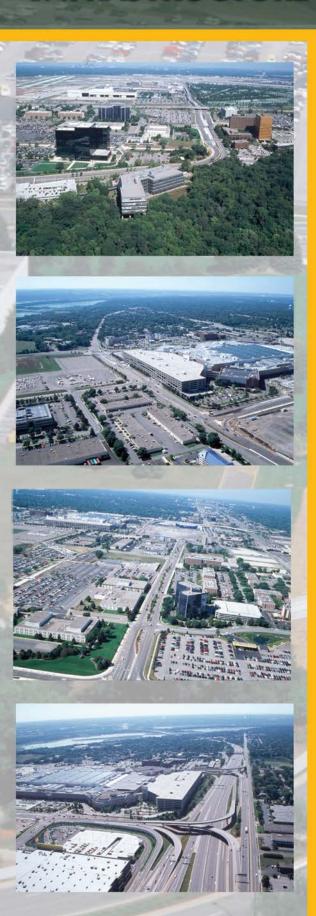
AIRPORT SOUTH ROADWAY INFRASTRUCTURE IMPROVEMENTS

JANUARY 25, 2007





SRF CONSULTING GROUP, INC.
ENGINEERS | PLANNERS | DESIGNERS

FINAL

AIRPORT SOUTH ROADWAY INFRASTRUCTURE IMPROVEMENTS

January 25, 2007

Prepared for: City of Bloomington

Prepared by: SRF Consulting Group, Inc.

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EXECUTIVE SUMMARY

Introduction

SRF Consulting Group has completed the preliminary engineering and cost estimates for the roadway infrastructure improvements necessary to support currently projected future growth in the Airport South Area over the next 25 years. These roadway improvements are consistent with the *Mall of America (MOA) Phase II Traffic Study* final draft report dated March 20, 2006 and the *Bloomington Central Station (BCS) Traffic Study* report dated October 28, 2004. Our work includes the following:

- Comprehensive list of infrastructure improvements for the Airport South Area
- Preliminary engineering for the TH 77 CD roadway connection to/from the current MOA
- Concept sketches, right-of-way needs and preliminary cost estimates for all infrastructure improvements
- Allocation of costs to the appropriate existing and proposed developments based on vehicular trips
- Supplemental operations analyses for the realignment of East Old Shakopee Road and reconstruction of the I-494/34th Avenue interchange

Infrastructure Improvements

With City staff input, SRF developed a comprehensive list of infrastructure improvements for the entire Airport South Area bounded by I-494 on the north, the Minnesota River on the east and south, Old Shakopee Road on the south and TH 77 on the west.

Preliminary Cost Estimates

Costs were developed for each improvement based on preliminary layouts and concept sketches. All cost estimates include construction cost, design engineering, contract administration, and construction engineering (inspection, testing services, etc.), right-of-way and contingency costs. Table Ex-1 includes the roadway infrastructure improvements and associated costs, by location.

Cost Allocations

The purpose of the cost allocation analysis is to allocate future public improvement costs related to full build conditions (year 2030) of the Airport South AUAR area to the appropriate existing and future redevelopments/developments. In addition, consideration was applied to existing volumes currently using the roadway network contributing to the capacity constraints and subsequent need for improvements. Table Ex-2 presents the costs allocated to the various existing and future developments/redevelopments.

Table Ex-1
Airport South Roadway Infrastructure Improvements – Cost Summary

1 2 3	Northbound TH 77 to Eastbound Lindau Lane Killebrew Drive and 24th Avenue Killebrew Drive and 22nd Avenue (City provided layout) Killebrew Drive and 20th Avenue (City provided layout)	Cost See #'s 6 & 7 \$881,104
3	Killebrew Drive and 24th Avenue Killebrew Drive and 22nd Avenue (City provided layout)	\$881,104
3	Killebrew Drive and 22nd Avenue (City provided layout)	
		ΦΩ 4Ω Ω 7 Ω
4	Killebrew Drive and 20th Avenue (City provided layout)	\$848,078
4	Kinebiew Dirve and Zour Avenue (City provided layout)	\$1,860,924
5	Lindau Lane/TH 77 Ramps/IKEA Way	See # 31
6 & 7	TH 77 CD Roadway (near Lindau Lane)	\$3,779,513
8	TH 77/I-494 CD Roadway (Interim)	\$512,549
9	TH 77/I-494 CD Roadway (Interim)	\$759,845
10A	TH 77/I-494 CD Roadway	\$1,258,795
10B	TH 77/I-494 CD Roadway	\$16,352,940
10C	Thunderbird Road Roundabout	\$1,178,231
11	I-494/24th Avenue Single-Point Interchange	\$646,121
12A	American Boulevard/24th Avenue	\$1,524,296
12B	American Boulevard/24th Avenue	\$4,076,987
13	28th Avenue/82nd Street	\$2,207,017
14	Old Shakopee Road, Cedar Avenue to Killebrew Drive	\$10,295,604
15	American Boulevard	\$474,094
16	American Boulevard/34th Avenue	\$2,252,575
17	American Boulevard/International Drive/33rd Avenue	\$170,138
18	American Boulevard/Metro Drive East	\$234,356
19	American Boulevard/30th Avenue	\$617,779
20	American Boulevard/28th Avenue	\$690,816
20A	28th Ave	\$1,676,140
21	34th Avenue	\$394,051
22	Old Shakopee Road/33rd Avenue	\$300,300
23	Old Shakopee Road/31st Avenue	Under construction
24	Old Shakopee Road/30th Avenue	\$2,433,499
25	Old Shakopee Road/28th Avenue	\$7,768,665
26	I-494/34th Avenue Interchange	\$59,652,091
27	24th Avenue/82nd Street	\$96,009
28A	86th Street extension to EOSR to 28th Avenue	\$28,261,141
28B	86th Street/Old Shakopee Road	\$1,608,896
29	30th Avenue	\$1,677,315
30	Wayfinding Signs	\$549,600
31	Lowering Lindau Lane	\$12,900,000
	Old Shakopee Road, 24th Avenue to 30th Avenue	See #'s 24 & 25
	ITS Improvements	\$2,500,000
	Total:	\$170,439,471

Table Ex-2
Development/Redevelopment Cost Allocation Summary

_	Scenario				
Development	Weekday (Thursday)	Weekend (Saturday)			
Existing					
City of Bloomington	\$20,429,651	\$22,327,527			
MOA	\$7,064,048	\$10,666,826			
IKEA	\$191,083	\$742,959			
Health Partners	\$2,973,453	\$0			
MAC	\$7,416,440	\$14,057,526			
Future					
Proposed MOA II	\$31,371,834	\$32,875,649			
Proposed BCS	\$25,874,408	\$35,093,766			
Proposed AUAR Developments	\$58,566,569	\$42,154,464			
Proposed MAC Terminal Expansion	\$11,331,414	\$7,632,189			
Proposed Park-and-Ride Expansion	\$5,220,570	\$4,888,565			
Total:	\$170,439,471	\$170,439,471			

INTRODUCTION

The proposed Mall of America Phase II and Bloomington Central Station developments alone will have a significant impact on the City's transportation infrastructure. As requested, we have completed the preliminary engineering and cost estimates for the roadway infrastructure improvements necessary to support currently projected future growth in the Airport South Area over the next 25 years. These roadway improvements are consistent with the *Mall of America* (MOA) Phase II Traffic Study final draft report dated March 20, 2006 and the Bloomington Central Station (BCS) Traffic Study report dated October 28, 2004. Our work includes the following:

- Comprehensive list of infrastructure improvements for the Airport South Area
- Preliminary engineering for the TH 77 CD roadway connection to/from the current MOA
- Concept sketches, right-of-way needs and preliminary cost estimates for all infrastructure improvements
- Allocation of costs to the appropriate existing and proposed developments based on vehicular trips
- Supplemental operations analyses for the realignment of East Old Shakopee Road and reconstruction of the I-494/34th Avenue interchange

INFRASTRUCTURE IMPROVEMENTS

As previously stated, the infrastructure improvements were consolidated from the MOA Phase II and BCS Studies. However, it is important to note that other proposed developments contribute to the need for future improvements; i.e. Metropolitan Airports Commission (MAC), Metro Transit Park-and-Ride facilities and various Airport South redevelopments/developments. With City staff input, SRF developed a comprehensive list of infrastructure improvements for the entire Airport South Area bounded by I-494 on the north, the Minnesota River on the east and south, Old Shakopee Road on the south and TH 77 on the west. Attachment A includes Figure 1 (an aerial perspective of each improvement location) and Table 1 (a detailed description of each improvement).

PRELIMINARY ENGINEERING AND CONCEPT SKETCHES

The preliminary engineering portion of the project provides the City with an initial layout for the new access to/from the northbound TH 77 CD roadway to/from the existing MOA. Given the location and complexity of the recommended improvement, the preliminary layout for the new connection to/from the TH 77 CD roadway consists of plan and profile views to check vertical and horizontal clearances, grades and utility clearances.

Previously, a concept layout was developed for the I-494/34th Avenue interchange as part of the MOA Phase II traffic study process. This layout was used to estimate the construction costs and review its feasibility to construct in the field. Additional concept sketches for the remaining improvements were developed on aerials to better tie in the existing curb lines and landmarks (i.e., Thunderbird Hotel and Mall of America, Phase II area improvements).

In preparation of the preliminary layouts and concept sketches, the following issues were addressed and resolved:

TH 77 CD Roadway

- The new access to/from the northbound TH 77 CD roadway to/from the existing MOA required additional field review and surveying in order to determine the specific topography.
- The proposed northbound TH 77 exit ramp and its approach directly into the MOA roundabout maintains the 5 percent grade that exists today at this exit point.
- The bridged connection to the west parking structure of MOA maintains its existing tie-in point.

TH 77/I-494 C-D Roadway

- There were no issues in laying out the new access from the northbound TH 77/eastbound I-494 CD roadway to Thunderbird Road. In addition, there were no problems with the new access from Thunderbird Road to the northbound TH 77/eastbound I-494 CD roadway (interim).
- For the permanent access from Thunderbird Road to the northbound TH 77/eastbound I-494 CD roadway, tunneling under 24th Avenue may cause some traffic control issues during construction. However, construction of this roadway is possible using a Conspan structure to create the tunnel under 24th Avenue. In-construction traffic control will be important in order to maintain roadway operations along 24th Avenue.
- A large retaining wall will be needed east of 24th Avenue. This will require Mn/DOT coordination for construction, as well as coordination with the MAC for right-of-way.

Killebrew Drive and 22nd Avenue

• Based on the MOA Phase II Study, dual southbound left-turn lanes were recommended at this intersection. However, the need for dual eastbound left-turn lanes was raised. Due to intersection constraints, it is not feasible to construct both improvements, dual southbound and eastbound left-turn lanes. Further analysis was completed for the intersection and it was determined that either improvement on its own will improve operations equally. With the close spacing of 20th Avenue and 22nd Avenue, it is recommended to implement improvements on Killebrew Drive. Therefore, the dual eastbound left-turn lanes are included as an improvement in this study.

I-494/24th Avenue Single-Point Interchange

- The westbound triple lefts proposed for this intersection were reviewed to determine their ability to turn within the intersection and not conflict with opposing left-turn movements.
- Review of this operation using Auto-Turn revealed no issues associated with this movement.

I-494/34th Avenue Interchange

- The concept layout developed as part of the MOA Phase II Study was reviewed for its feasibility to construct in the field. This interchange concept with loops in the northwest and southwest quadrants does not present any major issues related to its construction.
- An additional operations analysis was conducted to determine the necessary interchange design if the LRT operations were modified to northbound/southbound green phase or priority operations. The results of the analysis indicate the need for loops in the northwest and southwest quadrants for year 2030 conditions, regardless of the LRT operations. Therefore, the study improvement at the I-494/34th Avenue interchange only includes the original concept layout with loops in the northwest and southwest quadrants. The operations analysis results are summarized later in this document.

86th Street Extension to 28th Avenue

- This improvement requires traversing a deep ravine. Crossing this ravine would require a substantial box culvert with extreme fill or a large bridge structure.
- This area is contained with the fish and wildlife refuge.
- Additional study of this improvement is necessary to determine the overall impacts associated.

PRELIMINARY COST ESTIMATES

Based on the preliminary layouts and concept sketches, costs were developed for each improvement. All cost estimates include construction cost, design engineering, contract administration, and construction engineering (inspection, testing services, etc.), right-of-way and contingency costs. The following processes and assumptions were used to determine the cost estimates:

- Aerial photography was used to determine the existing curb lines, number and length of lanes, and any existing structures that could be used as a guide to determine the placement of the recommended improvements.
- Roadway improvements were drawn on top of the aerial photography to determine the removal quantities and new material quantities needed to complete the improvement.
- A field visit was conducted on February 28, 2006 to review the existing layouts at each improvement location and assess special considerations for computing the cost estimates.

- Based on field visit observations, retaining walls are needed in conjunction with improvements 5, 16 and 25, due to extreme grade changes where widening of the roadway is recommended. In addition, the 86th Street extension to 28th Avenue will need to cross a deep ravine. It was assumed that a bridge will be constructed to cross the ravine. Its cost is reflected in this improvement's estimate (improvement 28A).
- Drainage quantity, cost, and structure type are affected by the specific improvement. These quantities were based on the location of existing structures, located on the aerial photographs. The assumption is that all drainage structures that are being removed or replaced do not lie on the trunk line system and the lateral can be extended outward.
- Right-of-way quantities were based on property right-of-way lines provided by the City. Amounts stated were overtaken by the respective improvement.
- All quantities are based on major construction components. Therefore, a contingency
 cost was added for all minor items. A 20-percent contingency was added for an
 improvement that included widening or construction of a lane or roadway. A 15-percent
 contingency was added if no widening occurred. It should be noted that the I-494/34th
 Avenue Interchange includes a contingency cost of 25 percent due to the size of this
 improvement.
- A project delivery cost of 30 percent of total construction cost was typically added (some exceptions are presented).
- Cost estimation item prices are based on average bid prices for Mn/DOT year 2005.
- Quantity assumptions include:
 - o All median removals are concrete walk, unless aerial photography shows trees/shrubs.
 - O All pavements are bituminous (4" wear and 4" non-wear course mix), except where the existing pavement is concrete (8" depth assumed for new or replacement pavement).
 - o Areas under new pavement contain 3'depth subgrade excavation, 10" depth aggregate base class 5, and 1.5' depth select granular borrow.
 - o Each pay item has 5 percent added to the total quantity to account for radii and miscellaneous areas of sway in calculations.

Attachment B includes Table 2, which summarizes the cost estimate for each improvement. Attachment B also includes the concept sketches and their associated detailed cost breakdowns. Attachment C contains the preliminary layout for the TH 77 CD roadway connection to/from the current MOA.

COST ALLOCATIONS

The purpose of the cost allocation analysis is to allocate future public improvement costs related to full build conditions (year 2030) of the Airport South AUAR area to the appropriate existing and future redevelopments/developments. The improvements recommended in the MOA Phase II and BCS Studies are a direct result of the proposed developments included in each project. The land use assumptions in both of these studies include additional adjacent developments (i.e., MAC developments, Metro Transit Park-and-Ride facilities and other Airport South area redevelopments/developments). While the future redevelopments and developments use up the available excess capacity of the existing intersection and roadway system, the existing developments in the area use a percentage of its initial capacity. This initial capacity usage was taken into account when allocating future improvement costs.

The following processes and assumptions were used to conduct the analysis:

Existing Traffic Volumes

- Existing traffic volumes include turning movement counts collected April/May 2005.
- Existing traffic volumes were rerouted to account for the one-way American Boulevard improvement between 30th Avenue and 34th Avenue.
- Existing properties that are to be redeveloped by year 2030 were also subtracted from the base traffic volumes.
- Special consideration was given to properties that are currently not producing the amount of trips generated using the ITE Trip Generation handbook.

Future Volumes

- An operations and trip distribution software package (Traffix for Windows) was used to
 determine the trip allocation percentages by intersection. The Traffix model results
 provide a detailed breakdown of percent trips at a given intersection based on the trip
 source (existing trips at an intersection or a particular developments trips passing through
 the same intersection).
- The base volumes developed were entered into the Traffix model as existing volumes.
- Traffix was used to distribute the trips from future developments/redevelopments. The output includes both the number and percent trips from each future development/redevelopment to each individual intersection.

Cost Allocation

- Improvement costs are to be allocated based on the percent vehicles from each development/redevelopment using the intersection.
- Existing volumes were associated with specific developments where applicable.
- Existing volumes that could not be associated with an existing development are identified as a City cost.

