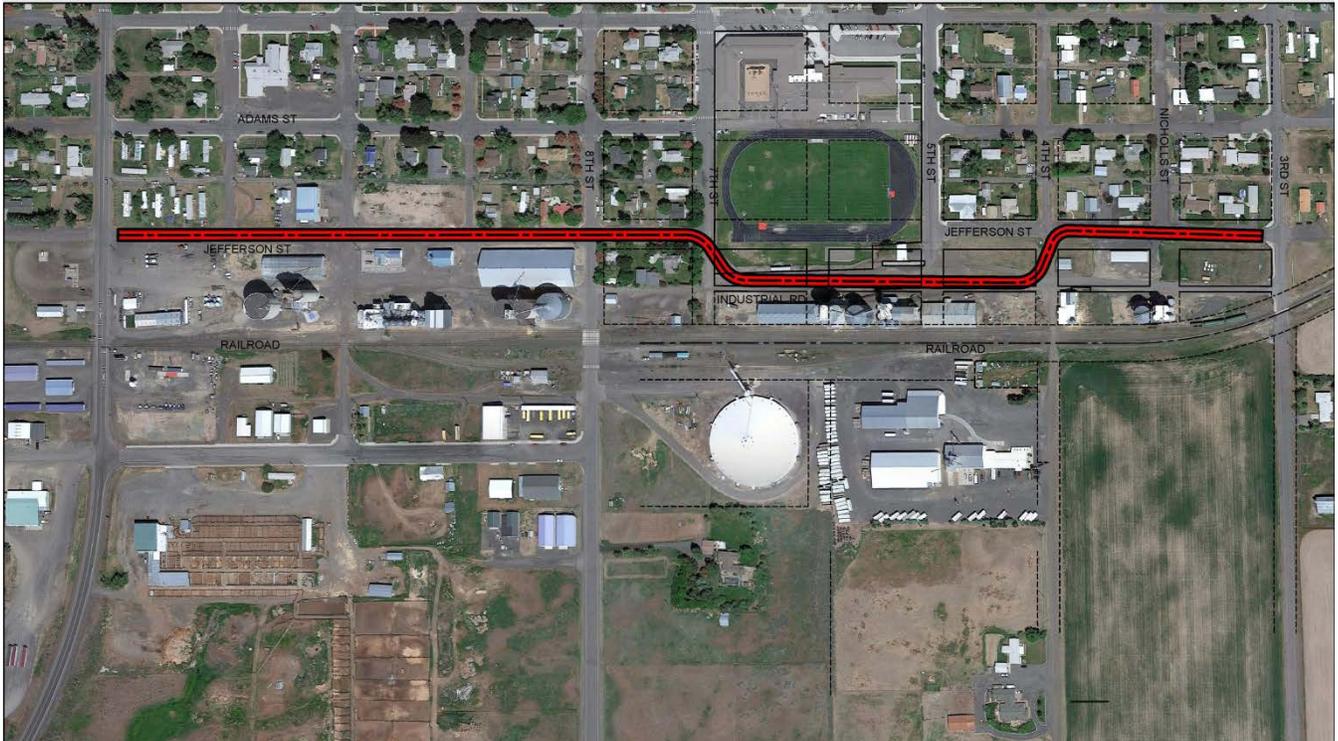
### Advantages

- Most familiar path to truck drivers
- Further away from residences on the east end of the project
- Straightest path available

### Disadvantages

- ROW encroachments restrict road width
- Lot adjustments needed to avoid non-conforming lots, keep 100'x50' dimensions.
- Close to residences along Jefferson on the west end of the project.

**Alternative 2:** Alternative 2 follows the same path as Alternative 1 on the west end of the project, but changes at the east end. From SR 28, trucks travel east on Jefferson to 7<sup>th</sup> Street. At 7<sup>th</sup>, turn south, and then immediately east on Industrial Road. Trucks continue east to 4<sup>th</sup> Street, and then turn through a shallow S-curve that diverts the trucks back up to Jefferson, and then ends at 3<sup>rd</sup> where trucks would turn north. In order to provide adequate right-of-way, the alignment must be widened between 7<sup>th</sup> and 5<sup>th</sup>. Additional ROW would have to be acquired to accommodate the S-curve.



### **Advantages**

- Avoids encroachments east of 4<sup>th</sup> Street
- Less adjustment to lot lines required

### **Disadvantages**

- Additional ROW needed to accommodate S-curve.
- Close to residences along Jefferson on both ends of the project.
- More curves to negotiate
- Bypasses truck delivery sites east of 4<sup>th</sup> Street

**Alternative 3:** Alternative 3 alters the path at the west end, by starting two blocks south before rejoining the path of Industrial Road. From SR 28, trucks travel east on Monroe to 8<sup>th</sup> Street. At 8<sup>th</sup>, they would turn north and cross the Railroad tracks. Immediately after the tracks, the path curves to the east, and rejoins Industrial Road at 7<sup>th</sup> Street. Trucks continue east to 4<sup>th</sup> Street, and then follow the alignment of Alternative 2. Additional ROW would have to be acquired to accommodate the curve from 8<sup>th</sup> to Industrial Rd.



### Advantages

- Avoids residential areas along Jefferson Street
- Monroe is wider, and better suited for truck traffic.

### Disadvantages

- Additional ROW needed to accommodate 8<sup>th</sup> to Industrial Rd. curve.
- Congestion point at RR crossing.

**APPENDIX E**  
**RECORD OF SURVEY**

**REFERENCES**

- SR1 PLAT OF THE TOWN OF DAVENPORT  
VOL. A OF PLATS, PG. 27, 7/15/1882
- SR2 PLAT OF DILLON'S ADDITION TO DAVENPORT  
VOL. A OF PLATS, PG. 35, 10/06/1889
- SR3 PLAT OF SOUTHEASTERN ADDITION TO DAVENPORT  
VOL. A OF PLATS, PG. 48, 12/13/1893
- SR4 PLAT OF WILSON'S SUBURBAN TRACTS  
VOL. A OF PLATS, PG. 49, 12/13/1893
- SR5 STATION MAP - DAVENPORT, LINCOLN COUNTY, WASHINGTON  
NORTHERN PACIFIC RAILWAY, MARCH 1921
- SR6 DAVENPORT, LINCOLN COUNTY STREET MONUMENT SURVEY  
RECORDS OF CITY OF DAVENPORT & WASHINGTON PLSO,  
HELLING, PLS 10922, 1977
- SR7 RECORD OF SURVEY BK. A, PG. 192  
VALENTINE, PLS 18741, 5/17/1990
- SR8 RECORD OF SURVEY BK. B, PG. 146  
CLARK, PLS 12904, 8/22/1997
- SR9 RECORD OF SURVEY BK. B, PG. 262  
WILEY, PLS 22354, 8/02/2001
- SR10 RECORD OF SURVEY BK. C, PG. 119  
CLARK, PLS 12904, 2/06/2006
- SR11 RECORD OF SURVEY BK. C, PG. 294  
SEESE, PLS 35991, 9/01/2009
- SR12 RECORD OF SURVEY BK. D, PG. 66  
SEESE, PLS 35991, 5/16/2011
- SR13 RECORD OF SURVEY BK. D, PG. 76  
TRIPP, PLS 34151, 5/18/2011

N-11  
(SEE DETAIL-SHEET 2 OF 6)

**NARRATIVE**

THE PURPOSE OF THIS SURVEY IS TO MONUMENT THE CORNERS SHOWN IN BLOCKS 8, 9, 10, 15, 16, 17, 18 AND 19 OF SOUTHEASTERN ADDITION TO DAVENPORT.

CIRCA 1977 AN UNRECORDED STREET MONUMENTATION SURVEY (SR6) WAS PERFORMED BY WESLEY B. HELLING, PLS 10922, FOR THE CITY OF DAVENPORT. WE FIND IN RESEARCHING OUR SURVEY THAT NUMEROUS SURVEYS THROUGHOUT THE CITY OF DAVENPORT HAVE RELIED ON THE STREET CENTERLINE MONUMENTS ESTABLISHED BY MR. HELLING'S SURVEY SR6. A FEW NOTABLE EXCEPTIONS HAVE CHOSEN DIFFERENT METHODS TO ESTABLISH BOUNDARY LINES.

IN OUR INVESTIGATION OF THE SURVEY SR6, WE HAVE REACHED THE FOLLOWING CONCLUSIONS:

A) SR6 LIKELY USED THE CURRENTLY-EXISTING MONUMENTS AT THE W1/4 CORNER AND AT THE E1/4 CORNER OF SECTION 21.

B) THE S1/4 CORNER OF SECTION 21 HAS BEEN LOCATED IN AT LEAST 3 DIFFERENT POSITIONS AS SHOWN HEREON. SURVEY SR6 LIKELY USED THE POSITION OF THE PK NAIL FOUND BY WILEY PLS 22354 WHEN CONDUCTING SURVEY SR9.

C) IN THE AREA OF THE N1/4 CORNER, SURVEY SR6 LIKELY USED THE 1-1/4" IRON PIN PLATTING CORNER, NOT THE CURRENTLY ACCEPTED POSITION OF THE N1/4 CORNER, WHICH IS MONUMENTED BY A 1" IRON PIPE.

D) AT THE SE CORNER OF SECTION 21, IT APPEARS THAT SURVEY SR6 USED THE ROCK NAIL FOUND BY WILEY PLS 22354 WHEN CONDUCTING SURVEY SR9.

SURVEY SR6 USED THESE, AND OTHER CONTROLLING SECTION CORNERS, TO ESTABLISH THE CENTER OF SECTION 21 MONUMENT, AND THE MANY STREET CENTERLINE MONUMENTS.

DUE TO THE UNSURE NATURE OF THE CONTROLLING SECTION CORNERS, PARTICULARLY THE S1/4 CORNER, WE TIED IN FEATURES SHOWN ON THE NPRR STATION MAP SR5 AS A CHECK ON THE POSITION OF THE SR6 MONUMENTS. EXISTING SWITCH HEAD BLOCKS AND BUILDINGS SHOWN ON THAT PLAN CHECK VERY WELL BETWEEN THEMSELVES. THE CHECK TO STATIONING FOR THE WEST LINE OF THE SE1/4 OF SECTION 21 (PER SR6) FALLS WITHIN 1.3'± OF RECORD.

WITH THESE FACTORS, ALONG WITH THE PROXIMITY OF RECORD OF SURVEY C/294 (SR11), AND THE UTTER LACK OF OTHER MONUMENTATION, WE HAVE ELECTED TO HOLD TO MONUMENTATION ESTABLISHED BY SURVEY SR6 AND SR11.

SEE ADDITIONAL SURVEYOR'S NOTES ON SHEETS 3 & 4 FOR INFORMATION ABOUT METHODS USED TO ESTABLISH STREETS AND BLOCKS.

**AUDITOR'S CERTIFICATE**

FILED FOR RECORD BY: \_\_\_\_\_

THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

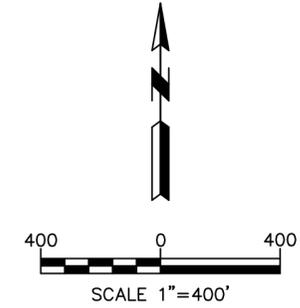
AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M;

AND RECORDED IN BOOK \_\_\_\_\_ OF SURVEYS

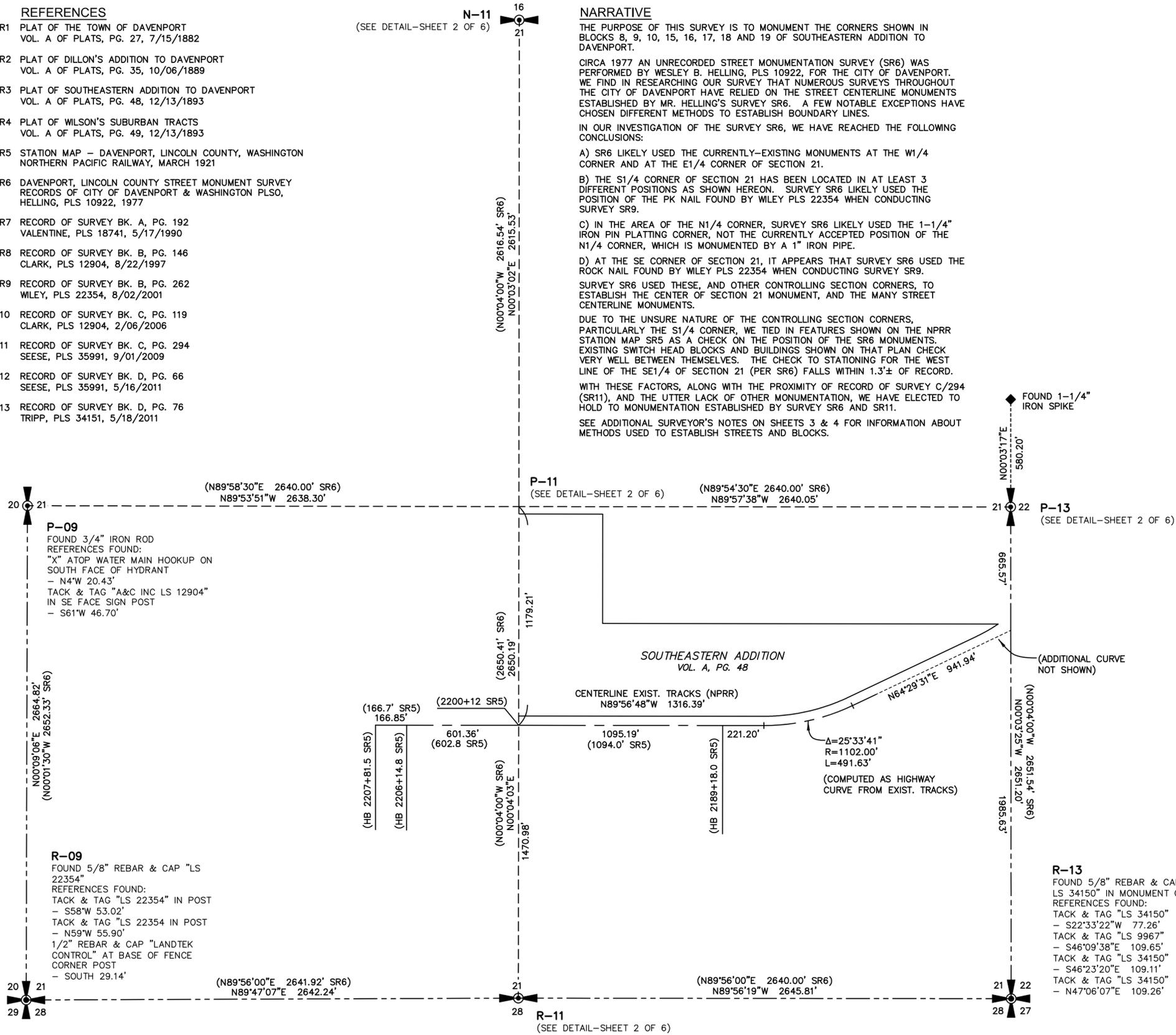
ON PAGE(S) \_\_\_\_\_.