The total improvement costs were allocated for two scenarios, Thursday (weekday) and Saturday (weekend). As a result of the cost allocation analysis, the following breakdowns are provided:

Existing

- City of Bloomington
- MOA
- IKEA
- Health Partners
- MAC

Future

- Proposed MOA II
- Proposed Bloomington Central Station (BCS)
- Proposed AUAR Redevelopments/Developments
- Proposed MAC Terminal Expansion
- Proposed Park-and-Ride Expansion

The following table presents a summary of the costs allocated to each development/redevelopment:

	Scenario				
Development	Weekday (Thursday)	Weekend (Saturday)			
Existing					
City of Bloomington	\$20,429,651	\$22,327,527			
MOA	\$7,064,048	\$10,666,826			
IKEA	\$191,083	\$742,959			
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Total:	\$170,439,471	\$170,439,471			

Attachment D includes detailed matrices, which display the percent breakdown by existing and future trip percentages, as well as the related costs for each improvement. The first matrix presented is representative of all existing and future developments for the overall Airport South study area. The second matrix displays the existing trip allocations broken down by City responsibilities and existing developments, as well as the future developments grouped by project.

SUPPLEMENTAL OPERATIONS ANALYSIS

East Old Shakopee Road

In the MOA Phase II Study, the extension of 86th Street to 28th Avenue is assumed for future conditions. As requested, an additional operations analysis has been completed to determine the traffic impacts if this extension is not constructed. Based on our analysis results, it was identified that the absence of this improvement will have a direct impact on the intersections of Killebrew Drive/24th Avenue/East Old Shakopee Road and East Old Shakopee Road/28th Avenue. This analysis will determine if any additional improvements are needed, or if any previously recommended improvements (from the BCS Study) are no longer needed.

The year 2030 weekday p.m. peak hour traffic model (developed during MOA Phase II Study) was used for this analysis. At this time, a year 2030 weekday a.m. peak hour analysis had not been completed. However, preliminary review of the a.m. peak hour volumes was taken into account when determining the following recommendations:

East Old Shakopee Road from 24th Avenue to 30th Avenue

- Extend the third eastbound through lane from the existing lane drop just east of the Killebrew Drive/24th Avenue/East Old Shakopee Road intersection to 30th Avenue
- Construct a third westbound through lane from 30th Avenue to 28th Avenue

Killebrew Drive/24th Avenue/East Old Shakopee Road

- Eliminate the northbound free right-turn lane
- Convert the right-most through lane into a right-turn lane (dual rights)

East Old Shakopee Road/28th Avenue

- Eliminate the recommended improvements listed in BCS Study:
 - o One southbound through lane
 - o One northbound through lane
 - o One northbound right-turn lane

34th Avenue Interchange

In the MOA Phase II Study, the 34th Avenue/I-494 interchange needs to be reconstructed under the year 2012 no build (Thursday) condition. As requested, an additional operations analysis has been completed to determine whether the recommended interchange design would change if LRT operations were modified to northbound/southbound green phase or priority operations. The year 2030 weekday p.m. peak hour traffic model (developed during MOA Phase II Study) was used for this analysis. At this time, a year 2030 weekday a.m. peak hour analysis has not been completed. However, preliminary review of the a.m. peak hour volumes was taken into account when completing this analysis:

Existing Diamond with "All-Red" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp
- Results
 - o North Ramp Delay = 285 seconds/vehicle LOS F
 - o South Ramp Delay = 80 seconds/vehicle LOS F (traffic spills back from this intersection into adjacent intersections to the south. Delay may actually be worse)

Existing Diamond with "NB/SB Green Phase" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp
- Results
 - o North Ramp Delay = 90 seconds/vehicle LOS F
 - South Ramp Delay = 80 seconds/vehicle LOS F (traffic spills back from this
 intersection into adjacent intersections to the south. Delay may actually be worse, but
 not as bad as the previous scenario)

Existing Diamond with "Priority" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp
- Results
 - o North Ramp Delay = 90 seconds/vehicle LOS F
 - South Ramp Delay = 80 seconds/vehicle LOS F (traffic does NOT spill back from this intersection into adjacent intersections to the south.)

The results of this analysis indicate that there is a capacity problem at the south ramp for all three scenarios. The additional analysis was completed assuming a loop in the southwest quadrant of the interchange:

Existing Diamond with Southwest Loop and "All-Red" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp

Results

- o North Ramp Delay = 120 seconds/vehicle LOS F
- o South Ramp Delay = 30 seconds/vehicle LOS C

Existing Diamond with Southwest Loop and "NB/SB Green Phase" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp
- Results
 - o North Ramp Delay = 55 seconds/vehicle LOS D/E
 - o South Ramp Delay = 15 seconds/vehicle LOS B

Existing Diamond with Southwest Loop and "Priority" LRT Operations

- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp
- Results
 - o North Ramp Delay = 50 seconds/vehicle LOS D
 - o South Ramp Delay = 15 seconds/vehicle LOS B

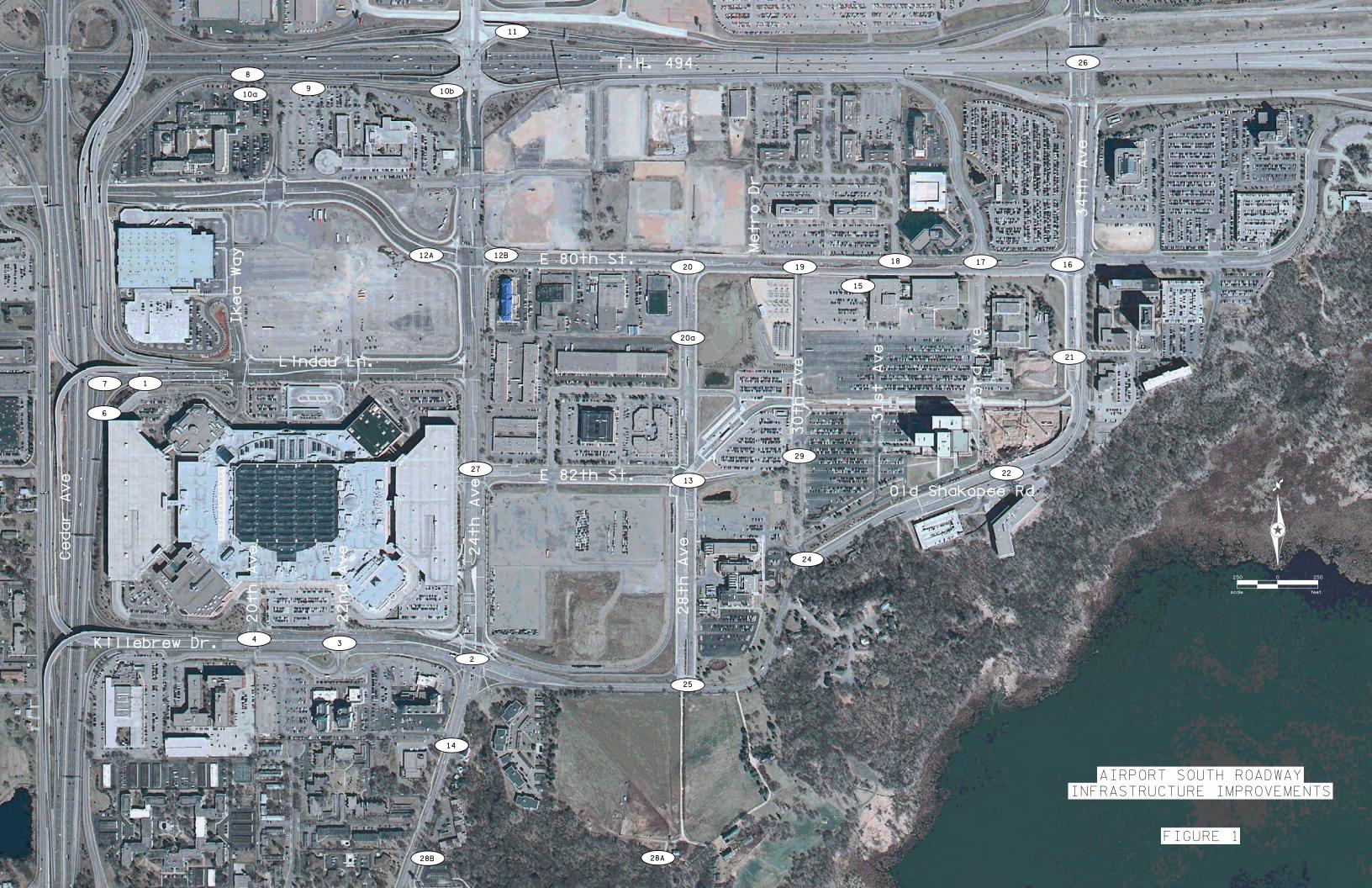
Assuming "all-red" LRT signal timing, the addition of the loop in the southwest quadrant of the interchange improves the level of service at the south ramp from LOS F to LOS C, however operational problems will still develop at the north intersection. By eliminating the "all-red" LRT signal timing, levels of service at the north ramp will improve from LOS F to LOS D/E.

The results of this analysis indicate that the north and south ramp at the I-494/34th Avenue interchange will operate at acceptable levels of service during the weekday p.m. peak hour assuming the following:

- Construction of a loop in the southwest quadrant of the interchange
- Replace the "All-Red" LRT signal timing with "NB/SB Green or Priority" LRT signal operations
- Turn lane improvements
 - o SB dual rights at the North Ramp
 - o EB and NB dual rights at the South Ramp

It is important to note that at the time of this analysis, a weekday a.m. peak hour traffic model has yet to be completed. Based on our review of the estimated volume and knowledge of the intersection in previous studies, it is expected that the north ramp will not operate at acceptable levels of service without a loop in the northwest quadrant of the interchange.