\_\_\_\_\_  
COUNTY AUDITOR

\_\_\_\_\_  
AUDITOR'S FILE NO.



**ABBREVIATIONS**  
HB RAILROAD SWITCH HEAD BLOCK



**SURVEYOR'S CERTIFICATE**

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT, AT THE REQUEST OF CENTURY WEST ENGINEERING CORP. IN APRIL-JUNE 2016

BRUCE R. LARSEN, P.L.S. DATE  
CERTIFICATE NO. 26390

**BASIS OF BEARINGS**

A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.

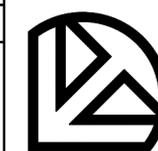
**EQUIPMENT AND PROCEDURES**

THIS SURVEY WAS PERFORMED WITH A TOPCON HIPER-LITE GLOBAL POSITIONING SYSTEM USING REAL TIME KINEMATIC SURVEY PROCEDURES IN CONJUNCTION WITH FIELD TRAVERSE PROCEDURES USING A 3-SECOND TOTAL STATION.

**RECORD OF SURVEY**

SHEET 1 OF 5

**PORTIONS OF SOUTHEASTERN ADDITION  
SE1/4 SECTION 21, T25N, R37E, W.M.  
CITY OF DAVENPORT  
LINCOLN COUNTY, WASHINGTON**

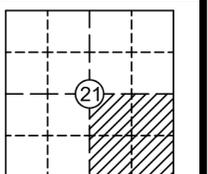


**LANDTEK LLC**  
PROFESSIONAL LAND SURVEYORS  
619 N. MADELIA STREET  
SPOKANE, WASHINGTON 99202  
PHONE 509.926.2821 FAX 509.926.2736  
LANDTEKSURVEYORS@GMAIL.COM

FB NO: 199

JOB NO: 16-2073

**INDEX DATA KEY**

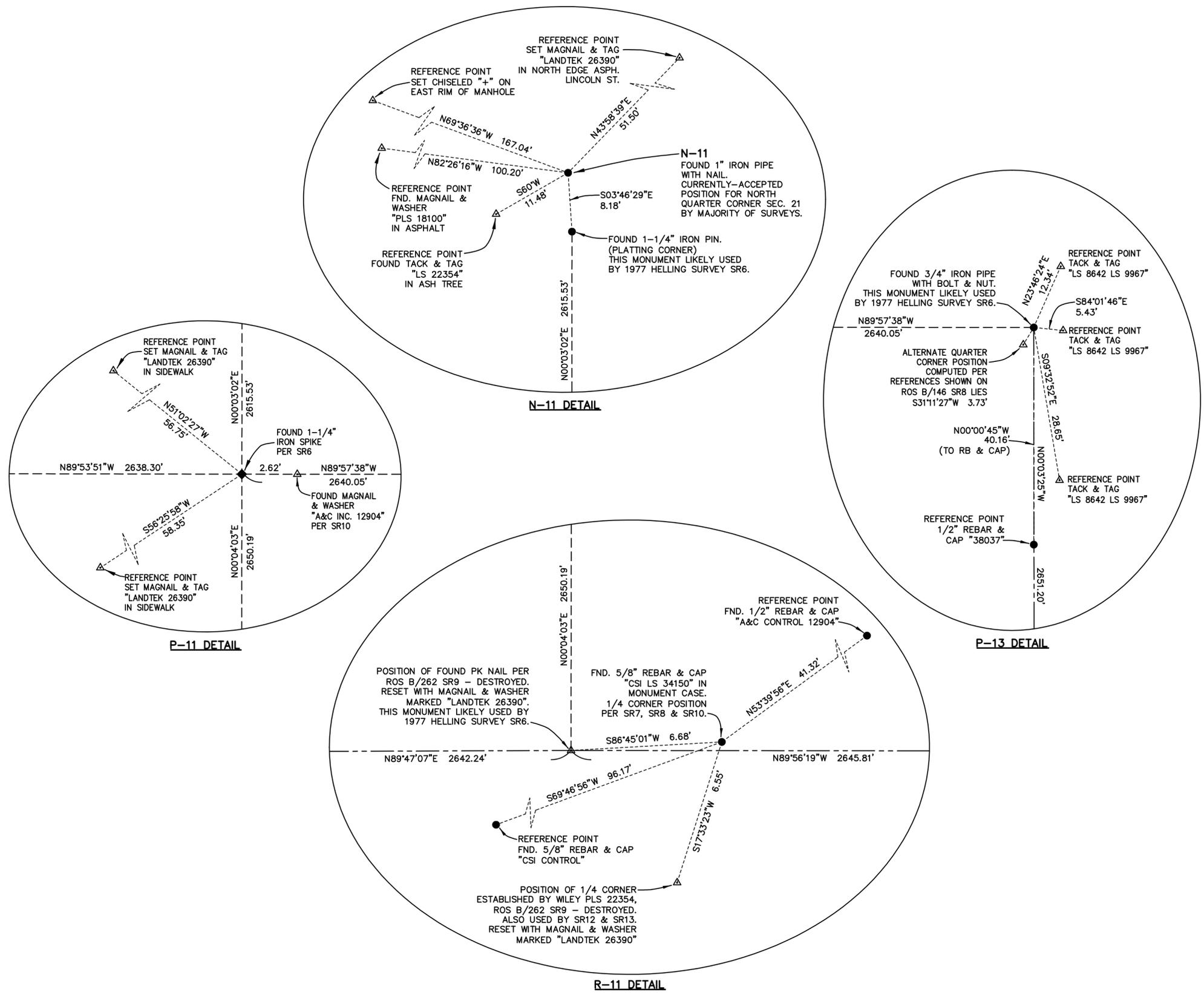
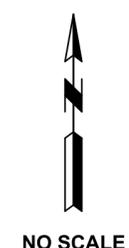


S21 T25N R37E W.M.



**AUDITOR'S CERTIFICATE**

FILED FOR RECORD BY: \_\_\_\_\_  
 THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_  
 AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M.  
 AND RECORDED IN BOOK \_\_\_\_\_ OF SURVEYS  
 ON PAGE(S) \_\_\_\_\_ .  
 COUNTY AUDITOR \_\_\_\_\_  
 AUDITOR'S FILE NO. \_\_\_\_\_



**SURVEYOR'S CERTIFICATE**  
 THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT, AT THE REQUEST OF CENTURY WEST ENGINEERING CORP. IN \_\_\_\_\_ APRIL-JUNE 2016 \_\_\_\_\_  
 BRUCE R. LARSEN, P.L.S. DATE \_\_\_\_\_  
 CERTIFICATE NO. 26390

**BASIS OF BEARINGS**  
 A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.

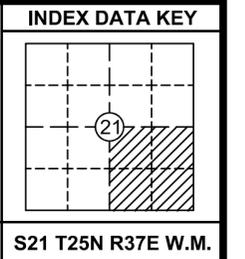
**EQUIPMENT AND PROCEDURES**  
 THIS SURVEY WAS PERFORMED WITH A TOPCON HIPER-LITE GLOBAL POSITIONING SYSTEM USING REAL TIME KINEMATIC SURVEY PROCEDURES IN CONJUNCTION WITH FIELD TRAVERSE PROCEDURES USING A 3-SECOND TOTAL STATION.

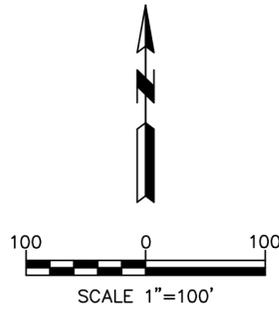
**RECORD OF SURVEY**  
 SHEET 2 OF 6

**PORTIONS OF SOUTHEASTERN ADDITION SE1/4 SECTION 21, T25N, R37E, W.M. CITY OF DAVENPORT LINCOLN COUNTY, WASHINGTON**

**LANDTEK LLC**  
 PROFESSIONAL LAND SURVEYORS  
 619 N. MADELIA STREET  
 SPOKANE, WASHINGTON 99202  
 PHONE 509.926.2821 FAX 509.926.2736  
 LANDTEKSURVEYORS@GMAIL.COM

FB NO: 199      JOB NO: 16-2073





- LEGEND**
- ◆ FOUND 1-1/4" IRON SPIKE
  - ⊕ FOUND MONUMENT CASE - EMPTY USED CENTER OF LID
  - MAG1 ● FOUND MAGNAIL & WASHER "TEI PLS 35991" IN SIDEWALK
  - MAG2 ● FOUND MAGNAIL
  - RB2 ● FOUND 5/8" REBAR, BENT TIED AT ROTATION POINT
  - RB5 ● FOUND 3/4" REBAR - NO I.D.
  - RB6 ● FOUND 3/8" REBAR - NO I.D.
  - IP-MON ● FOUND 1" IRON PIPE WITH BRASS PIN

**SURVEYOR'S NOTES**

- ① ACCEPTED FOUND MONUMENT USED TO COMPUTE POSITIONING OF R-O-S C/294.
- ③ COMPUTED POSITION PER R-O-S C/294.
- ⑥ CENTERLINE OF 3RD STREET N00°08'11"E IS DERIVED FROM LEAST SQUARES BEST FIT OF EXISTING CURBS BETWEEN MAIN ST. & JEFFERSON ST.

**SURVEYOR'S NOTE**

VACATED STREETS HAVE NOT BEEN ADDRESSED BY THIS SURVEY.

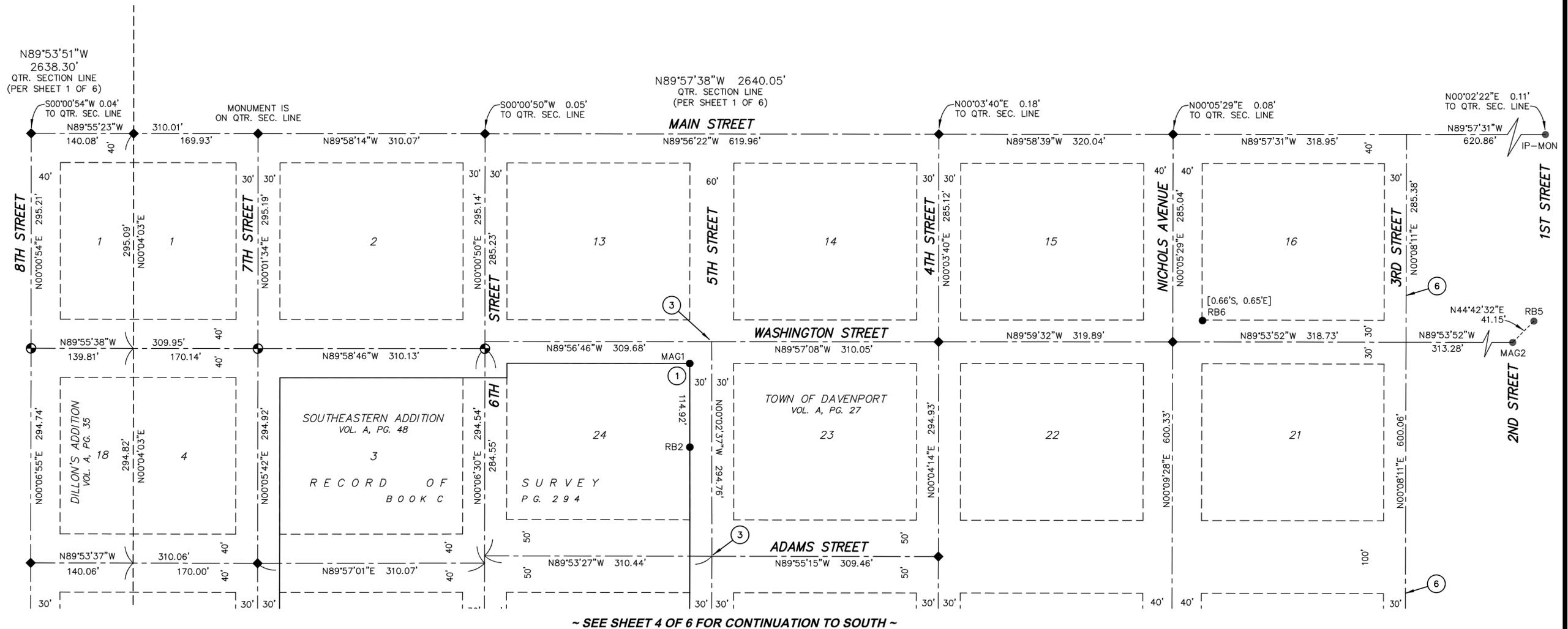
**AUDITOR'S CERTIFICATE**

FILED FOR RECORD BY:

THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_  
 AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M;  
 AND RECORDED IN BOOK \_\_\_\_\_ OF SURVEYS  
 ON PAGE(S) \_\_\_\_\_.

COUNTY AUDITOR

AUDITOR'S FILE NO.



**SURVEYOR'S CERTIFICATE**

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BRUCE R. LARSEN, P.L.S. DATE  
 CERTIFICATE NO. 26390

**BASIS OF BEARINGS**

A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.

**EQUIPMENT AND PROCEDURES**

THIS SURVEY WAS PERFORMED WITH A TOPCON HIPER-LITE GLOBAL POSITIONING SYSTEM USING REAL TIME KINEMATIC SURVEY PROCEDURES IN CONJUNCTION WITH FIELD TRAVERSE PROCEDURES USING A 3-SECOND TOTAL STATION.

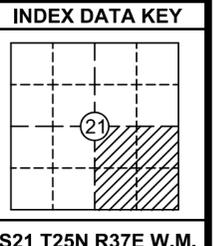
**RECORD OF SURVEY**

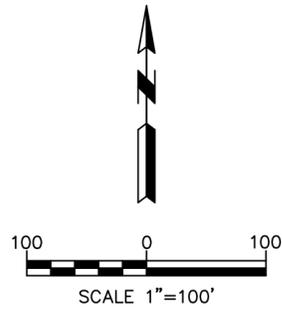
SHEET 3 OF 6

**PORTIONS OF SOUTHEASTERN ADDITION SE1/4 SECTION 21, T25N, R37E, W.M. CITY OF DAVENPORT LINCOLN COUNTY, WASHINGTON**

**LANDTEK LLC**  
 PROFESSIONAL LAND SURVEYORS  
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 SPOKANE, WASHINGTON 99202  
 PHONE 509.926.2821 FAX 509.926.2736  
 LANDTEKSURVEYORS@GMAIL.COM

FB NO: 199 JOB NO: 16-2073





- LEGEND**
- SET 1/2" REBAR & PLASTIC CAP MARKED "LANDTEK 26390"
  - ◆ FOUND 1-1/4" IRON SPIKE
  - RB1 ● FOUND 5/8" REBAR & CAP "SEESE PLS 35991"
  - RB3 ● FOUND 1/2" REBAR - NO I.D.
  - RB4 ● FOUND 1/2" REBAR & CAP "A&C INC 7317/12904"
  - RB5 ● FOUND 3/4" REBAR - NO I.D.
  - RB7 ● FOUND 5/8" REBAR "LS 42441"
  - IP ● FOUND 3/4" IRON PIPE UP 1.2' ABOVE GROUND
  - 60D ● FOUND 60D SPIKE (100')
  - (100') PLATTED DIMENSION

**SURVEYOR'S NOTES**

- 1 ACCEPTED FOUND MONUMENT USED TO COMPUTE POSITIONING OF R-O-S C/294.
- 2 COMPUTED A POSITION FOR THIS INTERSECTION BASED ON R-O-S C/294, THEN ESTABLISHED BEARING OF S00°06'30"W FOR 6TH STREET FROM FOUND MONUMENT CASE TO COMPUTED POSITION.
- 3 COMPUTED POSITION PER R-O-S C/294.
- 4 COMPUTED A POSITION FOR THIS INTERSECTION BASED ON R-O-S C/294 TO ESTABLISH BEARING OF 5TH STREET FROM ADAMS TO JEFFERSON.
- 5 N00°03'57"E BEARING OF 4TH STREET IS COMPUTED FROM LEAST SQUARES BEST FIT OF 3 FOUND MONUMENTS ON 4TH STREET, BETWEEN MAIN AND ADAMS.

**SURVEYOR'S NOTES**

- 6 CENTERLINE OF 3RD STREET N00°08'11"E IS DERIVED FROM LEAST SQUARES BEST FIT OF EXISTING CURBS BETWEEN MAIN ST. & JEFFERSON ST.
- 7 HELD FOUND MONUMENT AND ESTABLISHED CENTERLINE OF JEFFERSON EASTERLY, PARALLEL WITH CENTERLINE OF RAILROAD.
- 8 EXTENSION OF BEARING BETWEEN FOUND MONUMENTS AT ADAMS ST. & JEFFERSON ST.
- 9 EXTENSION OF BEARING COMPUTED PER NOTE 2.
- 10 POINT IS COMPUTED MIDWAY BETWEEN THE EXTENSIONS OF 4TH ST. & 6TH ST.
- 11 POINT IS COMPUTED MIDWAY BETWEEN 3RD ST. & 4TH ST. TO ESTABLISH THE BEARING OF NICHOLS AVENUE, HOLDING THE FOUND MONUMENT AT WASHINGTON ST.

**AUDITOR'S CERTIFICATE**

FILED FOR RECORD BY: \_\_\_\_\_

THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_

AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M.

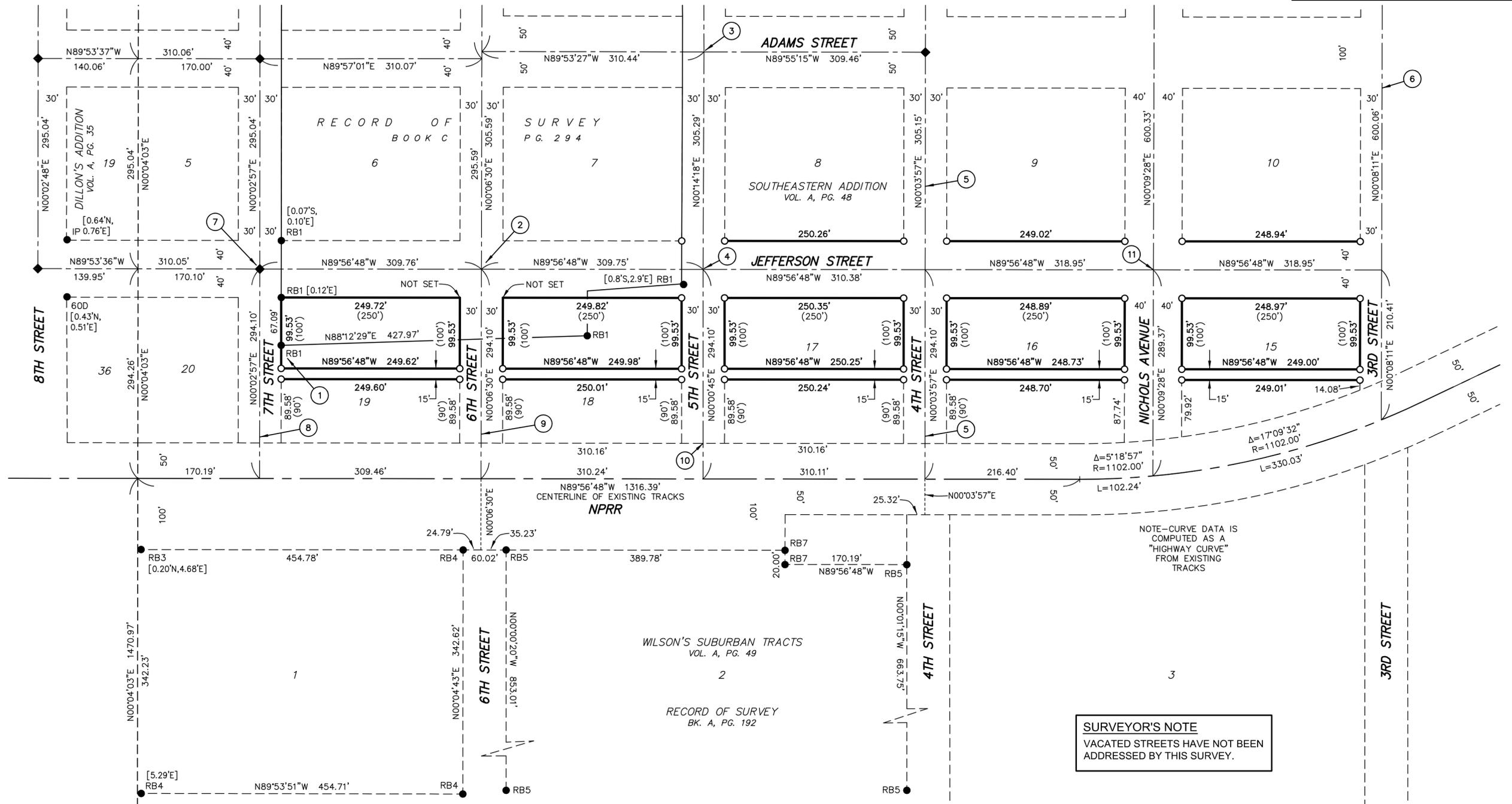
AND RECORDED IN BOOK \_\_\_\_\_ OF SURVEYS

ON PAGE(S) \_\_\_\_\_.

\_\_\_\_\_  
COUNTY AUDITOR

\_\_\_\_\_  
AUDITOR'S FILE NO.

~ SEE SHEET 3 OF 6 FOR CONTINUATION TO NORTH ~



**SURVEYOR'S NOTE**  
VACATED STREETS HAVE NOT BEEN ADDRESSED BY THIS SURVEY.

	<b>SURVEYOR'S CERTIFICATE</b>	<b>BASIS OF BEARINGS</b>	<b>RECORD OF SURVEY</b>
	THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT, AT THE REQUEST OF CENTURY WEST ENGINEERING CORP. IN APRIL-JUNE 2016	A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.	<b>SHEET 4 OF 6</b>
	BRUCE R. LARSEN, P.L.S. DATE _____ CERTIFICATE NO. 26390	<b>EQUIPMENT AND PROCEDURES</b> THIS SURVEY WAS PERFORMED WITH A TOPCON HIPER-LITE GLOBAL POSITIONING SYSTEM USING REAL TIME KINEMATIC SURVEY PROCEDURES IN CONJUNCTION WITH FIELD TRAVERSE PROCEDURES USING A 3-SECOND TOTAL STATION.	<p><b>PORTIONS OF SOUTHEASTERN ADDITION</b> SE1/4 SECTION 21, T25N, R37E, W.M. CITY OF DAVENPORT LINCOLN COUNTY, WASHINGTON</p>
			<p><b>LANDTEK LLC</b> PROFESSIONAL LAND SURVEYORS 619 N. MADELIA STREET SPOKANE, WASHINGTON 99202 PHONE 509.926.2821 FAX 509.926.2736 LANDTEKSURVEYORS@GMAIL.COM</p>
			<p>FB NO: 199      JOB NO: 16-2073      S21 T25N R37E W.M.</p>

**AUDITOR'S CERTIFICATE**

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THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_  
 AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M;  
 AND RECORDED IN BOOK \_\_\_\_\_ OF SURVEYS  
 ON PAGE(S) \_\_\_\_\_.

COUNTY AUDITOR \_\_\_\_\_

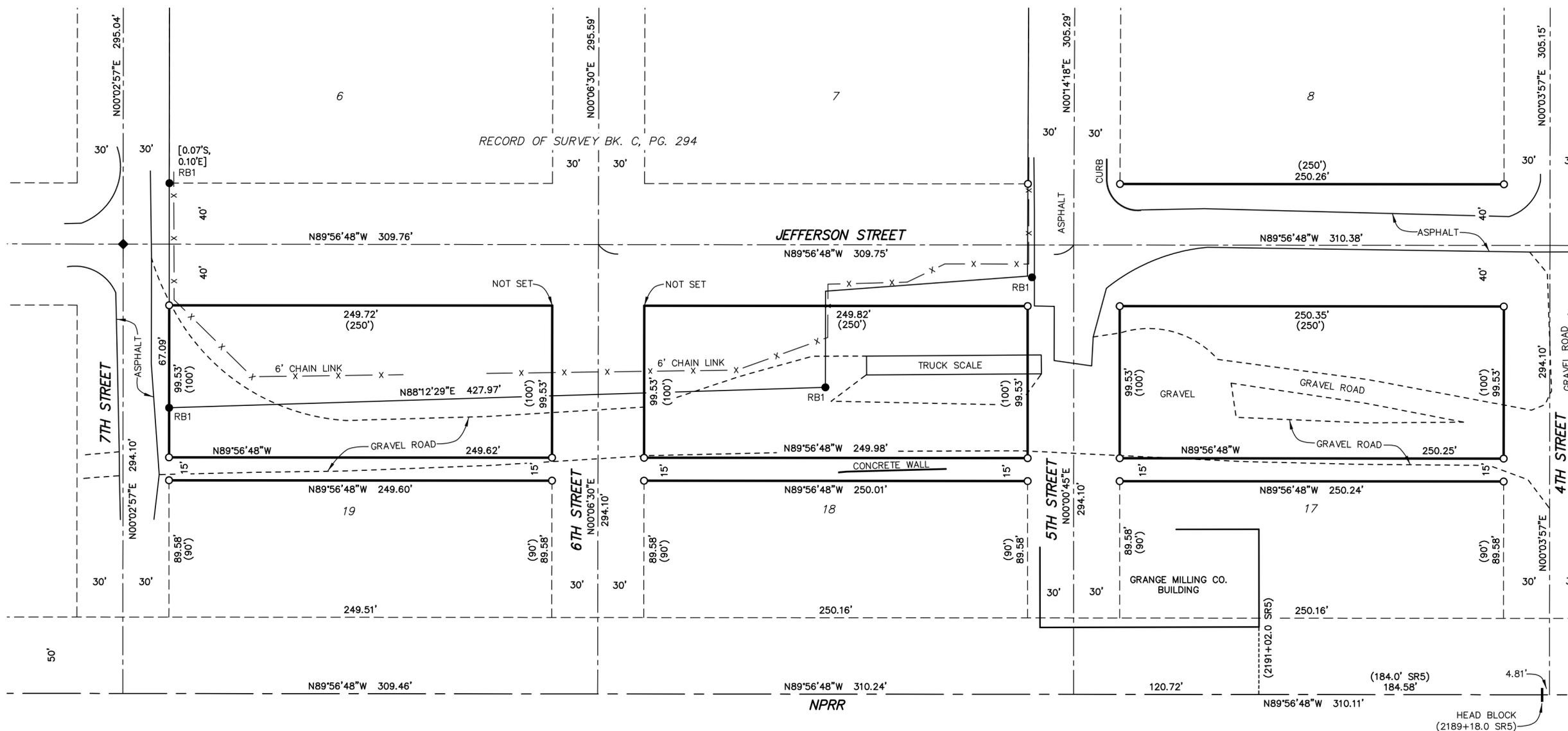
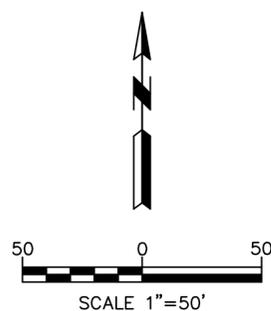
AUDITOR'S FILE NO. \_\_\_\_\_

**LEGEND**

- SET 1/2" REBAR & PLASTIC CAP MARKED "LANDTEK 26390"
- ◆ FOUND 1-1/4" IRON SPIKE
- RB1 ● FOUND 5/8" REBAR & CAP "SESEE PLS 35991"
- (100') PLATTED DIMENSION

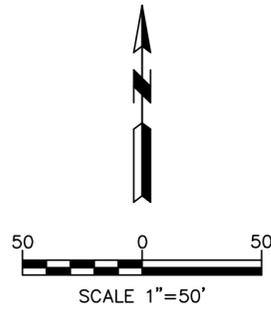
**SURVEYOR'S NOTE**

VACATED STREETS HAVE NOT BEEN ADDRESSED BY THIS SURVEY.