Attachment A



Hi-Mu Improvement		
	Location	Improvement
1	Northbound TH 77 to Eastbound Lindau Lane	Eliminate northbound TH 77 exit to eastbound Lindau Lane (Estimate included in improvement 6 & 7 cost estimate)
5	Lindau Lane/TH 77 Ramps/IKEA Way	Removal of concrete median on the west approach Extend the southbound right-turn lane (350 feet) - (Estimate included in Lowering Lindau Lane cost estimate)
		Extend the southbound right-turn lane (350 feet) - (Estimate included in Lowering Lindau Lane cost estimate)
6 & 7	TH 77 CD Roadway	Construct a new access from northbound TH 77 into current MOA parking lot
		Construct a new access from current MOA parking lot to the northbound TH 77 CD roadway
8	TH 77/I-494 CD Roadway	Construct a new access from northbound TH 77/eastbound I-494 CD roadway to Thunderbird Road (Year 2012 interim)
10A	TH 77/I-494 CD Roadway	Construct a new access from northbound TH 77/eastbound I-494 CD roadway to Thunderbird Road
10C	Thunderbird Road Roundabout	Construct a new roundabout from Thunderbird road to ramp off of TH 77
100		General and the medical and the management of th
9	TH 77/I-494 CD Roadway	Construct a new access from Thunderbird Road to the eastbound I-494 CD roadway (Year 2012 interim)
10B	TH 77/I-494 CD Roadway	Construct a new access from Thunderbird Road to the eastbound I-494 CD roadway (permanent)
.,,,		Construct a new CD roadway from Thunderbird Road under 24th Avenue to east of 34th Avenue
_		
2	Killebrew Drive and 24th Avenue	Extend the eastbound left-turn lanes (400 feet) Extend the westbound left-turn lane (500 feet)
		Extend the third westbound through lane back to the intersection of Old Shakopee Road/28th Avenue
	Willebrass Delve and 60md Assessed	
3	Killebrew Drive and 22nd Avenue (City has provided layout)	Construct an additional eastbound left-turn lane (dual lefts) North approach may need to be modified to accommodate a hotel development in the future
	(City has provided layout)	I total approach may need to be modified to accommodate a noter development in the ratale
4	Killebrew Drive and 20th Avenue	Construct an additional eastbound left-turn lane (dual lefts)
	(City has provided layout)	
11	I-494/24th Avenue Single-Point Interchange	Construct an additional westbound left-turn lane (triple lefts)
12A	American Boulevard/24th Avenue	Construct an additional southbound right-turn lane (dual rights). Extend both turn lanes to the I-494 single-point interchange
		Extend the eastbound left-turn lanes (500 feet)
12B	American Boulevard/24th Avenue	Extend the southbound outside left-turn lane (500 feet)
		Extend the westbound left-turn lanes (500 feet) Construct an additional westbound right-turn lane (triple rights). The westbound approach should have four lanes that begin at 28th Avenue
		Construct an additional westbound right-turn lane (triple rights). The westbound approach should have four lanes that begin at 28th Avenue Construct an additional eastbound right-turn lane (dual rights)
27	24th Avenue/82nd Street	Convert the right-turn/through lane into a trap right-turn lane (dual southbound rights)
16	American Boulevard/34th Avenue	Eliminate the southbound free right-turn lane
•		Construct southbound dual right-turn lanes that extend from the I-494 South Ramps
		Eliminate the westbound free right-turn lane
		Construct westbound dual right-turn lanes
15	American Boulevard	Convert to a westbound one-way (three through lanes) roadway between 30th Avenue and 34th Avenue (Included in Airport South CIP)
47	American Boulevard/International Drive/33rd Avenue	Modify the westbound approach to provide a left-turn lane, two through lanes and a right-turn lane (this is with the one-way conversion)
17	American Boulevard/International Drive/35rd Avenue	Modify the southbound approach to a right-turn only (free movement) (this is with the one-way conversion)
21	34th Avenue	Construct southbound right-in only into Northeast housing
26	I-494/34th Avenue Interchange	Reconstruction of interchange with LRT operations (folded diamond to west)
	. To wo tan Attended motorical go	, , , , , , , , , , , , , , , , , , ,
	I-494/34th Avenue Interchange	Reconstruction of interchange without LRT operations (to be determined) (pre-empt vs. priority)
18	American Boulevard/Metro Drive East	Construct a westbound left-turn lane (200 feet)
19	American Boulevard/30th Avenue	Install signal
		Convert the eastbound through lanes into dual right-turn lanes
		Modify the westbound approach to provide dual left-turn lanes and two through lanes. The inside through lane will become the outside left-turn lane
		Modify the northbound approach to provide dual left-turn lanes
20	American Boulevard/28th Avenue	Construct an eastbound right-turn lane (250 feet)
		Restripe the northbound inside through lane to a left-turn lane
		Extend the northbound left-turn lane to 200 feet Construct a southbound left-turn lane
		Replace north/south split phasing with protected left-turn phasing
		Replace north/south split phasing with protected left-turn phasing
13	28th Avenue/82nd Street	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts)
13	28th Avenue/82nd Street	Replace north/south split phasing with protected left-turn phasing
		Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane
13	28th Avenue/82nd Street Old Shakopee Road/33rd Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal
		Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane
		Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal
22	Old Shakopee Road/33rd Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300'
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes The southbound approach will provide dual left-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes The southbound approach will provide dual left-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes The southbound approach will provide dual left-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound left-turn lanes (300 feet)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct outhbound dual left-turn lanes (250 feet) Construct an additional westbound right-turn lane (400 feet) (dual rights) Construct dual eastbound left-turn lanes (300 feet) Construct dual eastbound right-turn lanes (300 feet)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal Construct on approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes. Construct southbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an eastbound left-turn lanes (300 feet) Construct an eastbound right-turn lanes (300 feet) Construct a westbound right-turn lane (300 feet)
22	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal Construct on approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes. Construct southbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an eastbound left-turn lanes (300 feet) Construct an eastbound right-turn lanes (300 feet) Construct a westbound right-turn lane (300 feet)
22 23 24 25	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue	Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct an eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane dual right-turn lane is 100 feet with a second full-length left-turn lane lane is 100 feet with a second full-length left-turn lane lane is 100 feet with a second full-length left-turn lane lane land left-turn lanes (250 feet) Construct an additional southbound right-turn lane (260 feet) Construct an eastbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet)
22 23 24 25	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue	Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct an eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane dual right-turn lane is 100 feet with a second full-length left-turn lane lane is 100 feet with a second full-length left-turn lane lane is 100 feet with a second full-length left-turn lane lane land left-turn lanes (250 feet) Construct an additional southbound right-turn lane (260 feet) Construct an eastbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet)
22 23 24 24	Old Shakopee Road/33rd Avenue Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct an eastbound right-turn lane (300 feet) Construct an eastbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25)
22 23 24 25 25	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, 24th Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound right-turn lane as a through/right-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25) Reconstruct with three through lanes in each direction and a median with left turn lanes (86th Street to Cedear Avenue was included in the Airport South CIP)
22 23 24 24	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, 24th Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct an eastbound right-turn lane (300 feet) Construct an eastbound right-turn lane (300 feet) Construct an eastbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25) Reconstruct with three through lanes in each direction and a median with left turn lanes Reconstruct with three through lanes in each direction and a median with left turn lanes
22 23 24 25 25	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, 24th Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound right-turn lane as a through/right-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25) Reconstruct with three through lanes in each direction and a median with left turn lanes (86th Street to Cedear Avenue was included in the Airport South CIP)
22 23 24 25 25	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, 24th Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound frough lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25 Reconstruct with three through lanes in each direction and a median with left turn lanes (86th Street to Cedear Avenue was included in the Airport South CIP)
22 23 24 24 25 25 14 28A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cetar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm)	Replace north/south split phasing with protected left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound fright-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes Install signal Construct dual eastbound left-turn lanes Install signal The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct activation and additional southbound right-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound right-turn lanes (300 feet) Construct an additional westbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25 Reconstruct with three through lanes in each direction and a median with left turn lanes *(68th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane
22 23 24 25 25 	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm)	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes is 100 feet with a second full-length left-turn lane Construct southbound dual left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound right-turn lane (300 feet) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25 Reconstruct with three through lanes in each direction and a median with left turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes
22 23 24 24 25 25 14 28A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cetar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm)	Replace north/south split phasing with protected left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane Restripe the eastbound fright-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes Install signal Construct dual eastbound left-turn lanes Install signal The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct activation and additional southbound right-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound right-turn lanes (300 feet) Construct an additional westbound right-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct an additional westbound left-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25 Reconstruct with three through lanes in each direction and a median with left turn lanes *(68th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane
22 23 24 25 25 14 28A 28A 28B 29 20A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound frough lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct abund left-turn lanes (250 feet) Construct dual eastbound left-turn lanes (300 feet) Construct dual eastbound right-turn lanes (300 feet) Construct dual eastbound right-turn lanes (300 feet) Construct an eastbound right-turn lanes (300 feet) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25) Reconstruct with three through lanes in each direction and a median with left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Construct as outbound
22 23 24 25 25 14 28A 28B	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cedar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound fright-turn lane as a through/right-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The rew northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes is 100 feet with a second full-length left-turn lanes Construct adule asstbound left-turn lanes (250 feet) Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound left-turn lanes (300 feet) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left-turn lanes (this improvement is included in improvement #'s 24 & 25 Reconstruct with two through lanes in each direction and a median with left-turn lanes **Restrict two lanes in each direction with a median and left- and right-turn lanes Modify the westbound approach to provide two through lanes in each direction and a median with left-turn lanes Reconstruct roadway to provide two through lanes in each direction and a median with left-turn lanes (included in Airport South CIP)
22 23 24 25 25 14 28A 28A 28B 29 20A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound frough lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct abund left-turn lanes (250 feet) Construct dual eastbound left-turn lanes (300 feet) Construct dual eastbound right-turn lanes (300 feet) Construct dual eastbound right-turn lanes (300 feet) Construct an eastbound right-turn lanes (300 feet) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #'s 24 & 25) Reconstruct with three through lanes in each direction and a median with left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Costruct two lanes in each direction with a median and left- and right-turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Construct as outbound
22 23 24 24 25 25 25 28 28A 28B 29 20A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cedar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue 28th Ave ITS Improvements Wayfinding Signs	Replace north/south spiti phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound frough lane as a second left-turn lane Restripe the eastbound frough lane as a through/right-turn lane Install signal Extend westbound right-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The rever northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct an additional approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct as outhbound dual left-turn lanes (250 feet) Construct as outhbound dual left-turn lanes (250 feet) Construct an eastbound right-turn lanes (300 feet) Construct an eastbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left turn lanes (this improvement is included in improvement #5 24 & 25) Reconstruct with two through lanes in each direction and a median with left turn lanes **(86th Street to Cedear Avenue was included in the Airport South CIP) Construct as outhbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane Reconstruct with two lanes in each direction with a median and left- and right-turn lanes Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane Reconstruct as authbound lane between American Boulevard and 82nd Street Po
22 23 24 25 25 14 28A 28A 28B 29 20A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cedar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue 28th Ave	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound fright-turn lane as a second left-turn lane Restripe the eastbound right-turn lane as a through/right-turn lane Install signal Extend westbound right-turn lane to 300' Construct an eastbound left-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct southbound dual left-turn lanes (250 feet) Construct southbound dual left-turn lanes (250 feet) Construct dual eastbound right-turn lanes (300 feet) (dual rights) Construct a westbound right-turn lanes (300 feet) Construct a westbound right-turn lane (300 feet) Construct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #5 24 & 25) Reconstruct with two through lanes in each direction and a median with left- and right-turn lanes **(86th Sireet to Cedear Avenue was included in the Airport South CIP) Construct as outhbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane Reconstruct with three through lanes in each direction and a median with left-turn lanes **(86th Sireet to Cedear Avenue was included in the Airport South CIP) Construct as outhbound lane between American Boulevard and 82nd Street Construct
22 23 24 24 25 25 25 28 28A 28B 29 20A	Old Shakopee Road/31st Avenue (to be consistent with BCS plans) Old Shakopee Road/30th Avenue (to be consistent with BCS plans) Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road/28th Avenue Old Shakopee Road, Cedar Avenue to 30th Avenue (along the original section) Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive) 86th Street extension to EOSR to 28th Avneue (new connection across Kelley Farm) 86th Street/Old Shakopee Road 30th Avenue 28th Ave ITS Improvements Wayfinding Signs	Replace north/south split phasing with protected left-turn phasing Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound frough lane as a second left-turn lane Restripe the eastbound frough lane as a strough/right-turn lane Install signal Extend westbound right-turn lane (350 feet) The southbound approach will provide a shared left-turn/through lane and a right-turn lane Install signal Construct an eastbound left-turn lane (350 feet) The southbound approach will provide dual left-turn/through lane and a right-turn lane Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane Install signal The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet) Construct southbound dual left-turn lanes (250 feet) Construct an eastbound right-turn lanes (200 feet) Construct an eastbound left-turn lanes (200 feet) Construct an eastbound left-turn lanes (300 feet) Construct an eastbound left-turn lanes (300 feet) (dual lefts) Reconstruct with two through lanes in each direction and a median with left-turn lanes (this improvement is included in improvement #s 24 & 25) Reconstruct with three through lanes in each direction and a median with left-turn lanes Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane Reconstruct with three through lanes in each direction and a median with left-turn lanes (Included in Airport South CIP) Construct as outhbound approach to provide dual left-turn lanes, two through lanes and a right-turn lanes Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane Reconstruct visit three through lanes in each direction and a median with left-turn lanes (Included in Airport South CIP) C

Attachment B

Airport South Roadway Infrastructure Improvements Based on City of Bloomington Staff Review

Table 2

Hi-Mu Improvement	Location Staff Review	Table 2	Total
11-mu improvement	Northbound TH 77 to Eastbound Lindau Lane	Eliminate northbound TH 77 exit to eastbound Lindau Lane (Estimate included in improvement 6 & 7 cost estimate)	see #'s 6 & 7
5	Lindau Lane/TH 77 Ramps/IKEA Way		555 # 5 5 4 7
.	Lindau Lane/1 n // Kampsinca way	Removal of concrete median on the west approach Extend the southbound right-turn lane (350 feet) - (Estimate included in Lowering Lindau Lane cost estimate)	see #31
6 & 7	TH 77 CD Roadway	Construct a new access from northbound TH 77 into current MOA parking lot	\$3,779,513
-		Construct a new access from current MOA parking lot to the northbound TH 77 CD roadway	\$540.540
8	TH 77/I-494 CD Roadway	Construct a new access from northbound TH 77/eastbound I-494 CD roadway to Thunderbird Road (Year 2012 interim)	\$512,549
10A	TH 77/I-494 CD Roadway	Construct a new access from northbound TH 77/eastbound I-494 CD roadway to Thunderbird Road (includes roundabout cost)	\$1,258,795
10C	Thunderbird Road Roundabout	Construct a new roundabout from Thunderbird road to ramp off of TH 77	\$1,178,231
9	TH 77/I-494 CD Roadway	Construct a new access from Thunderbird Road to the eastbound I-494 CD roadway (Year 2012 interim)	\$759,845
10B	TH 77/I-494 CD Roadway	Construct a new access from Thunderbird Road to the eastbound I-494 CD roadway (permanent) Construct a new CD roadway from Thunderbird Road under 24th Avenue to east of 34th Avenue	\$16,352,940
2	Killebrew Drive and 24th Avenue	Extend the eastbound left-turn lanes (400 feet) Extend the westbound left-turn lane (500 feet) Extend the third westbound through lane back to the intersection of Old Shakopee Road/28th Avenue	\$881,104
3	Killebrew Drive and 22nd Avenue (City has provided layout)	Construct an additional eastbound left-turn lane (dual lefts) North approach may need to be modified to accommodate a hotel development in the future	\$848,078
4	Killebrew Drive and 20th Avenue (City has provided layout)	Construct an additional eastbound left-turn lane (dual lefts)	\$1,860,924
11	I-494/24th Avenue Single-Point Interchange	Construct an additional westbound left-turn lane (triple lefts)	\$646,121
12A	American Boulevard/24th Avenue	Construct an additional southbound right-turn lane (dual rights). Extend both turn lanes to the I-494 single-point interchange	A. 50.1.000
		Extend the eastbound left-turn lanes (500 feet)	\$1,524,296
12B	American Boulevard/24th Avenue	Extend the southbound outside left-turn lane (500 feet) Extend the westbound left-turn lanes (500 feet)	\$4,076,987
		Construct an additional westbound right-turn lane (triple rights). The westbound approach should have four lanes that begin at 28th Avenue Construct an additional eastbound right-turn lane (dual rights)	ψ 1,01 0,001
27	24th Avenue/82nd Street	Convert the right-turn/through lane into a trap right-turn lane (dual southbound rights)	\$96,009
16	American Boulevard/34th Avenue	Eliminate the southbound free right-turn lane	
		Construct southbound dual right-turn lanes that extend from the I-494 South Ramps Eliminate the westbound free right-turn lane Construct westbound dual right-turn lanes	\$2,252,575
15	American Boulevard		\$474,094
17	American Boulevard American Boulevard/International Drive/33rd Avenue	Convert to a westbound one-way (three through lanes) roadway between 30th Avenue and 34th Avenue (Included in Airport South CIP) Modify the westbound approach to provide a left-turn lane, two through lanes and a right-turn lane (this is with the one-way conversion)	Q474,U34
		Modify the southbound approach to a right-turn only (free movement) (this is with the one-way conversion)	\$170,138
21	34th Avenue	Construct southbound right-in only into Northeast housing	\$394,051
26	I-494/34th Avenue Interchange	Reconstruction of interchange with LRT operations (folded diamond to west)	\$59,652,091
	I-494/34th Avenue Interchange	Reconstruction of interchange without LRT operations (to be determined) (pre-empt vs. priority)	
18	American Boulevard/Metro Drive East	Construct a westbound left-turn lane (200 feet)	\$234,356
19	American Boulevard/30th Avenue	Install signal	
		Convert the eastbound through lanes into dual right-turn lanes Modify the westbound approach to provide dual left-turn lanes and two through lanes. The inside through lane will become the outside left-turn lane	\$617,779
		Modify the northbound approach to provide dual left-turn lanes	
20	American Boulevard/28th Avenue	Construct an eastbound right-turn lane (250 feet) Restripe the northbound inside through lane to a left-turn lane	
		Extend the northbound left-turn lane to 200 feet Construct a southbound left-turn lane	\$690,816
		Replace north/south split phasing with protected left-turn phasing	
13	28th Avenue/82nd Street	Construct an additional westbound left-turn lane (250 feet) (dual lefts) Restripe the eastbound through lane as a second left-turn lane	\$2,207,017
		Restripe the eastbound right-turn lane as a through/right-turn lane	
22	Old Shakopee Road/33rd Avenue	Install signal Extend westbound right-turn lane to 300'	\$300,300
23	Old Shakopee Road/31st Avenue	Construct an eastbound left-turn lane (350 feet)	
13	(to be consistent with BCS plans)	The southbound approach will provide a shared left-turn/through lane and a right-turn lane	under construction w/ BCS
24	Old Shakopee Road/30th Avenue (to be consistent with BCS plans)	Install signal Construct dual eastbound left-turn lanes The southbound approach will provide dual left-turn lanes and dual right-turn lanes. The inside left-turn lane is 100 feet with a second full-length left-turn lane	\$2,433,499
25	Old Shakopee Road/28th Avenue	Install signal	
•		The new northbound approach will provide dual left-turn lanes, two through lanes and dual right-turn lanes Construct southbound dual left-turn lanes (250 feet)	
		Construct an additional southbound right-turn lane (400 feet) (dual rights) Construct dual eastbound left-turn lanes (300 feet)	\$7,768,665
		Construct an eastbound right-turn lane (300 feet) Construct a westbound right-turn lane (300 feet)	
		Construct an additional westbound left-turn lane (300 feet) (dual lefts)	
	Old Shakopee Road, 24th Avenue to 30th Avenue (along the original section)	Reconstruct with two through lanes in each direction and a median with left- and right-turn lanes (this improvement is included in improvement #s 24 & 25)	see #'s 24 & 25
14	Old Shakopee Road, Cedar Avenue to Killebrew Drive (south of Killebrew Drive)	Reconstruct with three through lanes in each direction and a median with left turn lanes * (86th Street to Cedar Avenue was included in the Airport South CIP)	\$10,295,604
28A	86th Street extension to EOSR to 28th Avenue (new connection across Kelley Farm)	Construct two lanes in each direction with a median and left- and right-turn lanes	\$28,261,141
28B	(new connection across kelley Farm) 86th Street/Old Shakopee Road	Modify the westbound approach to provide dual left-turn lanes, two through lanes and a right-turn lane	\$1,608,896
	30th Avenue	Reconstruct roadway to provide two through lanes in each direction and a median with left-turn lanes (Included in Airport South CIP)	\$1,677,315
29			
20A	28th Ave	Construct a southbound lane between American Boulevard and 82nd Street	\$1,676,140
	ITS Improvements	Possibly electronic detection (Autoscope or similar technology) and dynamic signing	\$2,500,000
30	Wayfinding Signs	Mall of America Area - Phase II New Signing Only	\$549,600
31	Lowering Lindau Lane	Costs provided by others	\$12,900,000
	Improvements		\$170,439,471

1. Turn lane improvements at Killebrew Drive / 24th Avenue

(Extend the eastbound left-turn lanes to 400 feet)

(Extend the westbound left-turn lanes to 500 feet)

(Extend the third westbound through lane back to the intersection of Old Shakopee Road/28th Ave)

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$25,000.00	1	\$25,000.00
Remove Curb & Gutter	LIN FT	\$5.00	780	\$3,900.00
Mill Pavement	SQ YD	\$3.00	12570	\$37,710.00
Wearing Course Mix	TON	\$50.00	1840	\$92,000.00
Non-Wearing Course Mix	TON	\$45.00	240	\$10,800.00
Subgrade Excavation	CU YD	\$12.00	980	\$11,760.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	280	\$5,040.00
Select Granular Borrow (CV)	CU YD	\$10.00	490	\$4,900.00
Curb & Gutter	LIN FT	\$10.00	720	\$7,200.00
Drainage	LUMP SUM	\$140,000.00	1	\$140,000.00
Traffic Control	LUMP SUM	\$15,000.00	1	\$15,000.00
Turf Establishment	LUMP SUM	\$4,000.00	1	\$4,000.00
Signal Modification	LUMP SUM	\$150,000.00	1	\$150,000.00
Street Lighting Modification	LUMP SUM	\$50,000.00	1	\$50,000.00
Signing & Striping	LUMP SUM	\$7,500.00	1	\$7,500.00
Subtotal				\$564,810.00
Contingency & Minor Items (assume 20%)	\$112,962.00			
Total Construction Cost	\$677,772.00			
Project Delivery (assume 30% construction cost)				\$203,331.60
Total Improvement Cost				\$881,103.60