~ SEE SHEET 6 OF 6 FOR CONTINUATION TO EAST ~

	<b>SURVEYOR'S CERTIFICATE</b>	<b>BASIS OF BEARINGS</b>	<b>RECORD OF SURVEY</b>	<b>INDEX DATA KEY</b>
	THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE SURVEY RECORDING ACT, AT THE REQUEST OF CENTURY WEST ENGINEERING CORP. IN APRIL-JUNE 2016  BRUCE R. LARSEN, P.L.S. DATE _____ CERTIFICATE NO. 26390	A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.	<b>EQUIPMENT AND PROCEDURES</b>  THIS SURVEY WAS PERFORMED WITH A TOPCON HIPER-LITE GLOBAL POSITIONING SYSTEM USING REAL TIME KINEMATIC SURVEY PROCEDURES IN CONJUNCTION WITH FIELD TRAVERSE PROCEDURES USING A 3-SECOND TOTAL STATION.	SHEET 5 OF 6  <b>PORTIONS OF SOUTHEASTERN ADDITION                  SE1/4 SECTION 21, T25N, R37E, W.M.                  CITY OF DAVENPORT                  LINCOLN COUNTY, WASHINGTON</b>
		<b>LANDTEK LLC</b> PROFESSIONAL LAND SURVEYORS 619 N. MADELIA STREET SPOKANE, WASHINGTON 99202 PHONE 509.926.2821 FAX 509.926.2736 LANDTEKSURVEYORS@GMAIL.COM		
		FB NO: 199      JOB NO: 16-2073		

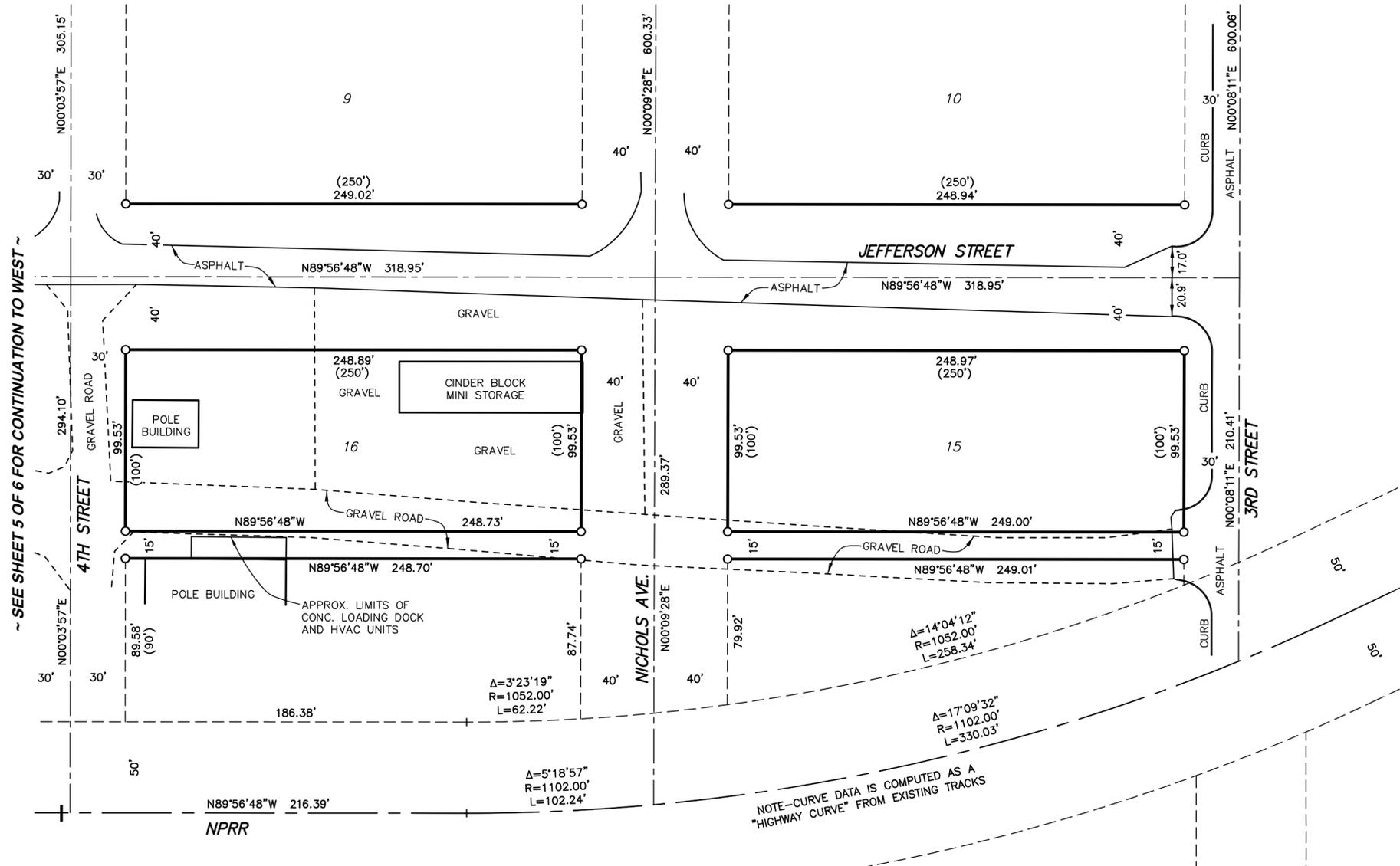


- LEGEND**
- SET 1/2" REBAR & PLASTIC CAP MARKED "LANDTEK 26390"
  - (100') PLATTED DIMENSION

**SURVEYOR'S NOTE**  
 VACATED STREETS HAVE NOT BEEN ADDRESSED BY THIS SURVEY.

**AUDITOR'S CERTIFICATE**

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 THIS \_\_\_\_ DAY OF \_\_\_\_\_ 20\_\_\_\_  
 AT \_\_\_\_ MINUTES PAST \_\_\_\_ O'CLOCK \_\_\_\_M;  
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 ON PAGE(S) \_\_\_\_\_ .  
 \_\_\_\_\_  
 COUNTY AUDITOR  
 \_\_\_\_\_  
 AUDITOR'S FILE NO. \_\_\_\_\_



**SURVEYOR'S CERTIFICATE**

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\_\_\_\_\_  
 BRUCE R. LARSEN, P.L.S. DATE  
 CERTIFICATE NO. 26390

**BASIS OF BEARINGS**

A GPS-DERIVED BEARING OF N00°09'06"E ALONG THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 25 NORTH, RANGE 37 EAST, W.M.

**EQUIPMENT AND PROCEDURES**

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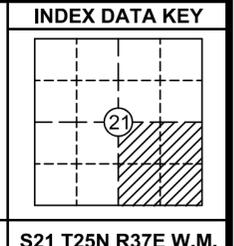
**RECORD OF SURVEY**

SHEET 6 OF 6

**PORTIONS OF SOUTHEASTERN ADDITION SE1/4 SECTION 21, T25N, R37E, W.M. CITY OF DAVENPORT LINCOLN COUNTY, WASHINGTON**

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FB NO: 199      JOB NO: 16-2073



**APPENDIX F**  
**TURNING PATH DIAGRAMS**



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

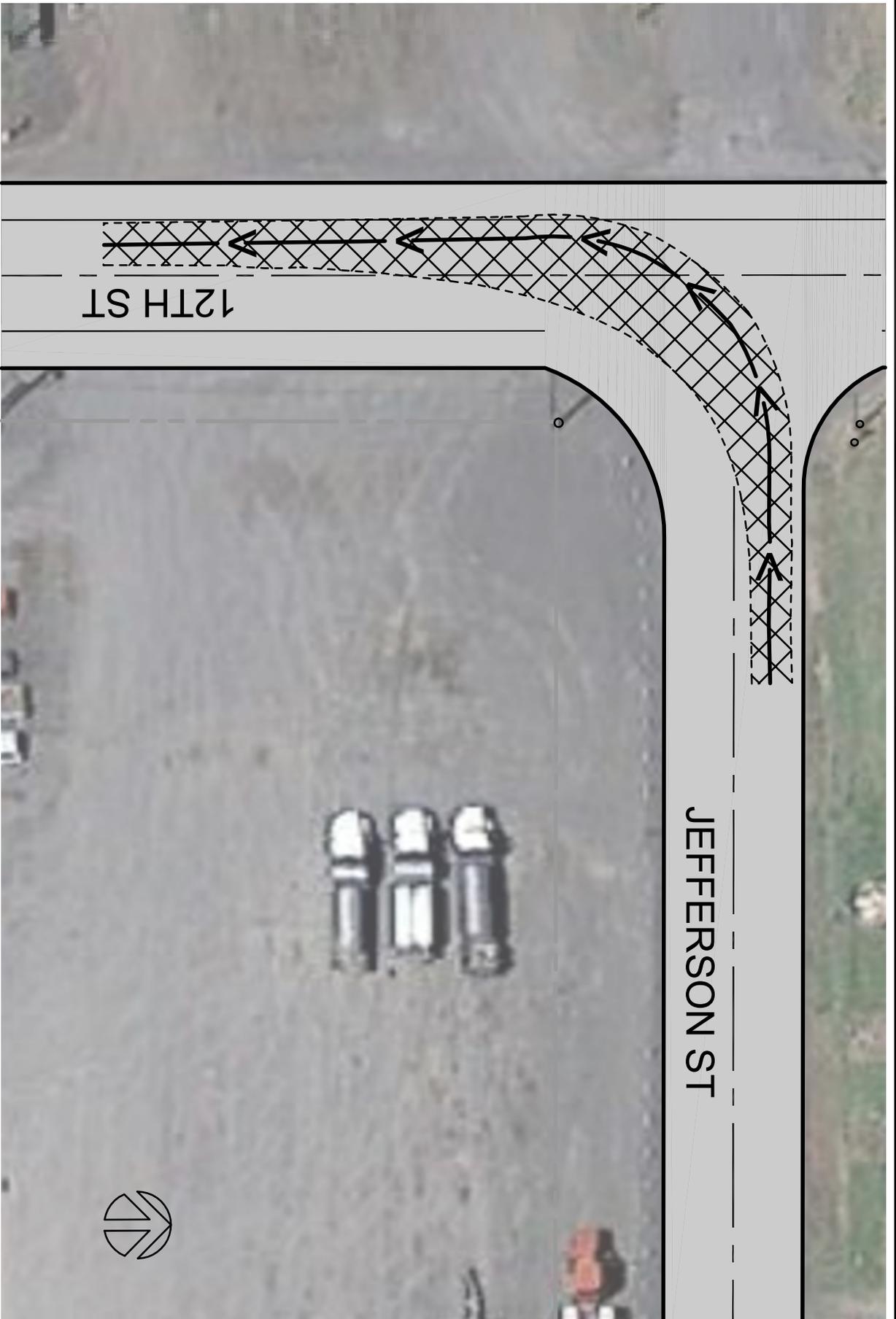
PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 12TH TO JEFFERSON


**CENTURY WEST**  
 ENGINEERING  
 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016

FIGURE: 1-1



JEFFERSON ST

12TH ST

CITY OF DAVENPORT

TRUCK ROUTE FEASIBILITY STUDY

WB-50 TURNING PATH

JEFFERSON TO 12TH

CHCKD BY: DGR

DSGND BY: DGR

SCALE: 1" = 30'

DRWN BY: AJF

PROJECT NO: 30208.028.01



SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016

FIGURE: 1-2



DSGND BY: DGR

CHKCD BY: DGR

DRWN BY: AJF

SCALE: 1" = 40'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT

TRUCK ROUTE FEASIBILITY STUDY

WB-50 TURNING PATH

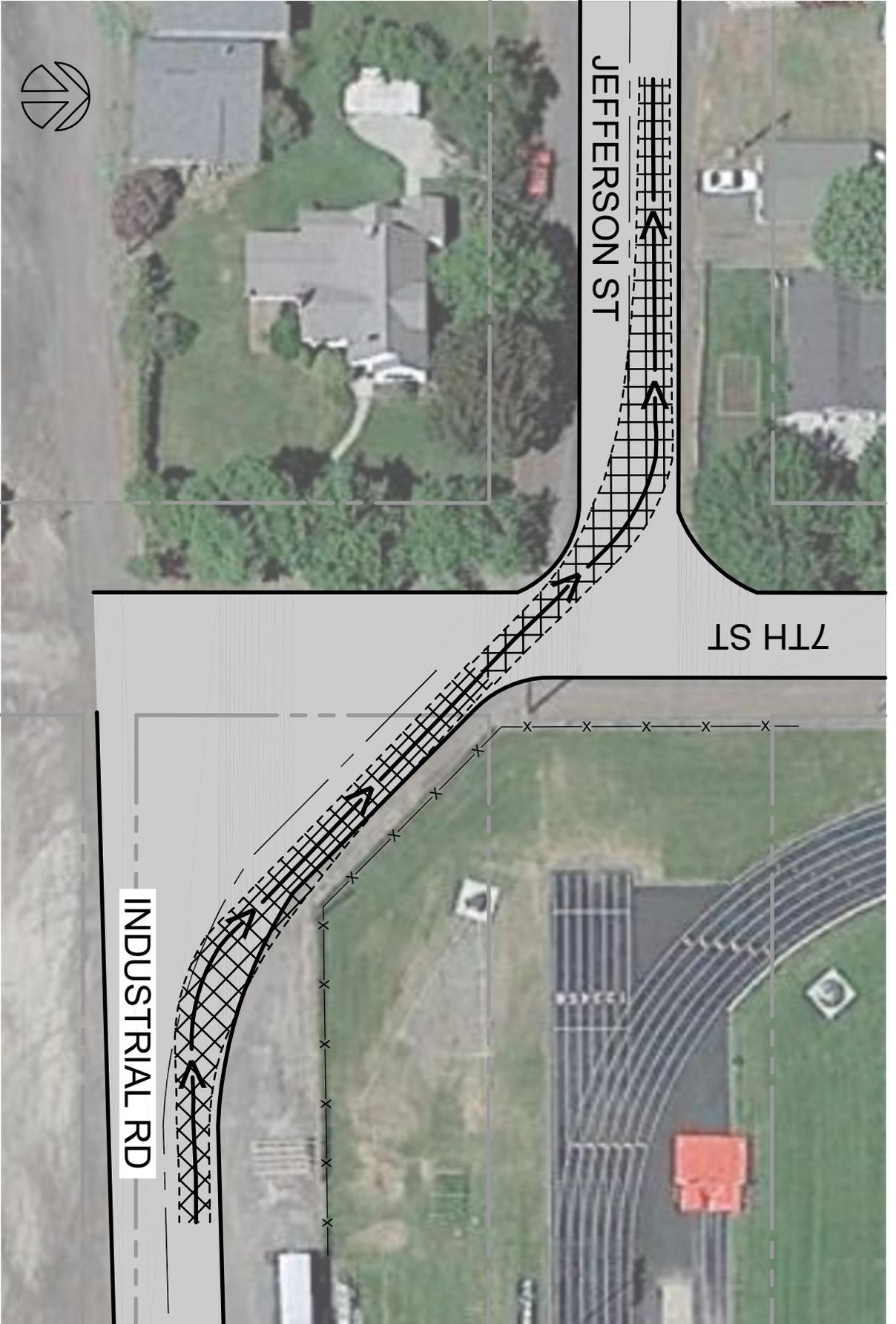
JEFFERSON - INDUSTRIAL S-CURVE



SPokane Office  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0385 FAX

DATE: 8/23/2016

FIGURE: 1-3

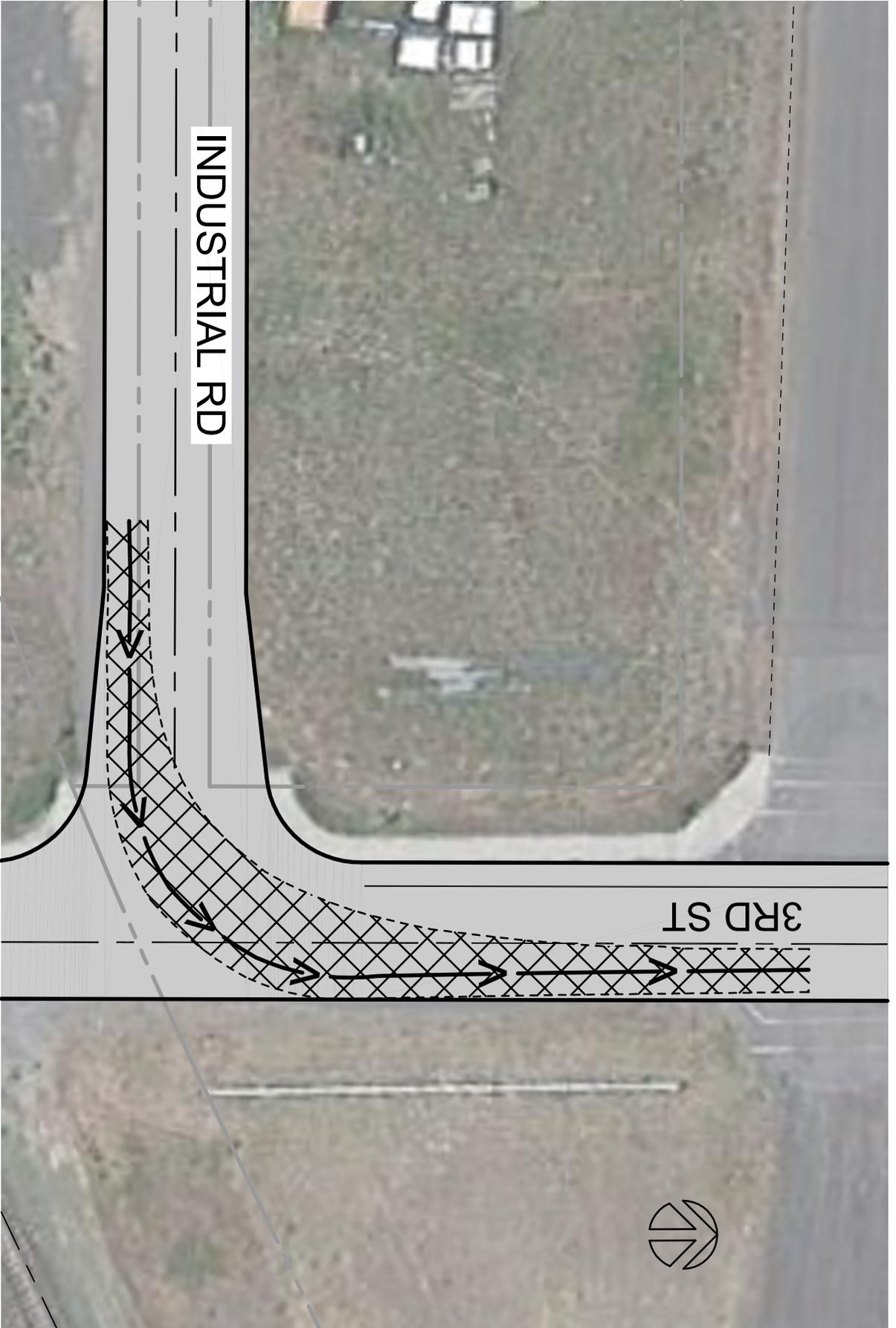


DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 40'
PROJECT NO: 30208.028.01	

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 INDUSTRIAL - JEFFERSON S-CURVE


**CENTURY WEST**  
 ENGINEERING  
 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016      FIGURE: 1-4

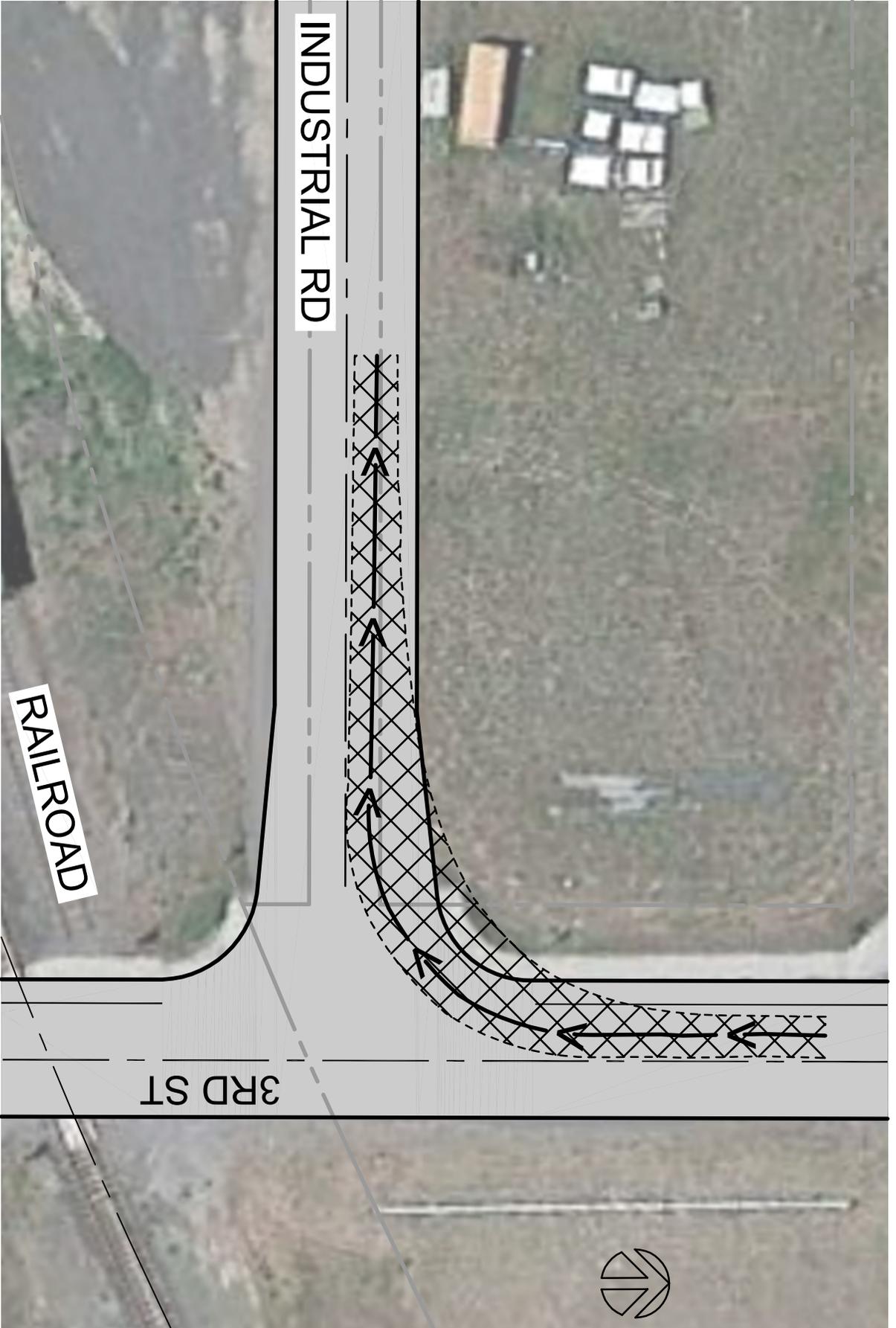


DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'
PROJECT NO: 30208.028.01	

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 INDUSTRIAL TO 3RD


**CENTURY WEST**  
 ENGINEERING  
 SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016      FIGURE: 1-5



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 3RD TO INDUSTRIAL

**CENTURY WEST**  
 ENGINEERING

SPokane Office  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016      FIGURE: 1-6



12TH ST

JEFFERSON ST

DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 12TH TO JEFFERSON



SPOKANE OFFICE  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016

FIGURE: 2-1



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 JEFFERSON TO 12TH

**CENTURY WEST**  
 ENGINEERING

SPokane Office  
 11707 E. MONTGOMERY DRIVE  
 SPOKANE VALLEY, WA 99206  
 509.838.3910  
 509.824.0365 FAX

DATE: 8/23/2016      FIGURE: 2-2



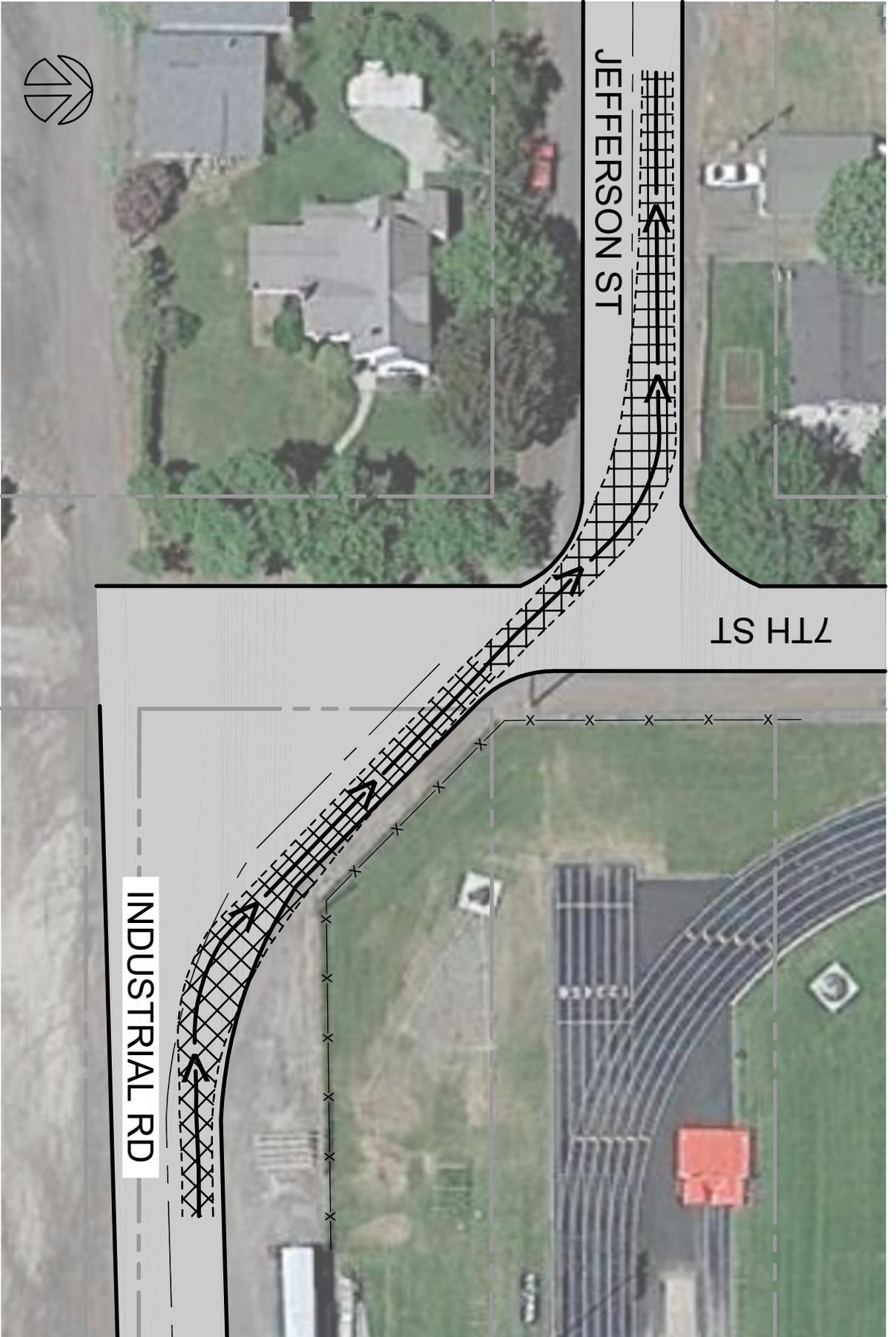
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DRWN BY: AJF	SCALE: 1" = 40'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 JEFFERSON - INDUSTRIAL S-CURVE

<p><b>CENTURY WEST</b> ENGINEERING</p>	<p>SPOKANE OFFICE          11707 E. MONTGOMERY DRIVE          SPOKANE VALLEY, WA 99206          509.838.3910          509.824.0365 FAX</p>
	<p>DATE: 8/23/2016</p>

FIGURE: 2-3

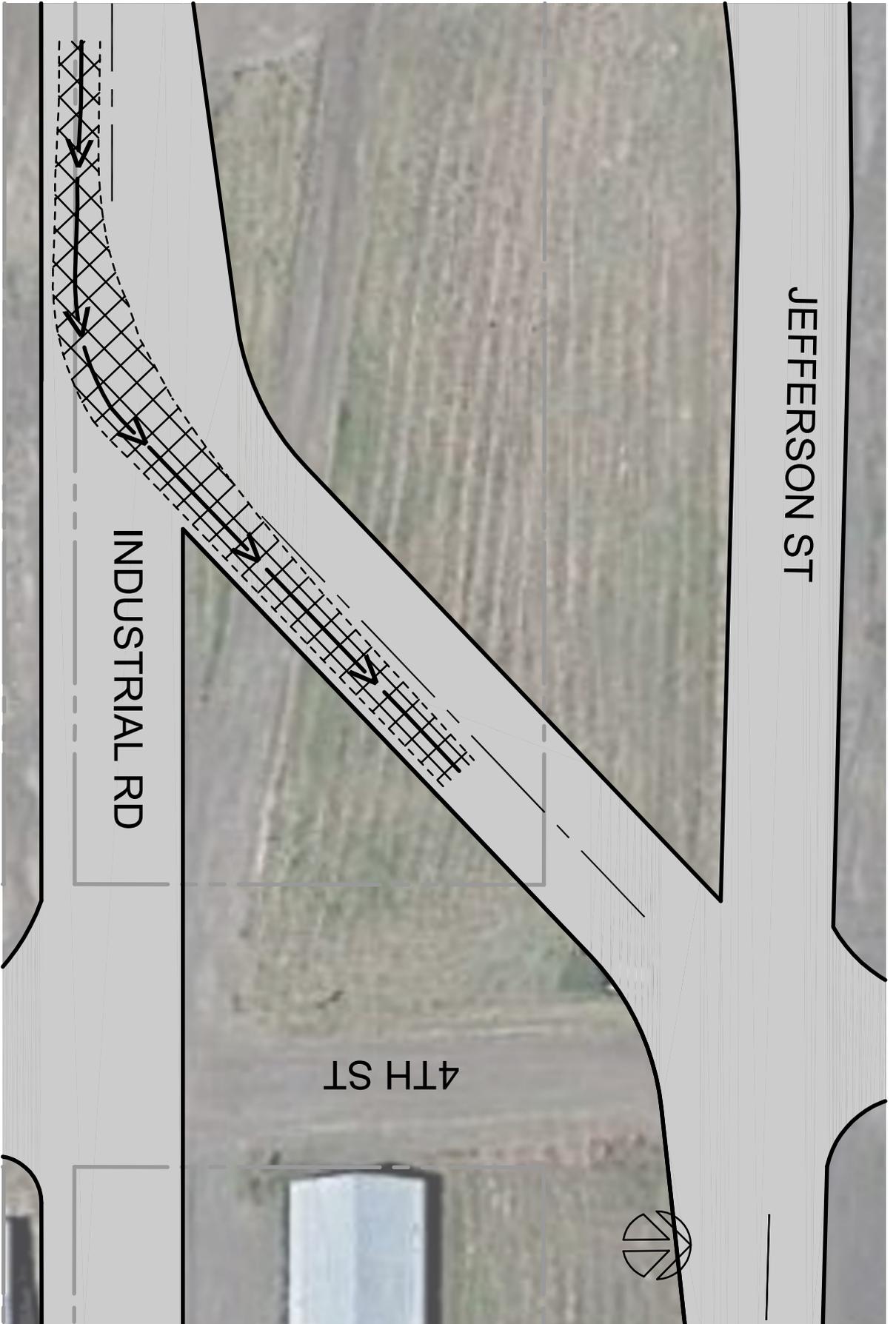


DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 40'
PROJECT NO: 30208.028.01	