Improvement 3

Turn lane improvements at Killebrew Drive / 22nd Avenue
(Quantities are based on the Killebrew layout that was provided by the City)

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$23,000.00	1	\$23,000.00
Remove Curb & Gutter	LIN FT	\$5.00	1740	\$8,700.00
Remove Concrete Walk	SQ FT	\$1.00	2910	\$2,910.00
Remove Pavement	SQ YD	\$2.00	630	\$1,260.00
Mill Pavement	SQ YD	\$3.00	6160	\$18,480.00
Subgrade Excavation	CU YD	\$12.00	1120	\$13,440.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	320	\$5,760.00
Select Granular Borrow (CV)	CU YD	\$10.00	560	\$5,600.00
Wearing Course Mix	TON	\$50.00	1060	\$53,000.00
Non-Wearing Course Mix	TON	\$45.00	270	\$12,150.00
Curb & Gutter	LIN FT	\$10.00	1580	\$15,800.00
Concrete Walk	SQ FT	\$2.50	1680	\$4,200.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Drainage	LUMP SUM	\$135,000.00	1	\$135,000.00
Traffic Control	LUMP SUM	\$13,500.00	1	\$13,500.00
Turf Establishment	LUMP SUM	\$4,000.00	1	\$4,000.00
Signal Modification	LUMP SUM	\$195,000.00	1	\$195,000.00
Street Lighting Modification	LUMP SUM	\$20,000.00	1	\$20,000.00
Signing & Striping	LUMP SUM	\$8,000.00	1	\$8,000.00
Subtotal				\$543,640.00
Contingency & Minor Items (assume 20%)	\$108,728.00			
Total Construction Cost	\$652,368.00			
Project Delivery (assume 30% construction cost)				\$195,710.40
Total Improvement Cost				\$848,078.40

1. Turn lane, striping, and signal phasing improvements at Killebrew Drive / 20th Avenue

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$50,000.00	1	\$50,000.00
Remove Curb & Gutter	LIN FT	\$5.00	1180	\$5,900.00
Remove Curb & Gutter (Frontage Road)	LIN FT	\$5.00	1050	\$5,250.00
Mill Pavement	SQ YD	\$3.00	2720	\$8,160.00
Subgrade Excavation	CU YD	\$12.00	1540	\$18,480.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	430	\$7,740.00
Select Granular Borrow (CV)	CU YD	\$10.00	770	\$7,700.00
Wearing Course Mix	TON	\$50.00	740	\$37,000.00
Non-Wearing Course Mix	TON	\$45.00	370	\$16,650.00
Curb & Gutter	LIN FT	\$10.00	1560	\$15,600.00
Truncated Dome	SQ FT	\$60.00	32	\$1,920.00
Drainage	LUMP SUM	\$295,000.00	1	\$295,000.00
Traffic Signal Phasing	EACH	\$10,000.00	1	\$10,000.00
Traffic Control	LUMP SUM	\$30,000.00	1	\$30,000.00
Signal Modification	LUMP SUM	\$125,000.00	1	\$125,000.00
Street Lighting Modification	LUMP SUM	\$38,500.00	1	\$38,500.00
Frontage Road	LIN FT	\$150.00	1200	\$180,000.00
Sanitary Sewer Casing	LIN FT	\$300.00	1100	\$330,000.00
Turf Establishment	LUMP SUM	\$4,000.00	1	\$4,000.00
Signing & Striping	LUMP SUM	\$6,000.00	1	\$6,000.00
Subtotal				\$1,192,900.00
Contingency & Minor Items (assume 20%)				\$238,580.00
Total Construction Cost				\$1,431,480.00
Project Delivery (assume 30% construction cost)				\$429,444.00
Total Improvement Cost				\$1,860,924.00

Improvements 1, 6, & 7

- 1. Eliminate northbound TH 77 exit to eastbound Lindau Lane
- 2. New access from northbound TH 77 CD roadway to current MOA
- 3. New access from existing MOA parking ramp to the northbound TH77 CD roadway

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$100,000.00	1	\$100,000.00
Clearing & Grubbing	ACRE	\$6,000.00	1	\$6,000.00
Remove Curb & Gutter	LIN FT	\$5.00	5100	\$25,500.00
Remove Concrete Walk	SQ FT	\$1.00	4780	\$4,780.00
Remove Pavement	SQ YD	\$2.00	12750	\$25,500.00
Remove Retaining Wall	LIN FT	\$8.00	690	\$5,520.00
Concrete Walk	SQ FT	\$2.50	11890	\$29,725.00
Curb & Gutter	LIN FT	\$10.00	6350	\$63,500.00
8" Concrete Pavement	SQ YD	\$4.00	3680	\$14,720.00
Structural Concrete	CU YD	\$63.00	820	\$51,660.00
Wearing Course Mix	TON	\$50.00	1320	\$66,000.00
Non-Wearing Course Mix	TON	\$45.00	1320	\$59,400.00
Common Excavation	CU YD	\$12.00	10980	\$131,760.00
Subgrade Excavation	CU YD	\$12.00	10250	\$123,000.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	2850	\$51,300.00
Select Granular Borrow	CU YD	\$10.00	5130	\$51,300.00
Bridge - Pre-Cast Concrete	SQ FT	\$120.00	5000	\$600,000.00
CIP Retaining Wall	SQ FT	\$40.00	4800	\$192,000.00
Modular Block Retaining Wall	SQ FT	\$20.00	1630	\$32,600.00
Drainage	LUMP SUM	\$600,000.00	1	\$600,000.00
Traffic Control	LUMP SUM	\$60,000.00	1	\$60,000.00
Street Lighting Modification	LUMP SUM	\$73,500.00	1	\$73,500.00
Turf Establishment	LUMP SUM	\$25,000.00	1	\$25,000.00
Signing & Striping	LUMP SUM	\$30,000.00	1	\$30,000.00
Subtotal				\$2,422,765.00
Contingency & Minor Items (assume 20%)				\$484,553.00
Total Construction Cost				\$2,907,318.00
Project Delivery (assume 30% construction cost)				\$872,195.40
Total Improvement Cost				\$3,779,513.40

1. New access from to northbound TH 77 to eastbound I-494 CD roadway to Thunderbird Road (interim)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$7,000.00	1	\$7,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.1	\$600.00
Remove Curb & Gutter	LIN FT	\$5.00	940	\$4,700.00
Remove Pavement	SQ YD	\$2.00	1750	\$3,500.00
Concrete Walk	SQ FT	\$2.50	1130	\$2,825.00
Curb & Gutter	LIN FT	\$10.00	960	\$9,600.00
Wearing Course Mix	TON	\$50.00	180	\$9,000.00
Non-Wearing Course Mix	TON	\$45.00	180	\$8,100.00
Common Excavation	CU YD	\$12.00	1440	\$17,280.00
Subgrade Excavation	CU YD	\$12.00	1080	\$12,960.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	300	\$5,400.00
Select Granular Borrow (CV)	CU YD	\$10.00	540	\$5,400.00
CD Roadway Lighting	LUMP SUM	\$26,500.00	1	\$26,500.00
Drainage	LUMP SUM	\$42,500.00	1	\$42,500.00
Erosion Control	LUMP SUM	\$4,000.00	1	\$4,000.00
Traffic Control	LUMP SUM	\$5,000.00	1	\$5,000.00
Turf Establishment	LUMP SUM	\$2,500.00	1	\$2,500.00
Signing & Striping	LUMP SUM	\$4,000.00	1	\$4,000.00
Subtotal				\$170,865.00
Contingency & Minor Items (assume 20%)				\$34,173.00
Total Construction Cost				\$205,038.00
Project Delivery (assume 30% construction cost)				\$61,511.40
Right of Way Cost	SQ FT	\$40.00	6150	\$246,000.00
Total Improvement Cost				\$512,549.40

Improvement 9

1. New access from Thunderbird Road to northbound TH 77 to eastbound I-494 CD roadway (interim)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$9,500.00	1	\$9,500.00
Remove Curb & Gutter	LIN FT	\$5.00	1380	\$6,900.00
Remove Pavement	SQ YD	\$2.00	3500	\$7,000.00
Concrete Walk	SQ FT	\$2.50	4310	\$10,775.00
Curb & Gutter	LIN FT	\$10.00	1790	\$17,900.00
Wearing Course Mix	TON	\$50.00	370	\$18,500.00
Non-Wearing Course Mix	TON	\$45.00	370	\$16,650.00
Common Excavation	CU YD	\$12.00	500	\$6,000.00
Subgrade Excavation	CU YD	\$12.00	2540	\$30,480.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	710	\$12,780.00
Select Granular Borrow (CV)	CU YD	\$10.00	1280	\$12,800.00
CD Roadway Lighting	LUMP SUM	\$10,000.00	1	\$10,000.00
Drainage	LUMP SUM	\$60,000.00	1	\$60,000.00
Erosion Control	LUMP SUM	\$2,500.00	1	\$2,500.00
Traffic Control	LUMP SUM	\$6,000.00	1	\$6,000.00
Turf Establishment	LUMP SUM	\$2,500.00	1	\$2,500.00
Signing & Striping	LUMP SUM	\$5,000.00	1	\$5,000.00
Subtotal				\$235,285.00
Contingency & Minor Items (assume 20%)				\$47,057.00
Total Construction Cost				\$282,342.00
Project Delivery (assume 30% construction cost)				\$84,702.60
Right of Way Cost	SQ FT	\$40.00	9820	\$392,800.00
Total Improvement Cost				\$759,844.60

Improvement 10A

1. New access from northbound TH77 to eastbound I-494 CD roadway to Thunderbird Road (Construct new ramp from northbound TH77 to eastbound I-494 CD roadway to Thunderbird Road)

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$10,000.00	1	\$10,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.5	\$3,000.00
Remove Curb & Gutter	LIN FT	\$5.00	900	\$4,500.00
Remove Pavement	SQ YD	\$2.00	3090	\$6,180.00
Concrete Walk	SQ FT	\$2.50	12390	\$30,975.00
Curb & Gutter	LIN FT	\$10.00	3180	\$31,800.00
8" Concrete Pavement (Ramp)	SQ YD	\$4.00	1410	\$5,640.00
Structural Concrete	CU YD	\$63.00	310	\$19,530.00
Subgrade Excavation	CU YD	\$12.00	2290	\$27,480.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	640	\$11,520.00
Select Granular Borrow	CU YD	\$10.00	1150	\$11,500.00
Street Lighting Modification	LUMP SUM	\$28,000.00	1	\$28,000.00
Traffic Control	LUMP SUM	\$9,000.00	1	\$9,000.00
Turf Establishment	LUMP SUM	\$6,000.00	1	\$6,000.00
Drainage	LUMP SUM	\$70,000.00	1	\$70,000.00
Subtotal				\$275,125.00
Contingency & Minor Items (assume 20%)				\$55,025.00
Total Construction Cost				\$330,150.00
Project Delivery (assume 30% construction cost)				\$99,045.00
Right of Way Cost ¹	SQ FT	\$40.00	20740	\$829,600.00
Total Improvement Cost				\$1,258,795.00

^{1.} Right of Way quantity does not include area of proposed Mn/DOT roadway for TH77. Assumed that roadway was completed.

Improvement 10B

- 1. New access from Thunderbird Road to northbound TH 77 to eastbound I-494 CD roadway (permanent) (Construct a new ramp from Thunderbird Road to the northbound TH77 to the eastbound I-494 roadway)
- 2. Construction of a new CD roadway under 24th Avenue to east of 34th Avenue

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$360,000.00	1	\$360,000.00
Clearing & Grubbing	ACRE	\$6,000.00	1.8	\$10,800.00
Remove Curb & Gutter	LIN FT	\$5.00	1590	\$7,950.00
Remove Pavement	SQ YD	\$2.00	8060	\$16,120.00
Concrete Walk	SQ FT	\$2.50	4330	\$10,825.00
Curb & Gutter	LIN FT	\$10.00	6700	\$67,000.00
8" Concrete Pavement (Ramp)	SQ YD	\$4.00	4790	\$19,160.00
Structural Concrete	CU YD	\$63.00	1060	\$66,780.00
Common Excavation	CU YD	\$12.00	42180	\$506,160.00
Subgrade Excavation	CU YD	\$12.00	8070	\$96,840.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	2240	\$40,320.00
Select Granular Borrow (CV)	CU YD	\$10.00	4040	\$40,400.00
Wearing Course Mix	TON	\$50.00	500	\$25,000.00
Non-Wearing Course Mix	TON	\$45.00	500	\$22,500.00
Bridge/Tunnel (Conspan 3-sided Structure)	SQ FT	\$250.00	9000	\$2,250,000.00
Steel Sheet Piling (temporary)	SQ FT	\$20.00	32140	\$642,800.00
Sheet Piling Anchors	EACH	\$2,000.00	80	\$160,000.00
CIP Retaining Wall	SQ FT	\$40.00	28200	\$1,128,000.00
MAC LIGHT SUPPORT BRIDGE OVER I-4943	LUMP SUM	\$500,000.00	1	\$500,000.00
Traffic Barrier	LUMP SUM	\$7,500.00	1	\$7,500.00
CD Tunnel Lighting	LUMP SUM	\$50,000.00	1	\$50,000.00
CD Roadway Lighting	LUMP SUM	\$90,000.00	1	\$90,000.00
Drainage	LUMP SUM	\$2,200,000.00	1	\$2,200,000.00
Erosion Control	LUMP SUM	\$90,000.00	1	\$90,000.00
Staging & Traffic Control	LUMP SUM	\$400,000.00	1	\$400,000.00
Turf Establishment	LUMP SUM	\$60,000.00	1	\$60,000.00
Signing & Striping	LUMP SUM	\$100,000.00	1	\$100,000.00
Subtotal				\$8,968,155.00
Contingency & Minor Items (assume 20%)				\$1,793,631.00
Total Construction Cost				\$10,761,786.00
Project Delivery (assume 31% construction cost) ¹				\$3,336,153.66
Easement	SQ FT	\$20.00	20780	\$415,600.00
Right of Way Cost ²	SQ FT	\$40.00	45985	\$1,839,400.00
Total Improvement Cost				\$16,352,939.66

- Additional cost to account for coordinating & permitting with Mn/DOT and FHWA.
- 2. Right of Way quantity does not include area of proposed Mn/DOT roadway for TH77. Assumed that roadway was completed.
- 3. Subject to FAA & Mn/DOT Aeronautics approval. Price includes bridge and lighting components.