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 INDUSTRIAL - JEFFERSON S-CURVE


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DATE: 8/23/2016      FIGURE: 24



JEFFERSON ST

INDUSTRIAL RD

4TH ST



DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

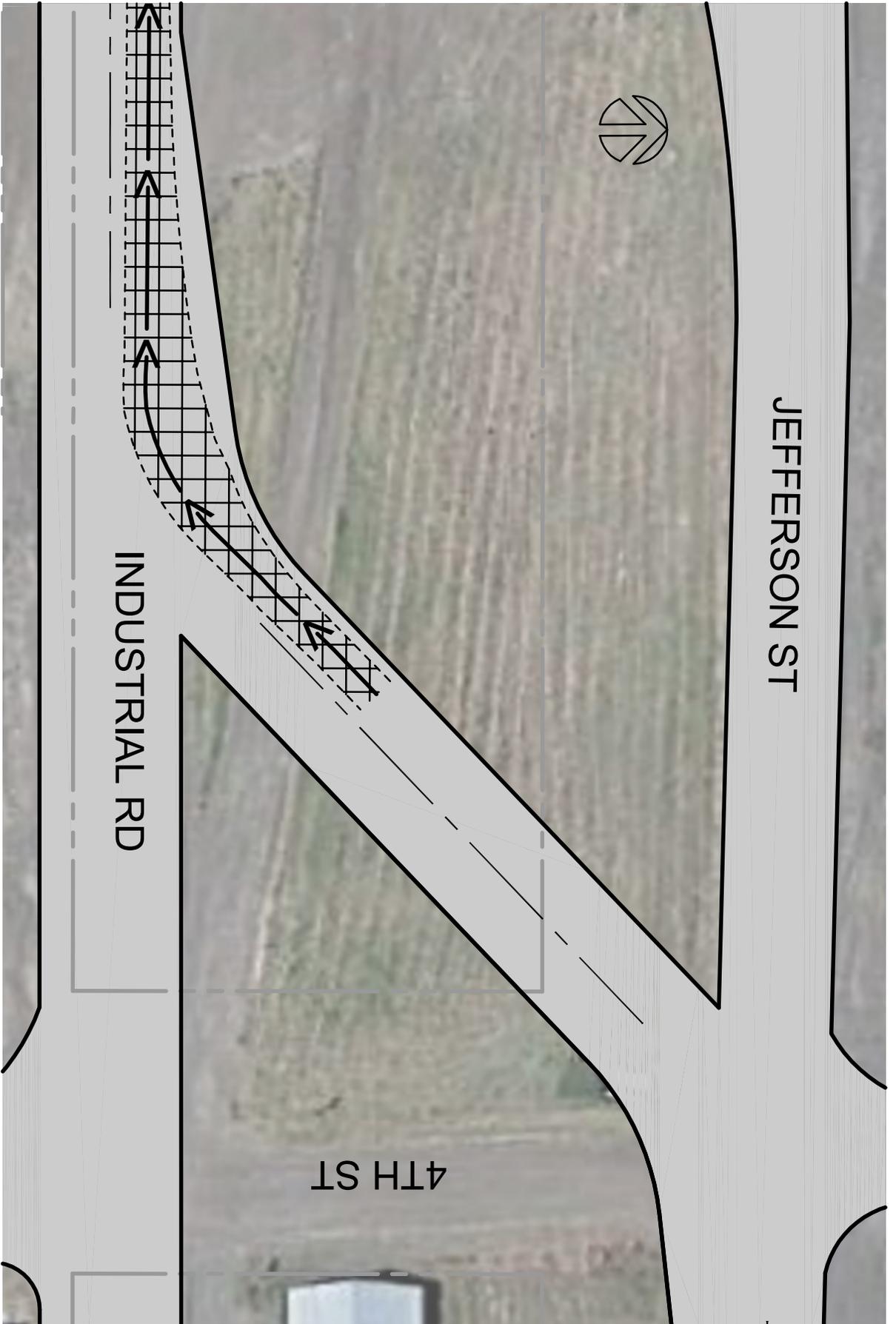
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 INDUSTRIAL TO 4TH



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FIGURE: 2-5



JEFFERSON ST

INDUSTRIAL RD

4TH ST



DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

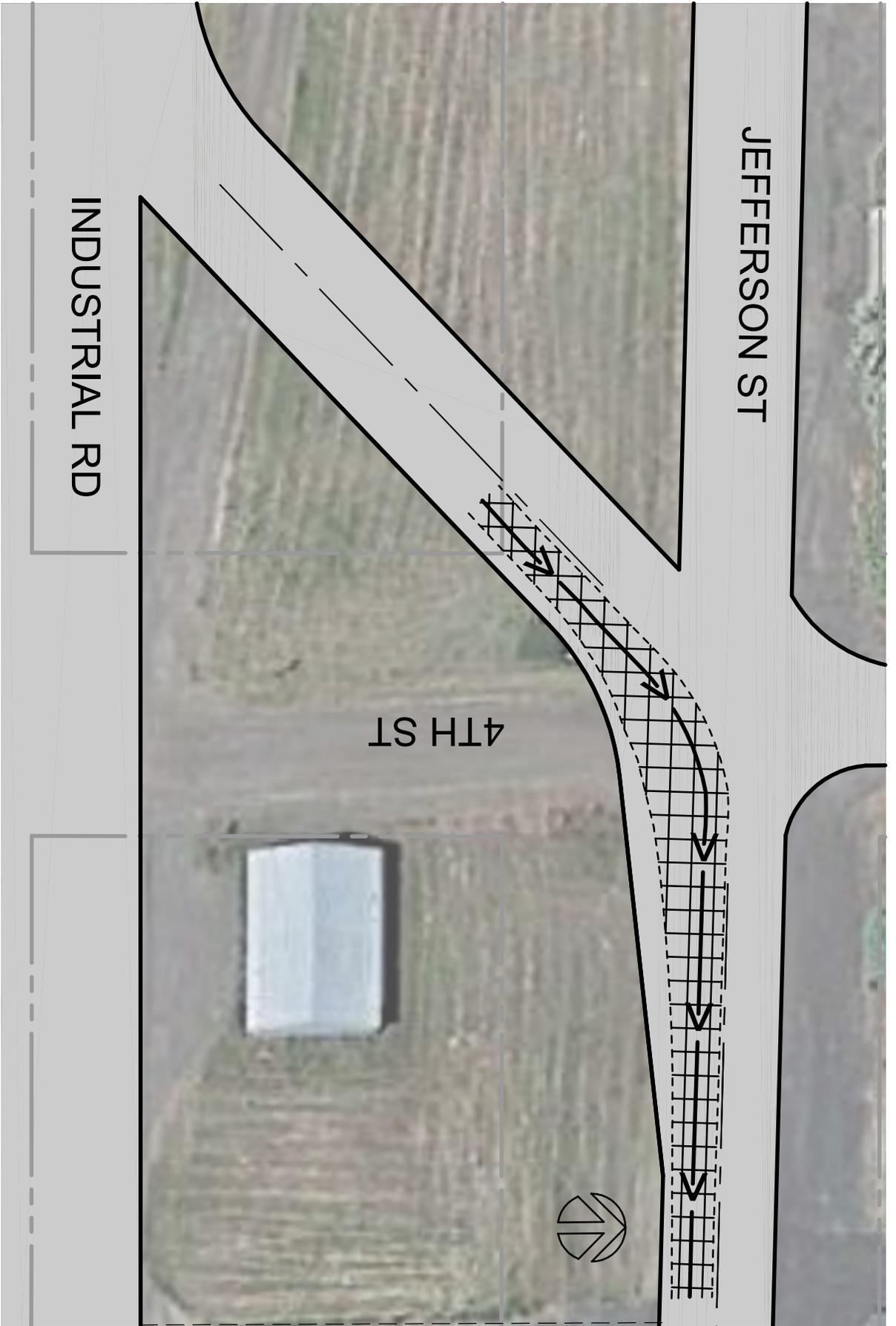
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 4TH TO INDUSTRIAL



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FIGURE: 2-6



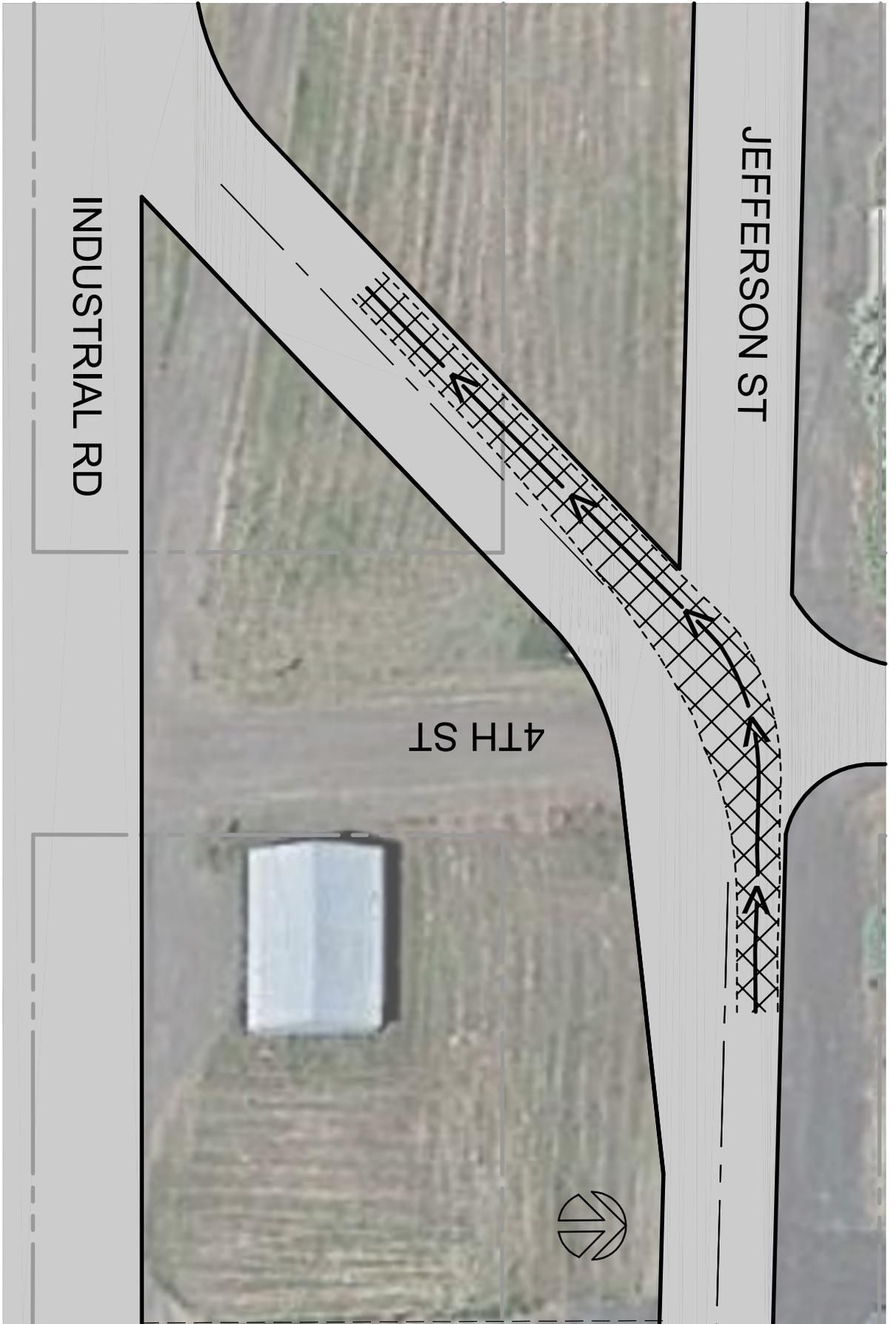
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DRWN BY: AJF	SCALE: 1" = 30'
PROJECT NO: 30208.028.01	

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 4TH TO JEFFERSON


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DATE: 8/23/2016      FIGURE: 2-7



JEFFERSON ST

4TH ST

INDUSTRIAL RD



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

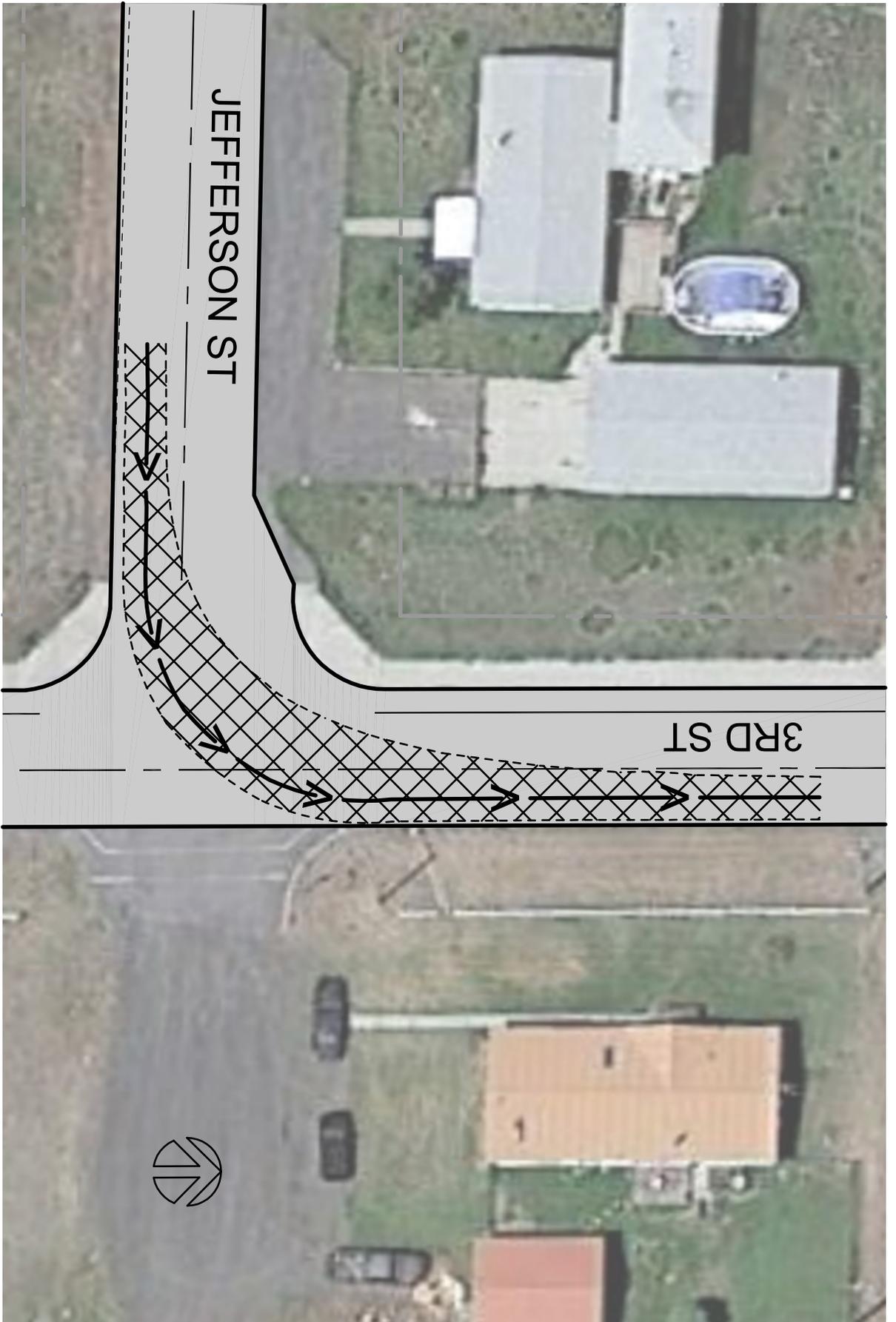
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 JEFFERSON TO 4TH

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DATE: 8/23/2016

FIGURE: 2-8



JEFFERSON ST

3RD ST



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

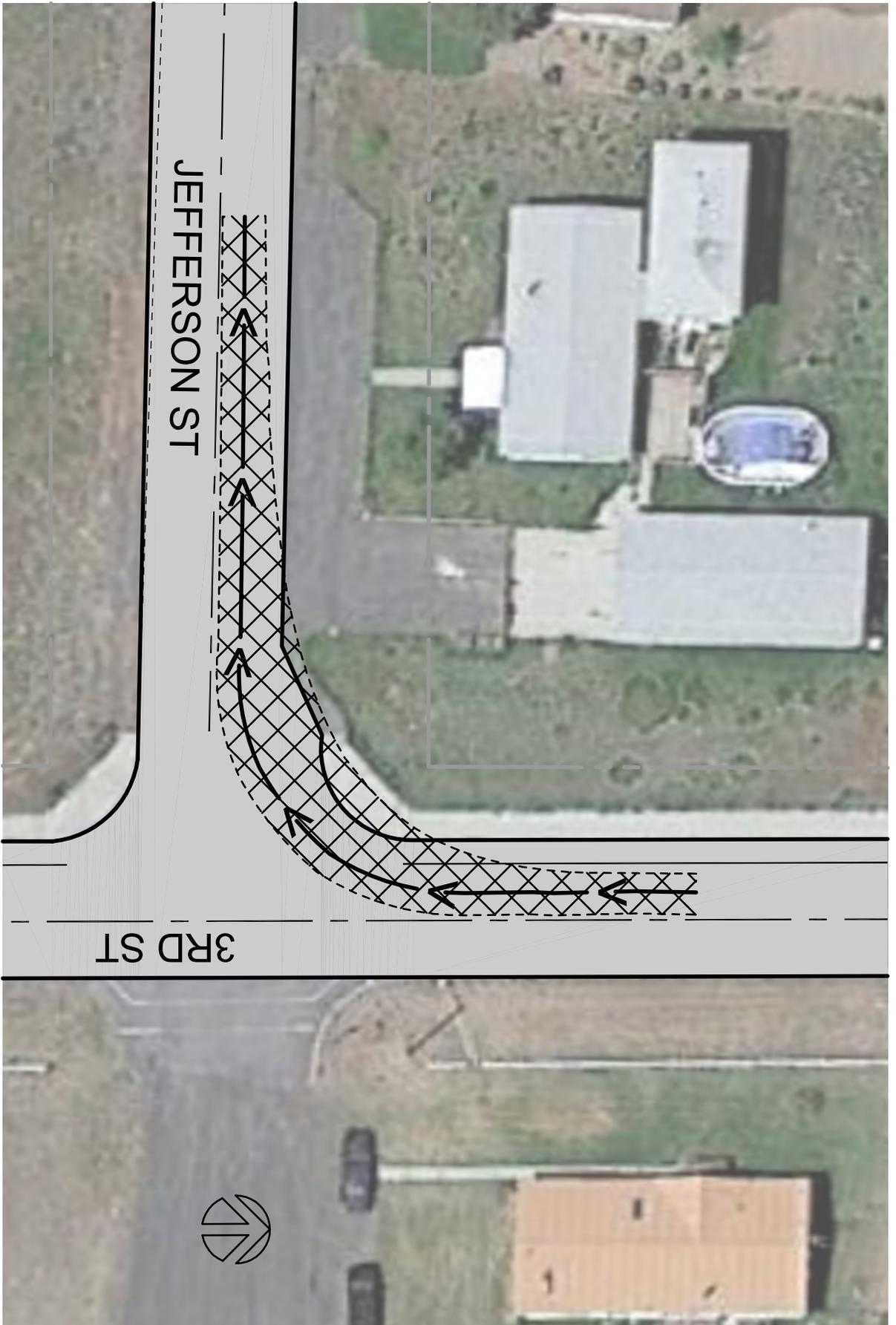
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 JEFFERSON TO 3RD

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DATE: 8/23/2016

FIGURE: 2-9



JEFFERSON ST

3RD ST



DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 3RD TO JEFFERSON

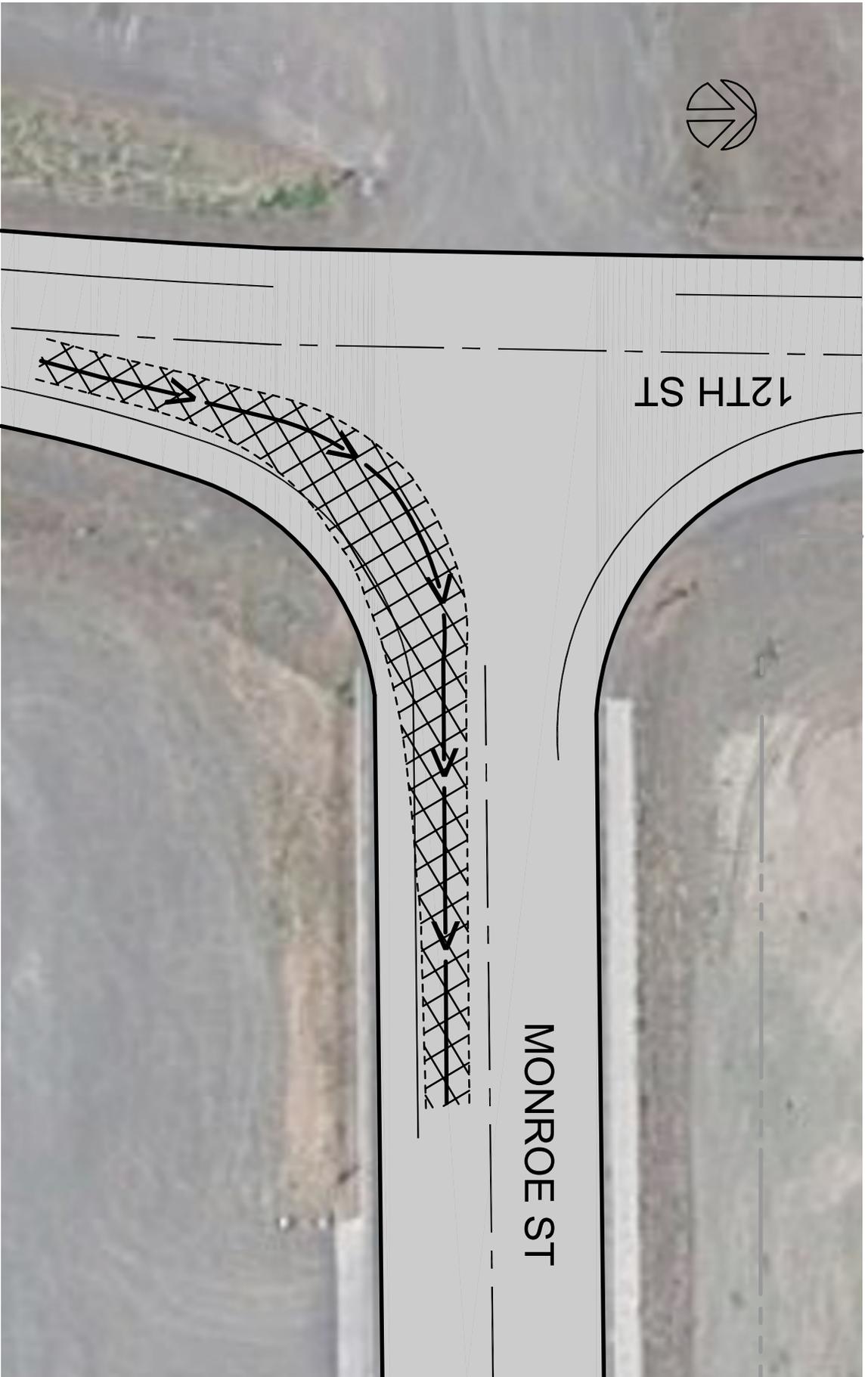


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DATE: 8/23/2016

FIGURE: 2-10



DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

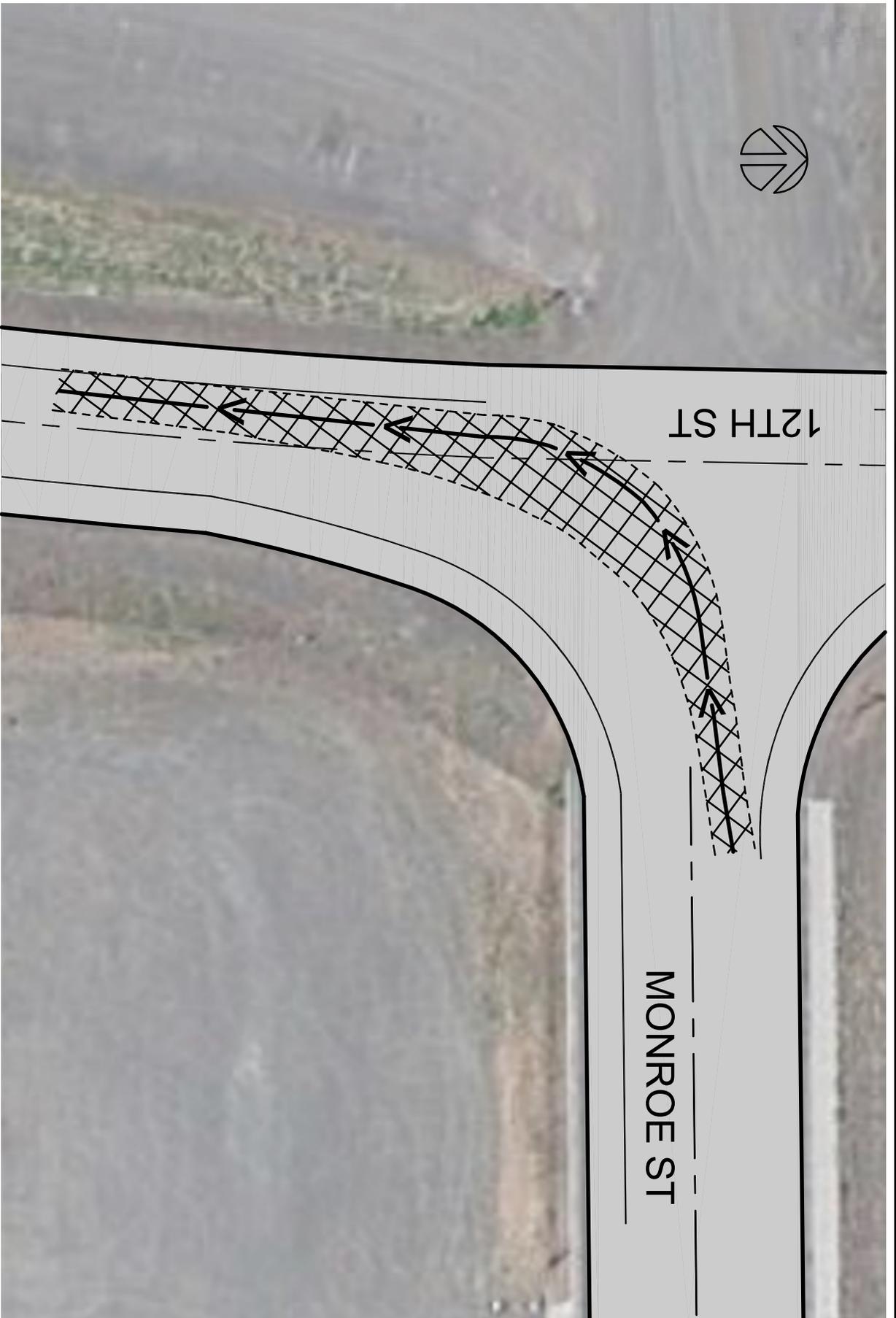
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 12TH TO MONROE