Improvement 10C

1. Thunderbird Road Roundabout

(Construct a new roundabout from Thunderbird road to ramp off of TH 77)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$8,000.00	1	\$8,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.1	\$600.00
Remove Curb & Gutter	LIN FT	\$5.00	630	\$3,150.00
Remove Pavement	SQ YD	\$2.00	3250	\$6,500.00
Concrete Walk	SQ FT	\$2.50	7660	\$19,150.00
Curb & Gutter	LIN FT	\$10.00	1420	\$14,200.00
Subgrade Excavation	CU YD	\$12.00	2250	\$27,000.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	560	\$10,080.00
Select Granular Borrow	CU YD	\$10.00	1130	\$11,300.00
Wearing Course Mix	TON	\$50.00	510	\$25,500.00
Non-Wearing Course Mix	TON	\$45.00	510	\$22,950.00
Traffic Control	LUMP SUM	\$2,000.00	1	\$2,000.00
Turf Establishment	LUMP SUM	\$1,000.00	1	\$1,000.00
Drainage	LUMP SUM	\$35,000.00	1	\$35,000.00
Subtotal				\$186,430.00
Contingency & Minor Items (assume 20%)				\$37,286.00
Total Construction Cost				\$223,716.00
Project Delivery (assume 30% construction cost)			•	\$67,114.80
Right of Way Cost	SQ FT	\$40.00	22185	\$887,400.00
Total Improvement Cost				\$1,178,230.80

1. Westbound I-494 to the southbound 24th Avenue, triple left-turn lane (Construct an additional westbound left-turn lane (triple lefts))

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$18,000.00	1	\$18,000.00
Remove Curb & Gutter	LIN FT	\$5.00	1760	\$8,800.00
Remove Concrete Walk	SQ FT	\$1.00	21740	\$21,740.00
Remove Pavement	SQ YD	\$2.00	560	\$1,120.00
Curb & Gutter	LIN FT	\$10.00	1460	\$14,600.00
Concrete Walk	SQ FT	\$2.50	9020	\$22,550.00
8" Concrete Pavement (Ramp)	SQ YD	\$4.00	1540	\$6,160.00
Structural Concrete	CU YD	\$63.00	350	\$22,050.00
Common Excavation	CU YD	\$12.00	2000	\$24,000.00
Subgrade Excavation	CU YD	\$12.00	1000	\$12,000.00
Aggregate Base Class 5 (CV)	CU YD	\$18.00	600	\$10,800.00
Select Granular Borrow (CV)	CU YD	\$10.00	700	\$7,000.00
Truncated Dome	SQ FT	\$60.00	96	\$5,760.00
Chain Link Fence	LIN FT	\$10.00	460	\$4,600.00
Drainage	LUMP SUM	\$105,000.00	1	\$105,000.00
Signal Modification	LUMP SUM	\$75,000.00	1	\$75,000.00
Street Lighting Modification	LUMP SUM	\$20,000.00	1	\$20,000.00
Erosion Control	LUMP SUM	\$9,000.00	1	\$9,000.00
Traffic Control	LUMP SUM	\$11,000.00	1	\$11,000.00
Turf Establishment	LUMP SUM	\$5,000.00	1	\$5,000.00
Signing & Striping	LUMP SUM	\$10,000.00	1	\$10,000.00
Subtotal	\$414,180.00			
Contingency & Minor Items (assume 20%)	\$82,836.00			
Total Construction Cost	\$497,016.00			
Project Delivery (assume 30% construction cost)	\$149,104.80			
Total Improvement Cost				\$646,120.80

Improvement 12 A

1. Turn lane and signal improvements at American Boulevard/24th Avenue (West of 24th Avenue) (Extend the eastbound left-turn lanes to 500 feet)

(Construct an additional southbound right-turn lane. Extend both turn lanes to the I-494 single-point interchange) (Construct an additional eastbound right-turn lane. (Dual Rights))

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$34,000.00	1	\$34,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.3	\$1,800.00
Remove Curb & Gutter	LIN FT	\$5.00	1790	\$8,950.00
Remove Concrete Walk	SQ FT	\$1.00	13860	\$13,860.00
Mill Pavement	SQ YD	\$3.00	8280	\$24,840.00
Remove Pavement	SQ YD	\$2.00	290	\$580.00
Curb & Gutter	LIN FT	\$10.00	2330	\$23,300.00
Concrete Walk	SQ FT	\$2.50	22280	\$55,700.00
Wearing Course Mix	TON	\$50.00	1350	\$67,500.00
Non-Wearing Course Mix	TON	\$45.00	490	\$22,050.00
Common Excavation	CU YD	\$12.00	1800	\$21,600.00
Subgrade Excavation	CU YD	\$12.00	3040	\$36,480.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	1050	\$18,900.00
Select Granular Base (CV)	CU YD	\$10.00	1520	\$15,200.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Drainage	LUMP SUM	\$205,000.00	1	\$205,000.00
Signal Modification	LUMP SUM	\$140,000.00	1	\$140,000.00
Street Lighting Modification	LUMP SUM	\$63,000.00	1	\$63,000.00
Traffic Control	LUMP SUM	\$20,000.00	1	\$20,000.00
Signing & Striping	LUMP SUM	\$10,000.00	1	\$10,000.00
Turf Establishment	LUMP SUM	\$10,000.00	1	\$10,000.00
Traffic Signal Phasing	EACH	\$5,000.00	1	\$5,000.00
Subtotal				\$801,600.00
Contingency & Minor Items (assume 20%)	\$160,320.00			
Total Construction Cost \$961,920				
Project Delivery (assume 30% construction cost) \$288,576.				
Right of Way Cost	SQ FT	\$40.00	6845	\$273,800.00
Total Improvement Cost				\$1,524,296.00

Improvement 12 B

1. Turn lane and signal improvements at American Boulevard/24th Avenue (East of 24th Avenue)

(Extend the southbound left most left-turn lane to 500 feet)

(Extend the westbound left-turn lanes to 500 feet)

(Construct an additional westbound right-turn lane to provide three westbound right-turn lanes)

(The westbound approach should have four approach lanes that begin at 28th Avenue)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$50,000.00	1	\$50,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.2	\$1,200.00
Remove Curb & Gutter	LIN FT	\$5.00	3460	\$17,300.00
Remove Concrete Walk	SQ FT	\$1.00	25170	\$25,170.00
Mill Pavement	SQ YD	\$3.00	7420	\$22,260.00
Remove Pavement	SQ YD	\$2.00	260	\$520.00
Curb & Gutter	LIN FT	\$10.00	4920	\$49,200.00
Concrete Walk	SQ FT	\$2.50	43110	\$107,775.00
Wearing Course Mix	TON	\$50.00	2480	\$124,000.00
Non-Wearing Course Mix	TON	\$45.00	1460	\$65,700.00
Common Excavation	CU YD	\$12.00	4800	\$57,600.00
Subgrade Excavation	CU YD	\$12.00	4670	\$56,040.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	1500	\$27,000.00
Select Granular Base (CV)	CU YD	\$10.00	2330	\$23,300.00
Truncated Dome	SQ FT	\$60.00	96	\$5,760.00
Drainage	LUMP SUM	\$295,000.00	1	\$295,000.00
Signal Modification	LUMP SUM	\$140,000.00	1	\$140,000.00
Street Lighting Modification	LUMP SUM	\$45,500.00	1	\$45,500.00
Traffic Control	LUMP SUM	\$30,000.00	1	\$30,000.00
Signing & Striping	LUMP SUM	\$15,000.00	1	\$15,000.00
Turf Establishment	LUMP SUM	\$10,000.00	1	\$10,000.00
Traffic Signal Phasing	EACH	\$5,000.00	1	\$5,000.00
Subtotal				\$1,173,325.00
Contingency & Minor Items (assume 20%)	\$234,665.00			
Total Construction Cost	\$1,407,990.00			
Project Delivery (assume 30% construction cost)				\$422,397.00
Right of Way Cost	SQ FT	\$40.00	56165	\$2,246,600.00
Total Improvement Cost		-		\$4,076,987.00

Improvement 13 ***

(Construct an additional westbound left-turn lane)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$21,000.00	1	\$21,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.7	\$4,200.00
Remove Bituminous Pavement	SQ YD	\$2.00	1220	\$2,440.00
Remove Curb & Gutter	LIN FT	\$5.00	2090	\$10,450.00
Remove Concrete Walk	SQ FT	\$1.00	1720	\$1,720.00
Mill Bituminous Pavement	SQ YD	\$1.65	1080	\$1,782.00
Wearing Course Mix	TON	\$50.00	970	\$48,500.00
Non-Wearing Course Mix	TON	\$45.00	970	\$43,650.00
Curb & Gutter	LIN FT	\$10.00	2840	\$28,400.00
Subgrade Excavation	CU YD	\$12.00	2740	\$32,880.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	800	\$14,400.00
Select Granular Borrow	CU YD	\$10.00	1370	\$13,700.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Drainage	LUMP SUM	\$105,000.00	1	\$105,000.00
Signing & Striping	LUMP SUM	\$4,000.00	1	\$4,000.00
Signal Modification	LUMP SUM	\$135,000.00	1	\$135,000.00
Traffic Control	LUMP SUM	\$13,000.00	1	\$13,000.00
Turf Establishment	LUMP SUM	\$3,500.00	1	\$3,500.00
Concrete Walk	SQ FT	\$2.50	3420	\$8,550.00
Subtotal	•		•	\$496,012.00
Contingency & Minor Items (assume 15%)				\$74,401.80
Total Construction Cost				\$570,413.80
Project Delivery (assume 25% construction cost)				\$142,603.45
Right of Way Cost	SQ FT	\$40.00	37350	\$1,494,000.00
Total Improvement Cost				\$2,207,017.25

^{***} Cost for Improvement 13 is anticipated to be fully funded by Metro Transit.

^{1.} Turn lane improvements at 28th Avenue/82nd Street

- 1. Old Shakopee Road improvements between Killebrew Drive and TH77
- (Reconstruct with three through lanes in each direction and a median with left-turn lanes)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$120,000.00	1	\$120,000.00
Remove Curb & Gutter	LIN FT	\$5.00	6830	\$34,150.00
Mill Pavement	SQ YD	\$3.00	19720	\$59,160.00
Subgrade Excavation	CU YD	\$12.00	36400	\$436,800.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	10120	\$182,160.00
Select Granular Borrow	CU YD	\$10.00	18200	\$182,000.00
Curb & Gutter	LIN FT	\$10.00	6830	\$68,300.00
Wearing Course Mix	TON	\$50.00	6520	\$326,000.00
Non-Wearing Course Mix	TON	\$45.00	4010	\$180,450.00
Signal Modification	LUMP SUM	\$220,000.00	1	\$220,000.00
Street Lighting Modification	LUMP SUM	\$250,000.00	1	\$250,000.00
Truncated Dome	SQ FT	\$60.00	448	\$26,880.00
Traffic Control	LUMP SUM	\$75,000.00	1	\$75,000.00
Turf Establishment	LUMP SUM	\$35,000.00	1	\$35,000.00
Drainage ¹	LUMP SUM	\$750,000.00	1	\$750,000.00
Subtotal				\$2,945,900.00
Contingency & Minor Items (assume 20%)				\$589,180.00
Total Construction Cost				\$3,535,080.00
Project Delivery (assume 30% construction cost)	•	•		\$1,060,524.00
Right of Way Cost ^{2, 3}	LUMP SUM	\$5,700,000.00	1	\$5,700,000.00
Total Improvement Cost	•	•		\$10,295,604.00

- Do not have graphics for improvement. Assumed drainage structures to be installed every 300' along each side of roadway including median.
- 2. ROW width assumed to be 96' (48' both sides from centerline of existing roadway)
- 3. Assume total takes. The cost of Right of Way was supplied by the City of Bloomington.

Improvement 15

1. American Boulevard conversion to a westbound one-way between 30th Ave. and 34th Avenue with three through lanes

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$13,000.00	1	\$13,000.00
Remove Curb & Gutter	LIN FT	\$5.00	2680	\$13,400.00
Remove Concrete Walk	SQ FT	\$1.00	2100	\$2,100.00
Remove Pavement	SQ YD	\$2.00	6210	\$12,420.00
Curb & Gutter	LIN FT	\$10.00	470	\$4,700.00
Topsoil Borrow	CU YD	\$14.00	4000	\$56,000.00
Turf Establishment	LUMP SUM	\$5,000.00	1	\$5,000.00
Traffic Control	LUMP SUM	\$8,000.00	1	\$8,000.00
Signal Modification	LUMP SUM	\$75,000.00	1	\$75,000.00
Street Lighting Modification	LUMP SUM	\$50,000.00	1	\$50,000.00
Turf Establishment	LUMP SUM	\$1,500.00	1	\$1,500.00
Drainage	LUMP SUM	\$76,000.00	1	\$76,000.00
Subtotal				\$317,120.00
Contingency & Minor Items (assume 15%)	•		•	\$47,568.00
Total Construction Cost	-		-	\$364,688.00
Project Delivery (assume 30% construction cost)				\$109,406.40
Total Improvement Cost				\$474,094.40

 $1. \ Turn \ lane \ improvements \ at \ American \ Boulevard/34th \ Avenue \ (listed in \ Bloomington \ Central \ Station \ Traffic \ Study)$

(Eliminate the southbound free right-turn lane)

(Construct southbound dual right-turn lanes that extend from the I-494 South Ramps)

(Eliminate the westbound free right-turn lane)

(Construct westbound dual right-turn lanes)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$40,000.00	1	\$40,000.00
Remove Concrete Walk	SQ FT	\$1.00	19780	\$19,780.00
Mill Pavement	SQ YD	\$3.00	8040	\$24,120.00
Remove Curb & Gutter	LIN FT	\$5.00	2770	\$13,850.00
Remove Pavement	SQ YD	\$2.00	560	\$1,120.00
Curb & Gutter	LIN FT	\$10.00	2080	\$20,800.00
Wearing Course Mix	TON	\$50.00	1700	\$85,000.00
Non-Wearing Course Mix	TON	\$45.00	670	\$30,150.00
Subgrade Excavation	CU YD	\$12.00	3260	\$39,120.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	910	\$16,380.00
Select Granular Borrow	CU YD	\$10.00	1630	\$16,300.00
Concrete Walk	SQ FT	\$2.50	9030	\$22,575.00
Signal Modification	LUMP SUM	\$220,000.00	1	\$220,000.00
Street Lighting Modification	LUMP SUM	\$60,000.00	1	\$60,000.00
Truncated Dome	SQ FT	\$60.00	144	\$8,640.00
Modular Block Retaining Wall	SQ FT	\$20.00	3810	\$76,200.00
Drainage	LUMP SUM	\$250,000.00	1	\$250,000.00
Traffic Control	LUMP SUM	\$25,000.00	1	\$25,000.00
Turf Establishment	LUMP SUM	\$8,000.00	1	\$8,000.00
Signing & Striping	LUMP SUM	\$10,000.00	1	\$10,000.00
Subtotal				\$987,035.00
Contingency & Minor Items (assume 20%)	•		•	\$197,407.00
Total Construction Cost				\$1,184,442.00
Project Delivery (assume 30% construction cost)				\$355,332.60
Right of Way Cost	SQ FT	\$40.00	17820	\$712,800.00
Total Improvement Cost				\$2,252,574.60

Improvement 17

(The westbound approach will include a left-turn lane, two through lanes and a right-turn lane)

(The southbound approach will be a right-turn only (free movement))

(Convert to a right-in/right-out/eastbound left-in access)

Item		Unit	Total	
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$2,500.00	1	\$2,500.00
Remove Pavement	SQ YD	\$2.00	360	\$720.00
Remove Concrete Walk	SQ FT	\$1.00	2170	\$2,170.00
Remove Curb & Gutter	LIN FT	\$5.00	690	\$3,450.00
Concrete Walk	SQ FT	\$2.50	8490	\$21,225.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Traffic Control	LUMP SUM	\$1,500.00	1	\$1,500.00
Drainage	LUMP SUM	\$70,000.00	1	\$70,000.00
Turf Establishment	LUMP SUM	\$1,000.00	1	\$1,000.00
Curb & Gutter	LIN FT	\$10.00	740	\$7,400.00
Subtotal				\$113,805.00
Contingency & Minor Items (assume 15%)				\$17,070.75
Total Construction Cost				\$130,875.75
Project Delivery (assume 30% construction cost)			•	\$39,262.73
Total Improvement Cost				\$170,138.48

^{1.} Turn lane improvements at American Boulevard/ International Drive/ 33rd Avenue

1. Turn lane improvements at American Boulevard/ Metro Drive East

(Construct a westbound left-turn lane (200 feet))

(The westbound approach will include a left-turn lane, three through lanes and a right-turn lane)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$6,500.00	1	\$6,500.00
Clearing & Grubbing	ACRE	\$6,000.00	0.3	\$1,800.00
Mill Pavement	SQ YD	\$3.00	2490	\$7,470.00
Remove Curb & Gutter	LIN FT	\$5.00	1050	\$5,250.00
Curb & Gutter	LIN FT	\$10.00	470	\$4,700.00
Wearing Course Mix	TON	\$50.00	820	\$41,000.00
Non-Wearing Course Mix	TON	\$45.00	240	\$10,800.00
Subgrade Excavation	CU YD	\$12.00	1260	\$15,120.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	350	\$6,300.00
Select Granular Borrow (CV)	CU YD	\$10.00	640	\$6,400.00
Truncated Dome	SQ FT	\$60.00	32	\$1,920.00
Drainage	LUMP SUM	\$40,000.00	1	\$40,000.00
Traffic Control	LUMP SUM	\$4,000.00	1	\$4,000.00
Turf Establishment	LUMP SUM	\$2,500.00	1	\$2,500.00
Signing & Striping	LUMP SUM	\$3,000.00	1	\$3,000.00
Subtotal				\$156,760.00
Contingency & Minor Items (assume 15%)			•	\$23,514.00
Total Construction Cost				\$180,274.00
Project Delivery (assume 30% construction cost)			•	\$54,082.20
Total Improvement Cost		•		\$234,356.20

Improvement 19

New traffic signal and turn lane improvements at American Boulevard/30th Avenue (Installation of a traffic signal)

(Convert the eastbound through lanes into dual right-turn lanes)

(The westbound approach will include dual left-turn lanes and two through lanes. The inside through lane will end and become the outside left-turn lane at this intersection.)

(The northbound approach will include dual left-turn lanes)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$17,000.00	1	\$17,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.3	\$1,800.00
Remove Pavement	SQ YD	\$2.00	250	\$500.00
Remove Curb & Gutter	LIN FT	\$5.00	600	\$3,000.00
Mill Pavement	SQ YD	\$3.00	1900	\$5,700.00
Concrete Walk	SQ FT	\$1.00	1510	\$1,510.00
Curb & Gutter	LIN FT	\$10.00	1010	\$10,100.00
Wearing Course Mix	TON	\$50.00	430	\$21,500.00
Non-Wearing Course Mix	TON	\$45.00	180	\$8,100.00
Subgrade Excavation	CU YD	\$12.00	1030	\$12,360.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	290	\$5,220.00
Select Granular Borrow	CU YD	\$10.00	510	\$5,100.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Drainage	LUMP SUM	\$100,000.00	1	\$100,000.00
Signing & Striping	LUMP SUM	\$1,500.00	1	\$1,500.00
Traffic Control	LUMP SUM	\$10,000.00	1	\$10,000.00
Turf Establishment	LUMP SUM	\$6,000.00	1	\$6,000.00
Traffic Signal	EACH	\$200,000.00	1	\$200,000.00
Subtotal				\$413,230.00
Contingency & Minor Items (assume 15%)		•		\$61,984.50
Total Construction Cost	\$475,214.50			
Project Delivery (assume 30% construction cost)				\$142,564.35
Total Improvement Cost				\$617,778.85

1. Turn lane, striping, and signal phasing improvements at American Boulevard/ 28th Avenue

(Construct an eastbound right-turn lane (250 feet))

(Restripe the northbound inside through lane to a left-turn/through lane)

(Extend the northbound left-turn lane to 200 feet)

(Convert the northbound left-turn/through lane into a left-turn lane)

(Construct a southbound left-turn lane)

(Replace north-south split phasing with protected left-turn phasing)

Item		Unit		Total		
Description	Unit	Cost	Quantities	Amount		
Mobilization	LUMP SUM	\$16,000.00	1	\$16,000.00		
Clearing & Grubbing	ACRE	\$6,000.00	0.1	\$600.00		
Remove Curb & Gutter	LIN FT	\$5.00	460	\$2,300.00		
Remove Concrete Walk	SQ FT	\$1.00	5800	\$5,800.00		
Mill Pavement	SQ YD	\$3.00	7510	\$22,530.00		
Wearing Course Mix	TON	\$50.00	1030	\$51,500.00		
Non-Wearing Course Mix	TON	\$45.00	70	\$3,150.00		
Subgrade Excavation	CU YD	\$12.00	910	\$10,920.00		
Aggregate Base (CV) Class 5	CU YD	\$18.00	260	\$4,680.00		
Select Granular Borrow (CV)	CU YD	\$10.00	460	\$4,600.00		
Curb & Gutter	LIN FT	\$10.00	540	\$5,400.00		
Concrete Walk	SQ FT	\$2.50	5430	\$13,575.00		
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00		
Drainage	LUMP SUM	\$95,000.00	1	\$95,000.00		
Signing & Striping	LUMP SUM	\$3,000.00	1	\$3,000.00		
Signal Modification	LUMP SUM	\$100,000.00	1	\$100,000.00		
Street Lighting Modification	LUMP SUM	\$20,000.00	1	\$20,000.00		
Traffic Control	LUMP SUM	\$10,000.00	1	\$10,000.00		
Turf Establishment	LUMP SUM	\$2,500.00	1	\$2,500.00		
Traffic Signal Phasing	EACH	\$10,000.00	1	\$10,000.00		
Subtotal	Subtotal					
Contingency & Minor Items (assume 20%)	\$77,079.00					
Total Construction Cost	\$462,474.00					
Project Delivery (assume 30% construction cost)	•			\$138,742.20		
Right of Way Cost	SQ FT	\$40.00	2240	\$89,600.00		
Total Improvement Cost				\$690,816.20		

Improvement 20A

On 28th Ave, add SB lane from American Blvd to 82nd St

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$19,000.00	1	\$19,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.3	\$1,800.00
Remove Curb & Gutter	LIN FT	\$5.00	1640	\$8,200.00
Remove Concrete Walk	SQ FT	\$1.00	15850	\$15,850.00
Mill Pavement	SQ YD	\$3.00	5030	\$15,090.00
Common Excavation	CU YD	\$12.00	2060	\$24,720.00
Subgrade Excavation	CU YD	\$12.00	2500	\$30,000.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	700	\$12,600.00
Select Granular Borrow	CU YD	\$10.00	1250	\$12,500.00
Curb & Gutter	LIN FT	\$10.00	1690	\$16,900.00
Concrete Walk	SQ FT	\$2.50	14070	\$35,175.00
Wearing Course Mix	TON	\$50.00	1060	\$53,000.00
Non-Wearing Course Mix	TON	\$45.00	460	\$20,700.00
Truncated Dome	SQ FT	\$60.00	96	\$5,760.00
Drainage	LUMP SUM	\$120,000.00	1	\$120,000.00
Signing & Striping	LUMP SUM	\$5,000.00	1	\$5,000.00
Street Lighting Modification	LUMP SUM	\$45,000.00	1	\$45,000.00
Traffic Control	LUMP SUM	\$11,000.00	1	\$11,000.00
Turf Establishment	LUMP SUM	\$6,000.00	1	\$6,000.00
Subtotal				\$458,295.00
Contingency & Minor Items (assume 20%)				\$91,659.00
Total Construction Cost			•	\$549,954.00
Project Delivery (assume 30% construction cost)				\$164,986.20
Right of Way Cost	SQ FT	\$40.00	24030	\$961,200.00
Total Improvement Cost				\$1,676,140.20

1. Southbound right in on 34th Avenue into the Northeast housing

(Construct a southbound right-in access to serve the Northeast Housing residents)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$7,000.00	1	\$7,000.00
Clearing & Grubbing	ACRE	\$6,000.00	0.3	\$1,800.00
Remove Curb & Gutter	LIN FT	\$5.00	290	\$1,450.00
Remove Concrete Walk	SQ FT	\$1.00	2840	\$2,840.00
Mill Pavement	SQ YD	\$3.00	2100	\$6,300.00
Concrete Walk	SQ FT	\$2.50	3570	\$8,925.00
Wearing Course Mix	TON	\$50.00	350	\$17,500.00
Non-wearing Course Mix	TON	\$45.00	80	\$3,600.00
Curb & Gutter	LIN FT	\$10.00	400	\$4,000.00
Subgrade Excavation	CU YD	\$12.00	410	\$4,920.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	120	\$2,160.00
Select Granular Base	CU YD	\$10.00	140	\$1,400.00
Truncated Dome	SQ FT	\$60.00	32	\$1,920.00
Drainage	LUMP SUM	\$40,000.00	1	\$40,000.00
Traffic Control	LUMP SUM	\$4,000.00	1	\$4,000.00
Signal Modification	LUMP SUM	\$50,000.00	1	\$50,000.00
Turf Establishment	LUMP SUM	\$1,500.00	1	\$1,500.00
Signing & Striping	LUMP SUM	\$2,000.00	1	\$2,000.00
Subtotal				\$161,315.00
Contingency & Minor Items (assume 20%)				\$32,263.00
Total Construction Cost				\$193,578.00
Project Delivery (assume 30% construction cost)				\$58,073.40
Right of Way Cost	SQ FT	\$40.00	3560	\$142,400.00
Total Improvement Cost				\$394,051.40

Improvement 22

New traffic signal and turn lane improvements at Old Shakopee Road/ 33rd Avenue (Installation of a traffic signal)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$13,000.00	1	\$13,000.00
Traffic Signal	EACH	\$220,000.00	1	\$220,000.00
Subtotal				\$220,000.00
Contingency & Minor Items (assume 5%)				\$11,000.00
Total Construction Cost				\$231,000.00
Project Delivery (assume 30% construction cost)				\$69,300.00
Total Improvement Cost				\$300,300.00

1. New traffic signal and turn lane improvements at Old Shakopee Road/ 30th Avenue (Installation of a traffic signal)

(Construct an eastbound left-turn lane (350 feet))

(The southbound approach will include dual left-turn lanes and dual right-turn lanes (300 ft). This approach was modeled with what is shown on the proposed site plan, an inside left-turn lane of approximately 100 feet and a second

(The southbound approach will include dual left-turn lanes and dual right-turn lanes (300 ft). However, full-length dual left-turn lanes should be provided with a short right-turn lane.)

(Construct an additional eastbound left-turn lane (350 feet))

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$50,000.00	1	\$50,000.00
Clearing & Grubbing	ACRE	\$6,000.00	1.7	\$10,200.00
Remove Curb & Gutter	LIN FT	\$5.00	1870	\$9,350.00
Remove Pavement	SQ YD	\$2.00	490	\$980.00
Mill Pavement	SQ YD	\$3.00	3740	\$11,220.00
Curb & Gutter	LIN FT	\$10.00	4450	\$44,500.00
Concrete Walk	SQ FT	\$2.50	10200	\$25,500.00
Wearing Course Mix	TON	\$50.00	2050	\$102,500.00
Non-Wearing Course Mix	TON	\$45.00	1570	\$70,650.00
Subgrade Excavation	CU YD	\$12.00	6380	\$76,560.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	1780	\$32,040.00
Select Granular Borrow (CV)	CU YD	\$10.00	3190	\$31,900.00
Retaining Wall	SQ FT	\$40.00	2850	\$114,000.00
Truncated Dome	SQ FT	\$60.00	32	\$1,920.00
Drainage	LUMP SUM	\$300,000.00	1	\$300,000.00
Signing & Striping	LUMP SUM	\$10,000.00	1	\$10,000.00
Traffic Control	LUMP SUM	\$30,000.00	1	\$30,000.00
Street Lighting Modification	LUMP SUM	\$50,000.00	1	\$50,000.00
Turf Establishment	LUMP SUM	\$9,000.00	1	\$9,000.00
Traffic Signal	EACH	\$220,000.00	1	\$220,000.00
Subtotal				\$1,200,320.00
Contingency & Minor Items (assume 20%)	\$240,064.00			
Total Construction Cost \$1,440,384.				
Project Delivery (assume 30% construction cost) \$432,115				
Right of Way Cost	SQ FT	\$40.00	14025	\$561,000.00
Total Improvement Cost \$2,433,499.2				\$2,433,499.20

Improvement 25

1. New traffic signal and turn lane improvements at Old Shakopee Road/ 28th Avenue

(Installation of a traffic signal)

(The new northbound approach will include dual left-turn lanes, two through lanes and a right-turn lane)

(Construct an eastbound left-turn lane (300 feet) and a right-turn lane (300 feet))

(Construct dual westbound left-turn lanes (300 feet))

(Restripe the southbound left-turn lane to a through lane)

(Construct a southbound left-turn lane (250 feet))

(Construct an additional eastbound left-turn lane (300 feet))

(Construct a westbound right-turn lane (300 feet))

(Construct an additional southbound right-turn lane (400 feet))

(Construct an additional southbound left-turn lane (250 feet))

(Construct an additional northbound right-turn lane (300 feet))

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$90,000.00	1	\$90,000.00
Clearing & Grubbing	ACRE	\$6,000.00	3	\$18,000.00
Remove Curb & Gutter	LIN FT	\$5.00	4700	\$23,500.00
Remove Pavement	SQ YD	\$2.00	1880	\$3,760.00
Mill Pavement	SQ YD	\$3.00	9870	\$29,610.00
Concrete Walk	SQ FT	\$2.50	23170	\$57,925.00
Wearing Course Mix	TON	\$50.00	4520	\$226,000.00
Non-Wearing Course Mix	TON	\$45.00	3260	\$146,700.00
Curb & Gutter	LIN FT	\$10.00	9660	\$96,600.00
Subgrade Excavation	CU YD	\$12.00	13620	\$163,440.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	3790	\$68,220.00
Select Granular Borrow (CV)	CU YD	\$10.00	6810	\$68,100.00
Truncated Dome	SQ FT	\$60.00	192	\$11,520.00
Drainage	LUMP SUM	\$540,000.00	1	\$540,000.00
Retaining Wall	SQ FT	\$40.00	2700	\$108,000.00
Erosion Control & Turf Establishment	LUMP SUM	\$50,000.00	1	\$50,000.00
Signing & Striping	LUMP SUM	\$26,000.00	1	\$26,000.00
Street Lighting Modification	LUMP SUM	\$115,000.00	1	\$115,000.00
Traffic Control	LUMP SUM	\$54,000.00	1	\$54,000.00
Turf Establishment	LUMP SUM	\$22,000.00	1	\$22,000.00
Traffic Signal	EACH	\$255,000.00	1	\$255,000.00
Subtotal				\$2,173,375.00
Contingency & Minor Items (assume 20%)				\$434,675.00
Total Construction Cost				\$2,608,050.00
Project Delivery (assume 30% of construction cost)				\$782,415.00
Right of Way Cost	SQ FT	\$40.00	109455	\$4,378,200.00
Total Improvement Cost				\$7,768,665.00

- 1. Reconstruction of I-494/34th Avenue interchange (with LRT)
- 2. Reconstruction of I-494/34th Avenue interchange (without LRT)

(Reconstruct the interchange to include loops in the northwest and southwest quadrants

(see Figure 11: Proposed Roadway Concept, I-494/34th Avenue)

These improvements will eliminate two major traffic conflicts with LRT operations, the westbound to southbound movement, and the southbound to eastbound movement. Improvements at the 34th Avenue/I-494 Ramps are a result of increased traffic volumes due to background growth and adjacent developments.)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$1,200,000.00	1	\$1,200,000.00
Clearing & Grubbing	ACRE	\$6,000.00	4	\$24,000.00
Remove Curb & Gutter	LIN FT	\$5.00	22290	\$111,450.00
Remove Pavement	SQ YD	\$2.00	36750	\$73,500.00
Mill Pavement	SQ YD	\$3.00	29390	\$88,170.00
Concrete Walk	SQ FT	\$2.50	115310	\$288,275.00
8" Concrete Pavement (Ramps)	SQ YD	\$4.00	53930	\$215,720.00
Structural Concrete	CU YD	\$63.00	11990	\$755,370.00
Wearing Course Mix (34th Ave and Shoulders)	TON	\$50.00	4350	\$217,500.00
Non-Wearing Course Mix (34th Ave & Shoulders)	TON	\$45.00	1700	\$76,500.00
Curb & Gutter	LIN FT	\$10.00	53620	\$536,200.00
Common Embankment	CU YD	\$1.50	130270	\$195,405.00
Subgrade Excavation	CU YD	\$12.00	72660	\$871,920.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	20200	\$363,600.00
Select Granular Borrow	CU YD	\$10.00	36330	\$363,300.00
Truncated Dome	SQ FT	\$60.00	160	\$9,600.00
Steel Bridges (5)	SQ FT	\$150.00	33000	\$4,950,000.00
Pre-Cast Concrete Bridges (5)	SQ FT	\$120.00	41000	\$4,920,000.00
Overhead Sign Structure	LUMP SUM	\$120,000.00	1	\$120,000.00
MSE Retaining Wall	SQ FT	\$45.00	66060	\$2,972,700.00
Drainage	LUMP SUM	\$7,000,000.00	1	\$7,000,000.00
Erosion Control	LUMP SUM	\$100,000.00	1	\$100,000.00
Lighting	LUMP SUM	\$50,000.00	1	\$50,000.00
Signal Modification	LUMP SUM	\$480,000.00	1	\$480,000.00
Lighting	LUMP SUM	\$245,000.00	1	\$245,000.00
Traffic Control	LUMP SUM	\$700,000.00	1	\$700,000.00
Turf Establishment	LUMP SUM	\$250,000.00	1	\$250,000.00
Signing & Striping	LUMP SUM	\$300,000.00	1	\$300,000.00
Subtotal				\$27,478,210.00
Contingency & Minor Items (assume 25%)				\$6,869,552.50
Total Construction Cost				\$34,347,762.50
Project Delivery (assume 30% construction cost)		•	•	\$10,304,328.75
Right of Way Cost ¹	LUMP SUM	\$15,000,000.00	1	\$15,000,000.00
Total Improvement Cost				\$59,652,091.25

^{1.} The cost of Right of Way is supplied by the City of Bloomington.