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DATE: 8/23/2016

FIGURE: 3-1



12TH ST

MONROE ST

DSGND BY: DGR

CHCKD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 MONROE TO 12TH

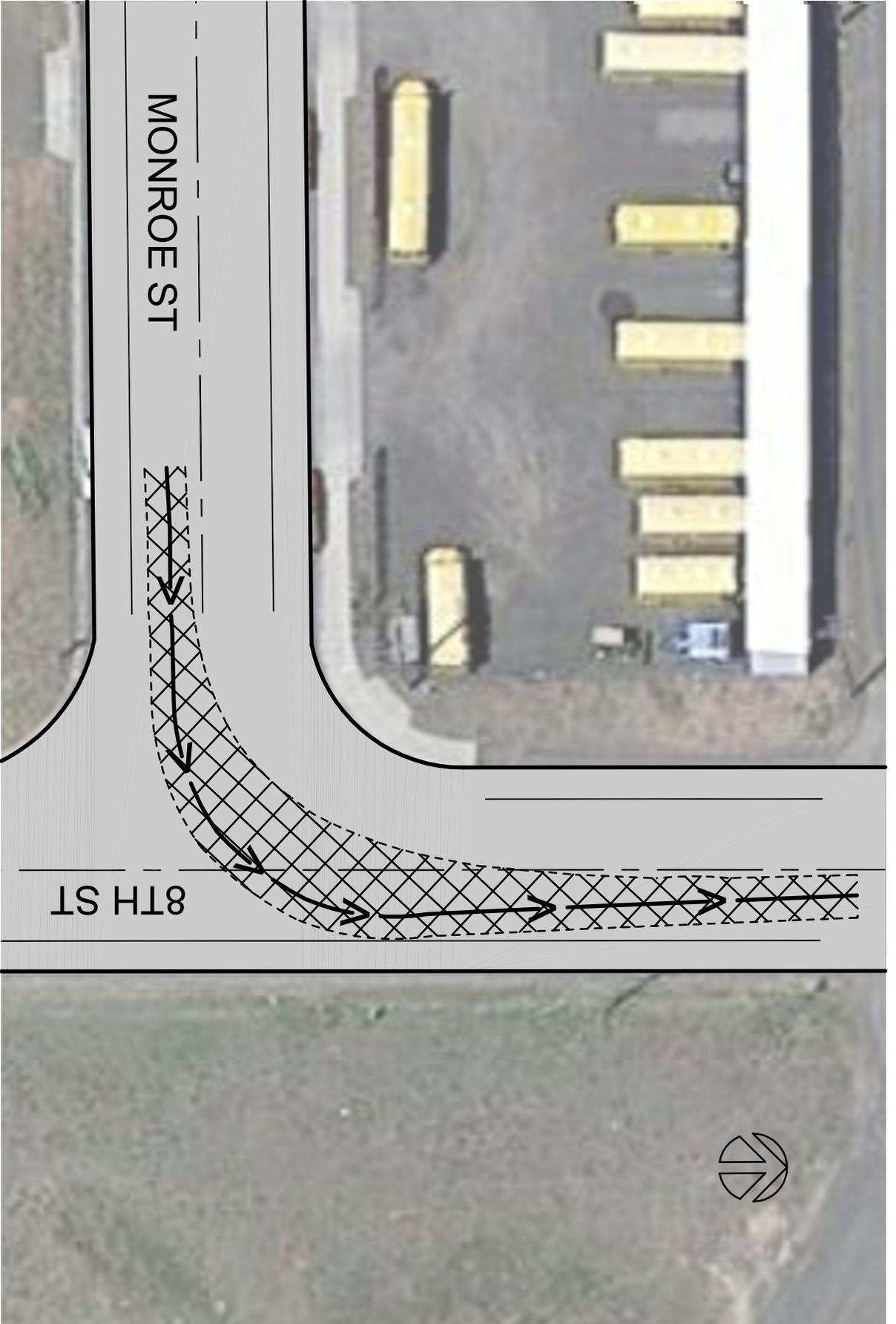


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FIGURE: 3-2



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 MONROE TO 8TH

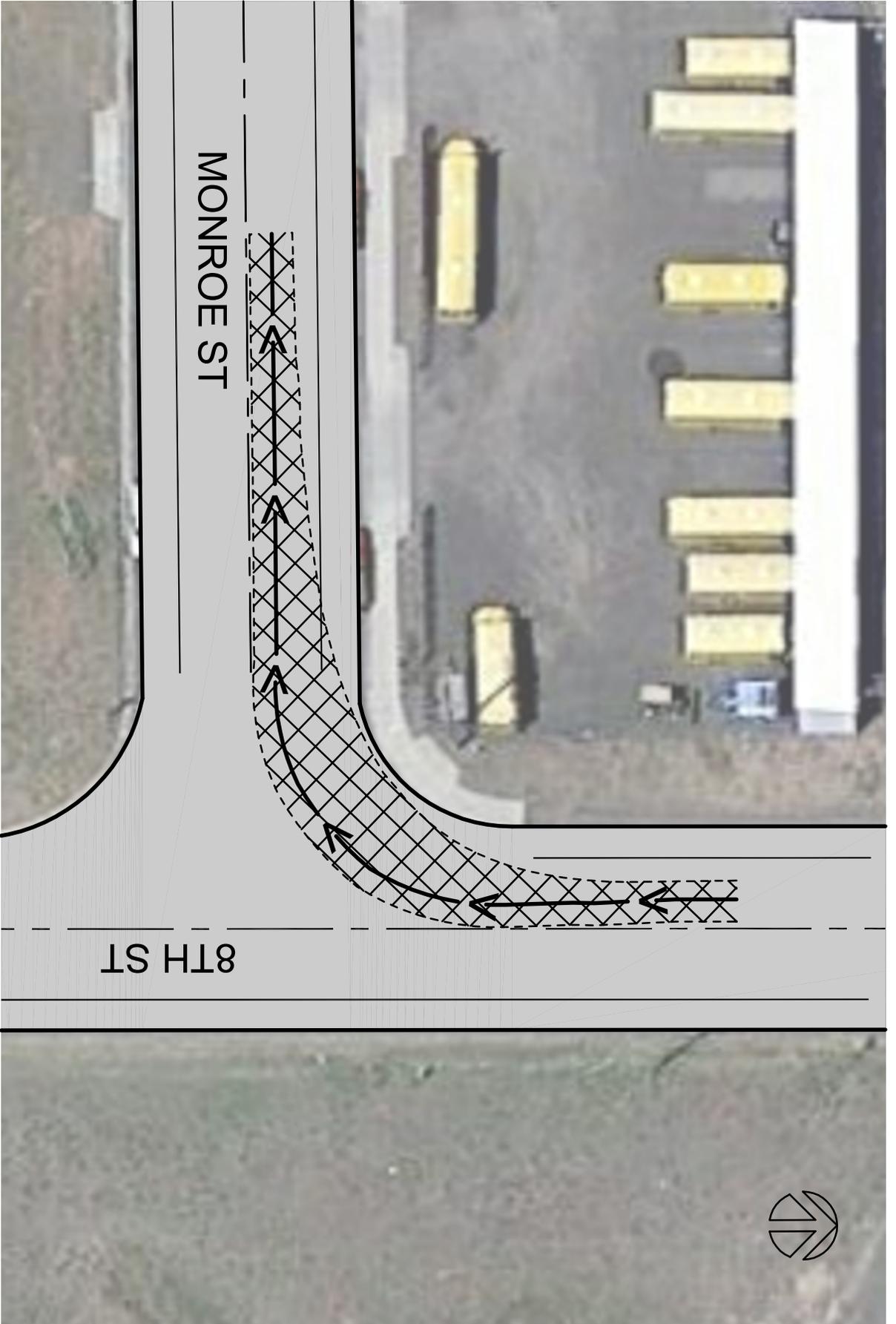
MONROE ST

8TH ST

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DATE: 8/23/2016      FIGURE: 3-3



MONROE ST

8TH ST



DSGND BY: DGR

CHKCD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

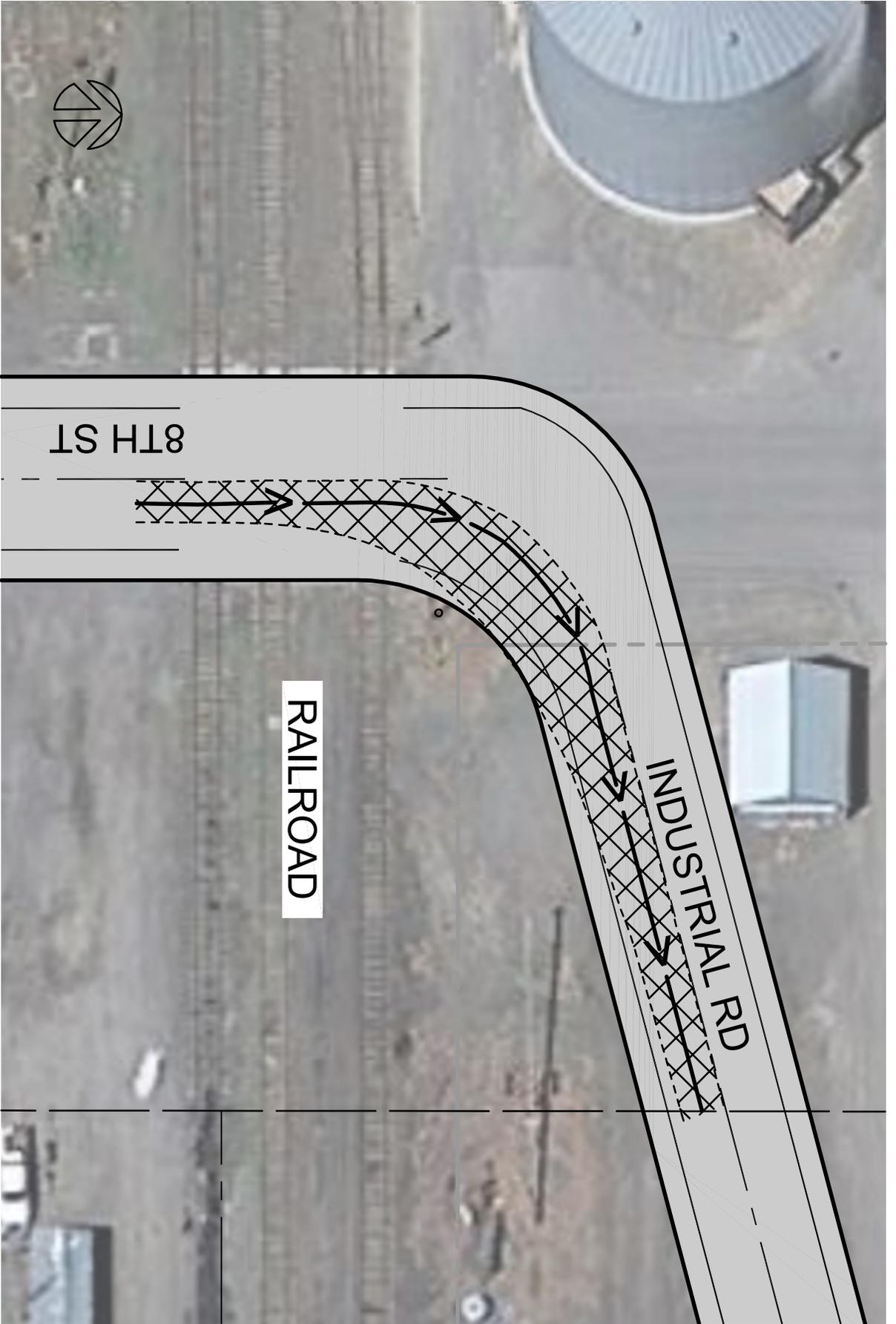
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 8TH TO MONROE



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DATE: 8/23/2016

FIGURE: 3-4



8TH ST

RAILROAD

INDUSTRIAL RD

DSGND BY: DGR

CHKCD BY: DGR

DRWN BY: AJF

SCALE: 1" = 30'

PROJECT NO: 30208.028.01

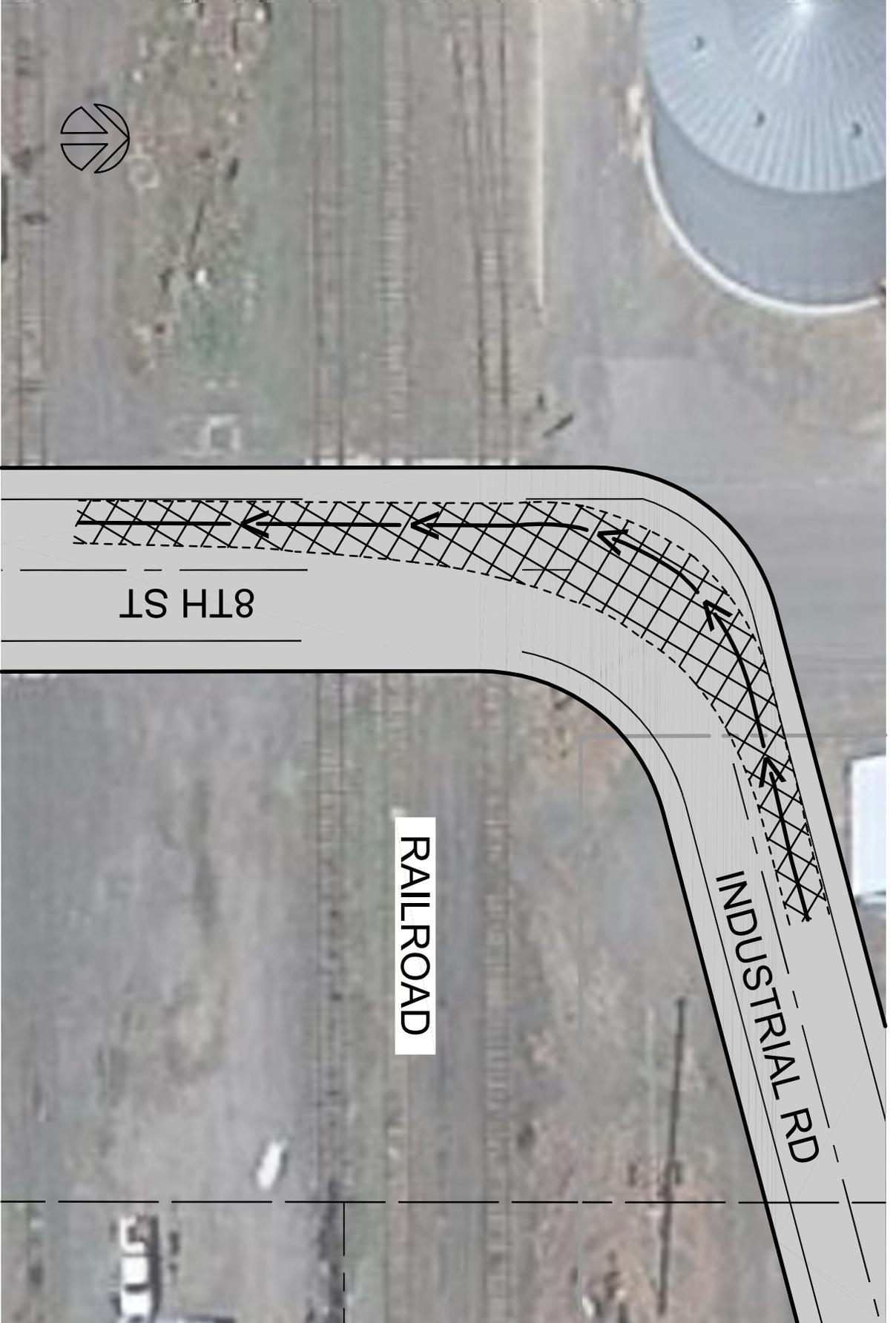
CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 8TH TO INDUSTRIAL



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FIGURE: 3-5



DSGND BY: DGR	CHCKD BY: DGR
DRWN BY: AJF	SCALE: 1" = 30'

PROJECT NO: 30208.028.01

CITY OF DAVENPORT  
 TRUCK ROUTE FEASIBILITY STUDY  
 WB-50 TURNING PATH  
 INDUSTRIAL TO 8TH

**CENTURY WEST**  
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DATE: 8/23/2016      FIGURE: 3-6