1. 24th Avenue/82nd Street

(On the north approach, convert the right/through lane into a trap dual right-turn lane. This improvement will create better lane utilization upstream at the single-point interchange)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$3,400.00	1	\$3,400.00
Remove Curb & Gutter	LIN FT	\$5.00	80	\$400.00
Concrete Walk	SQ FT	\$2.50	1480	\$3,700.00
Curb & Gutter	LIN FT	\$10.00	160	\$1,600.00
Truncated Dome	SQ FT	\$60.00	32	\$1,920.00
Signal Modification	LUMP SUM	\$50,000.00	1	\$50,000.00
Traffic Control	LUMP SUM	\$2,200.00	1	\$2,200.00
Signing & Striping	LUMP SUM	\$1,000.00	1	\$1,000.00
Subtotal				\$64,220.00
Contingency & Minor Items (assume 15%)	\$9,633.00			
Total Construction Cost	\$73,853.00			
Project Delivery (assume 30% construction cost)				\$22,155.90
Total Improvement Cost				\$96,008.90

Improvement 28A

1. 86th Street Extension to EOSR to 28th Ave

(Construct two lanes in each direction with a median and left and right-turn lanes)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$580,000.00	1	\$580,000.00
Clearing and Grubbing	ACRE	\$6,000.00	4	\$24,000.00
Remove Curb & Gutter	LIN FT	\$5.00	1160	\$5,800.00
Remove Pavement	SQ YD	\$2.00	4590	\$9,180.00
Subgrade Excavation	CU YD	\$12.00	13540	\$162,480.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	3770	\$67,860.00
Select Granular Borrow	CU YD	\$10.00	6770	\$67,700.00
Curb & Gutter	LIN FT	\$10.00	6650	\$66,500.00
Wearing Course Mix	TON	\$50.00	3250	\$162,500.00
Non-Wearing Course Mix	TON	\$45.00	3250	\$146,250.00
Drainage ¹	LUMP SUM	\$3,500,000.00	1	\$3,500,000.00
Bridge	SQ FT	\$150.00	55200	\$8,280,000.00
Retaining Wall	SQ FT	\$40.00	7500	\$300,000.00
Erosion Control	LUMP SUM	\$100,000.00	1	\$100,000.00
Traffic Control	LUMP SUM	\$350,000.00	1	\$350,000.00
Lighting	LUMP SUM	\$120,000.00	1	\$120,000.00
Turf Establishment	LUMP SUM	\$65,000.00	1	\$65,000.00
Signing & Striping	LUMP SUM	\$80,000.00	1	\$80,000.00
Subtotal				\$14,087,270.00
Contingency & Minor Items (assume 20%)		•	•	\$2,817,454.00
Total Construction Cost				\$16,904,724.00
Project Delivery (assume 30% construction cost)				\$5,071,417.20
Right of Way Cost	SQ FT	\$40.00	157125	\$6,285,000.00
Total Improvement Cost				\$28,261,141.20

Assumed drainage structures to be installed every 300' along each side of roadway including median.

1. 86th Street and Old Shakopee Road

(Modify the westbound approach to provide dual left-turns, two through lanes, and a right-turn lane)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$32,000.00	1	\$32,000.00
Curb & Gutter	LIN FT	\$10.00	1000	\$10,000.00
Subgrade Excavation	CU YD	\$12.00	5800	\$69,600.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	1620	\$29,160.00
Select Granular Borrow	CU YD	\$10.00	2900	\$29,000.00
Wearing Course Mix	TON	\$50.00	1400	\$70,000.00
Non-Wearing Course Mix	TON	\$45.00	1400	\$63,000.00
Truncated Dome	SQ FT	\$60.00	64	\$3,840.00
Lighting	LUMP SUM	\$30,000.00	1	\$30,000.00
Drainage ¹	LUMP SUM	\$190,000.00	1	\$190,000.00
Traffic Control	LUMP SUM	\$19,000.00	1	\$19,000.00
Traffic Signal	EACH	\$210,000.00	1	\$210,000.00
Turf Establishment	LUMP SUM	\$5,000.00	1	\$5,000.00
Signing & Striping	LUMP SUM	\$6,000.00	1	\$6,000.00
Subtotal				\$766,600.00
Contingency & Minor Items (assume 20%)				\$153,320.00
Total Construction Cost				\$919,920.00
Project Delivery (assume 30% construction cost)				\$275,976.00
Right of Way Cost	SQ FT	\$40.00	10325	\$413,000.00
Total Improvement Cost				\$1,608,896.00

^{1.} Assumed drainage structures to be installed every 300' along each side of roadway including median.

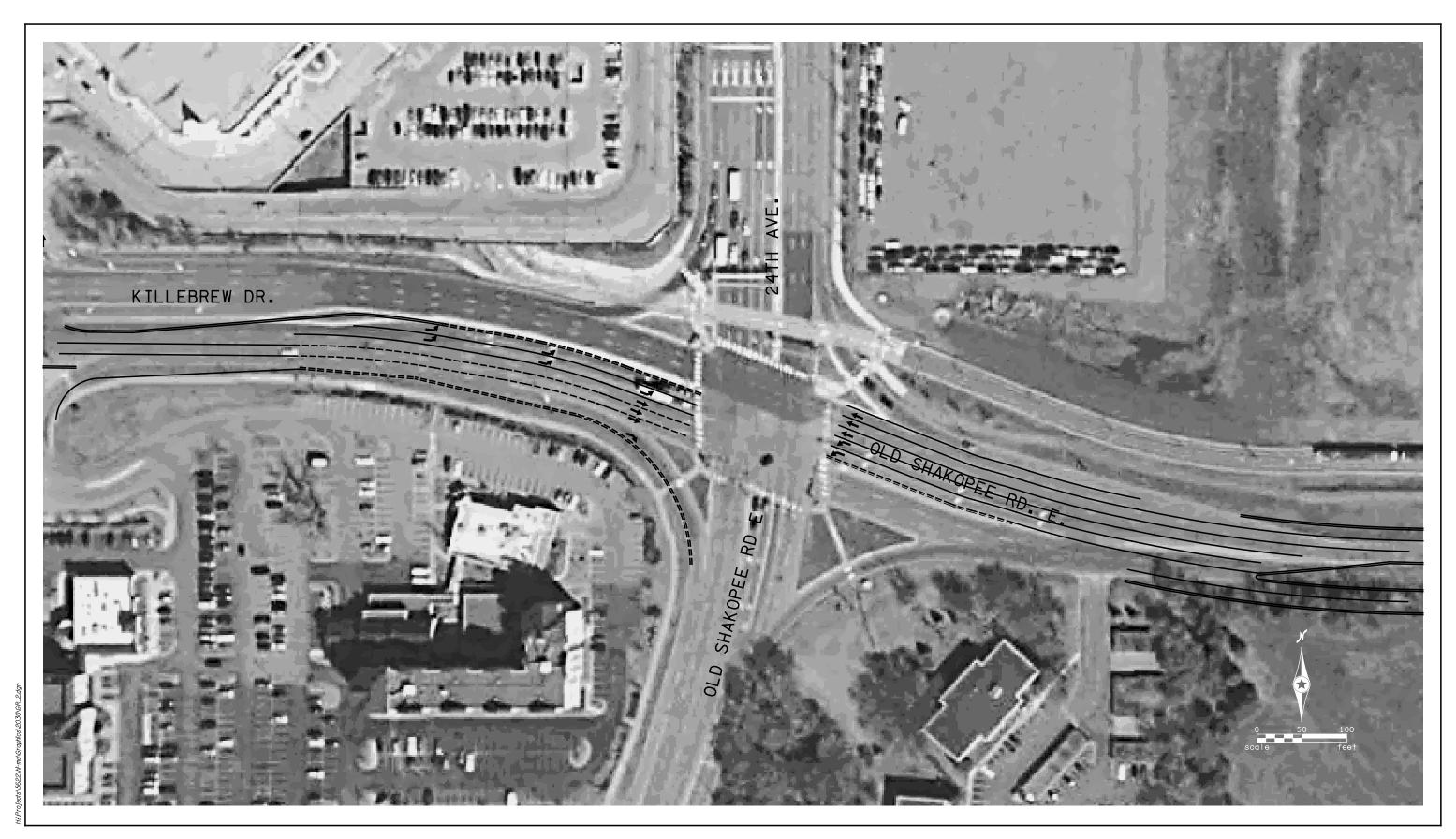
Improvement 29

1. 30th Ave

(Reconstruct roadway to provide two through lanes in each direction and a median with left-turn lanes)

Item		Unit		Total
Description	Unit	Cost	Quantities	Amount
Mobilization	LUMP SUM	\$45,000.00	1	\$45,000.00
Remove Curb & Gutter	LIN FT	\$5.00	3310	\$16,550.00
Remove Pavement	SQ YD	\$2.00	9560	\$19,120.00
Subgrade Excavation	CU YD	\$12.00	11400	\$136,800.00
Aggregate Base (CV) Class 5	CU YD	\$18.00	3170	\$57,060.00
Select Granular Borrow	CU YD	\$10.00	5700	\$57,000.00
Curb & Gutter	LIN FT	\$10.00	4960	\$49,600.00
Wearing Course Mix	TON	\$50.00	2740	\$137,000.00
Non-Wearing Course Mix	TON	\$45.00	2740	\$123,300.00
Lighting	LUMP SUM	\$100,000.00	1	\$100,000.00
Truncated Dome	SQ FT	\$60.00	192	\$11,520.00
Drainage ¹	LUMP SUM	\$270,000.00	1	\$270,000.00
Traffic Control	LUMP SUM	\$27,000.00	1	\$27,000.00
Light Rail Signaling	LUMP SUM	\$50,000.00	1	\$50,000.00
Turf Establishment	LUMP SUM	\$10,000.00	1	\$10,000.00
Signing & Striping	LUMP SUM	\$12,000.00	1	\$12,000.00
Subtotal				\$1,121,950.00
Contingency & Minor Items (assume 15%)	•	•		\$168,292.50
Total Construction Cost				\$1,290,242.50
Project Delivery (assume 30% construction cost)				\$387,072.75
Total Improvement Cost				\$1,677,315.25

Do not have graphics for improvement. Assumed drainage structures to be installed every 300' along each side of roadway including median.

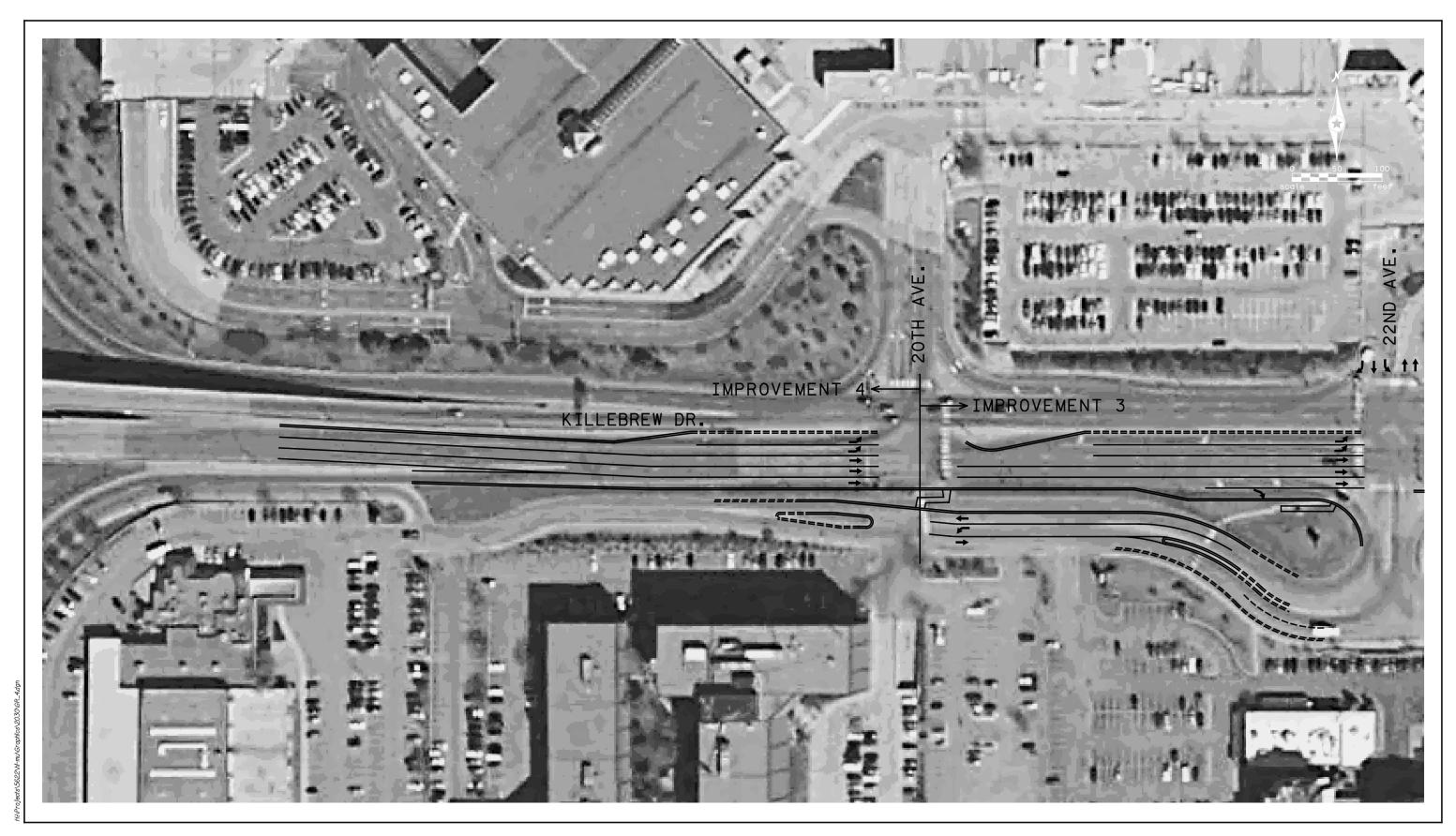




Improvement 2





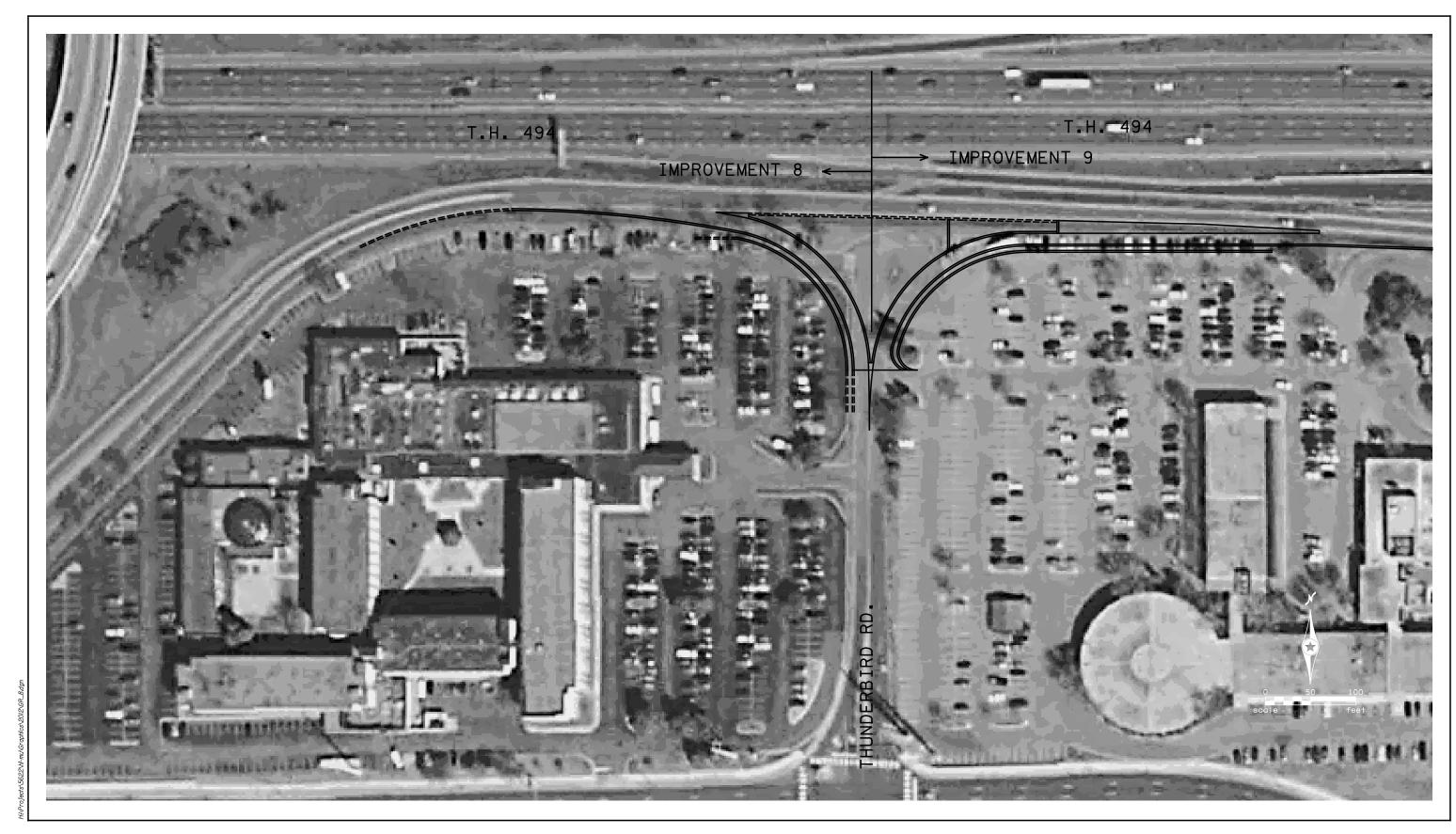




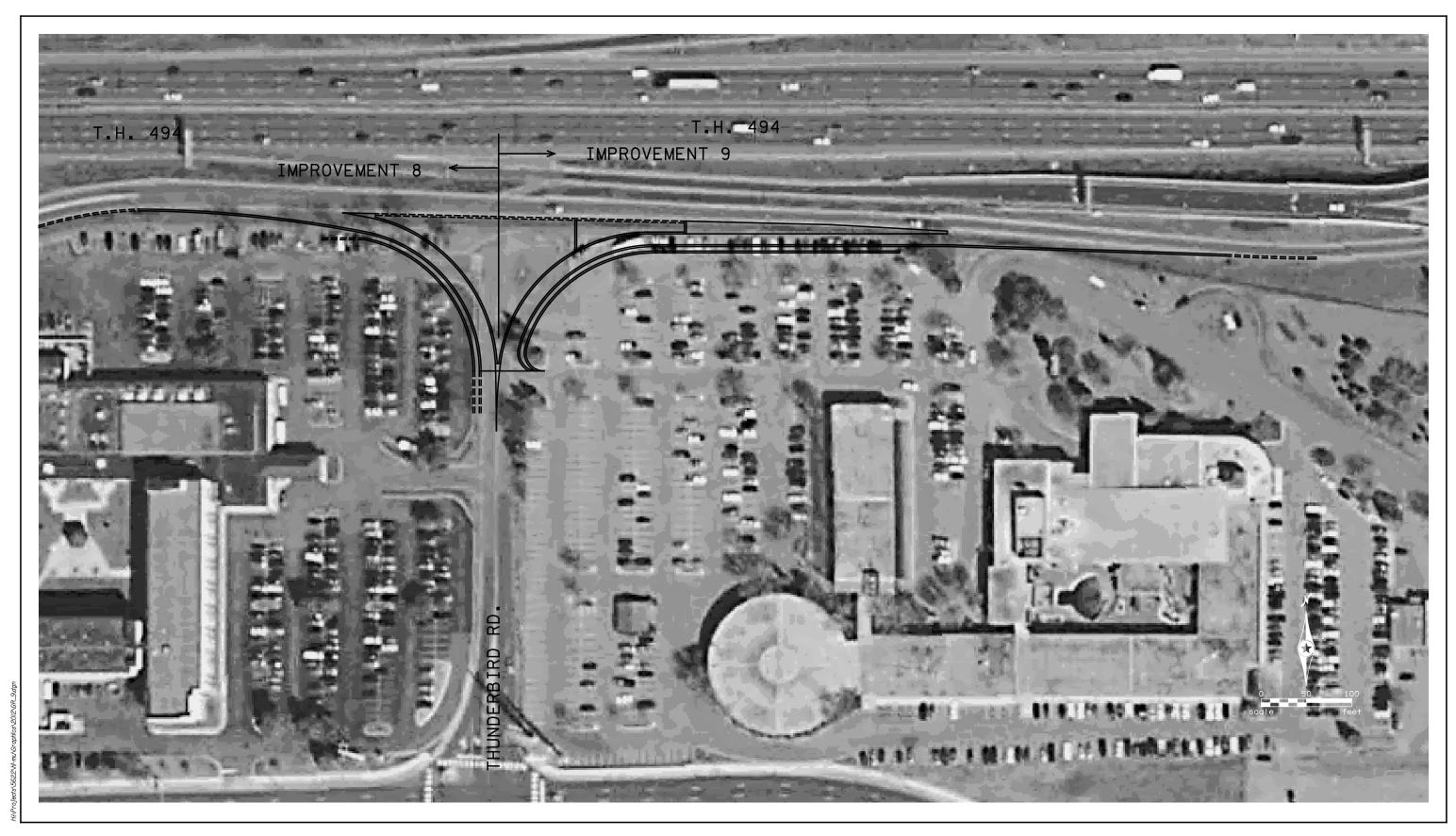
Improvement 4



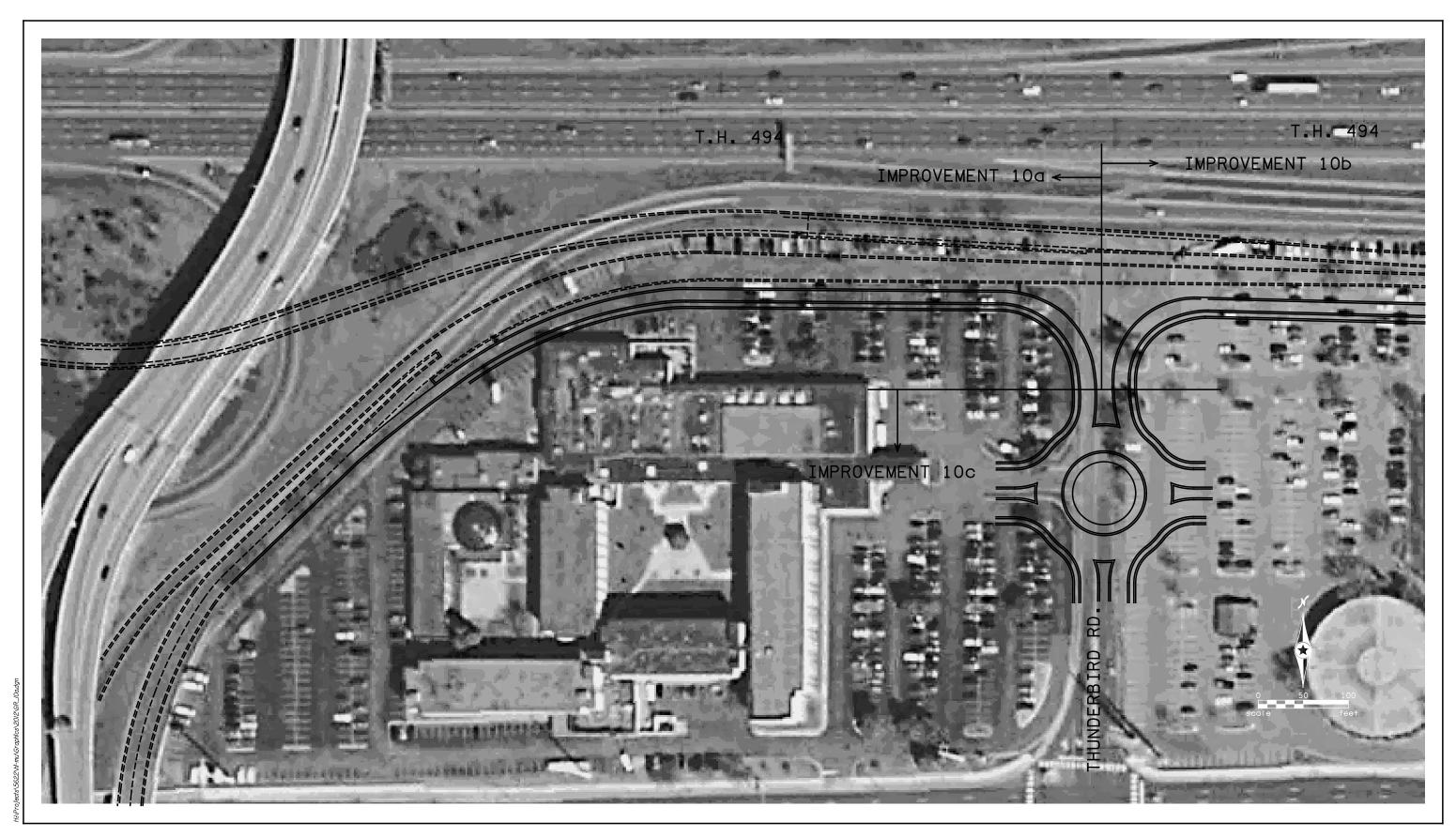












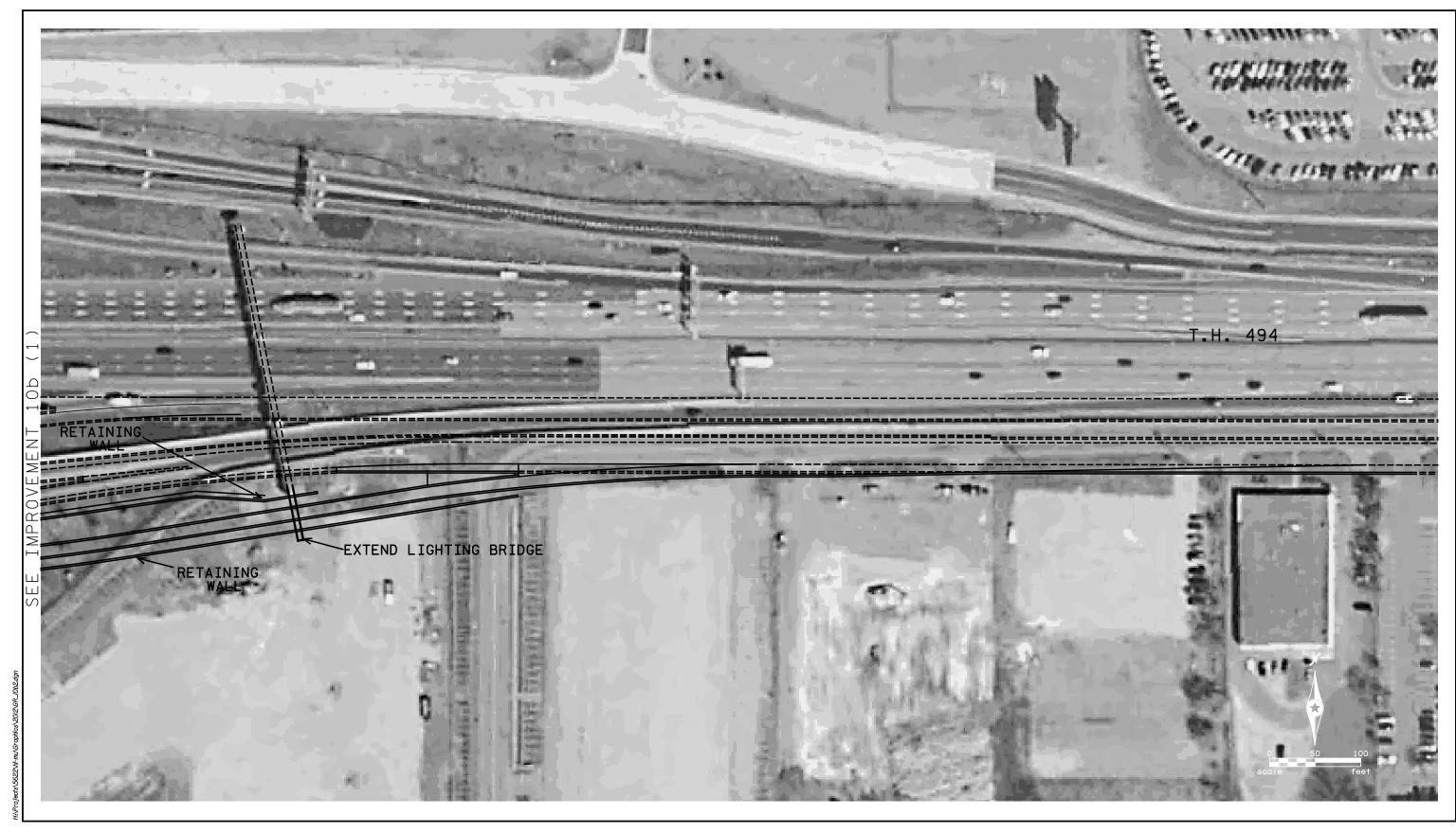


Improvement 10a





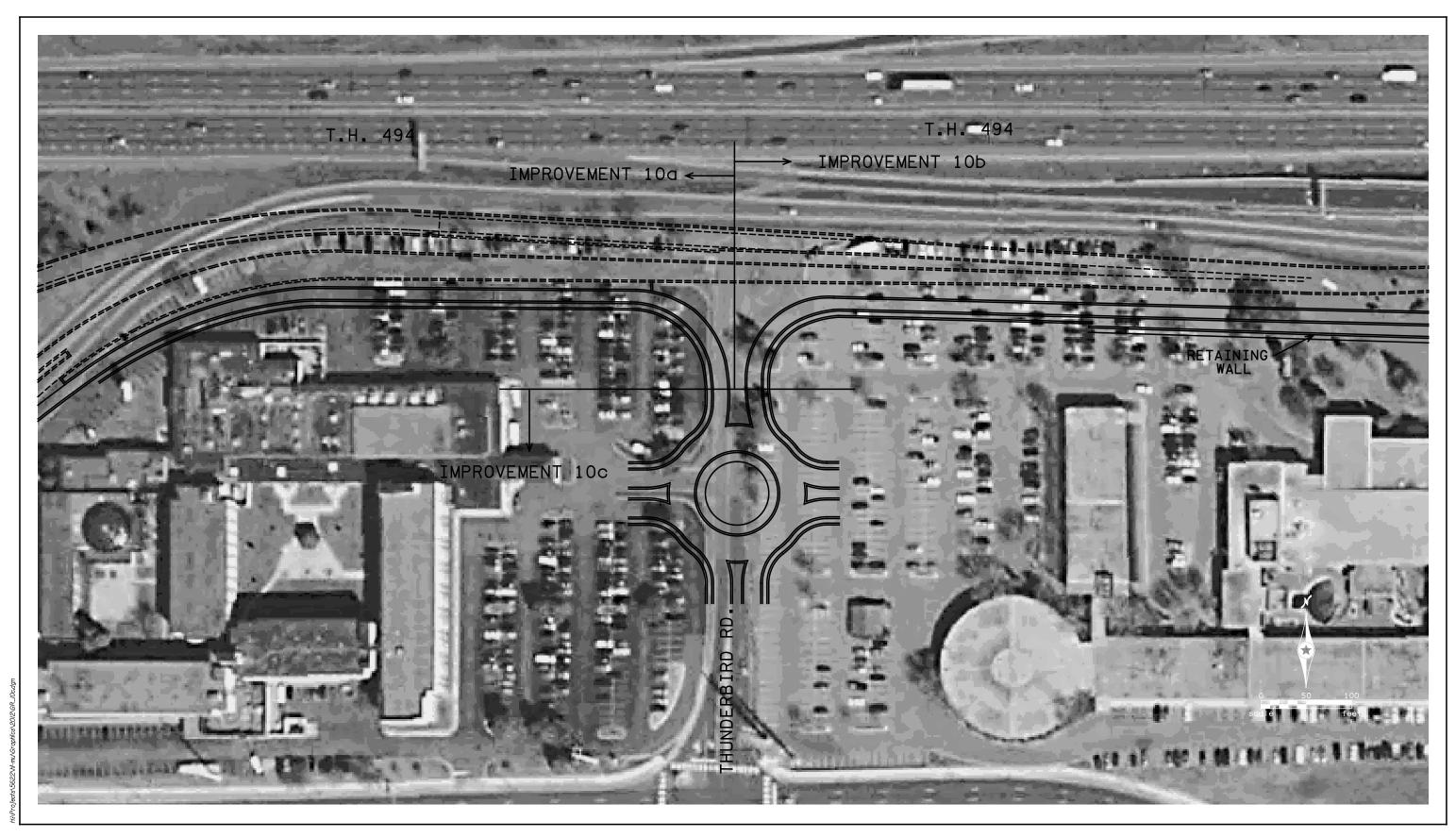
Improvement 10b (1)
Airport South Roadway Infrastructure Improvements
City of Bloomington



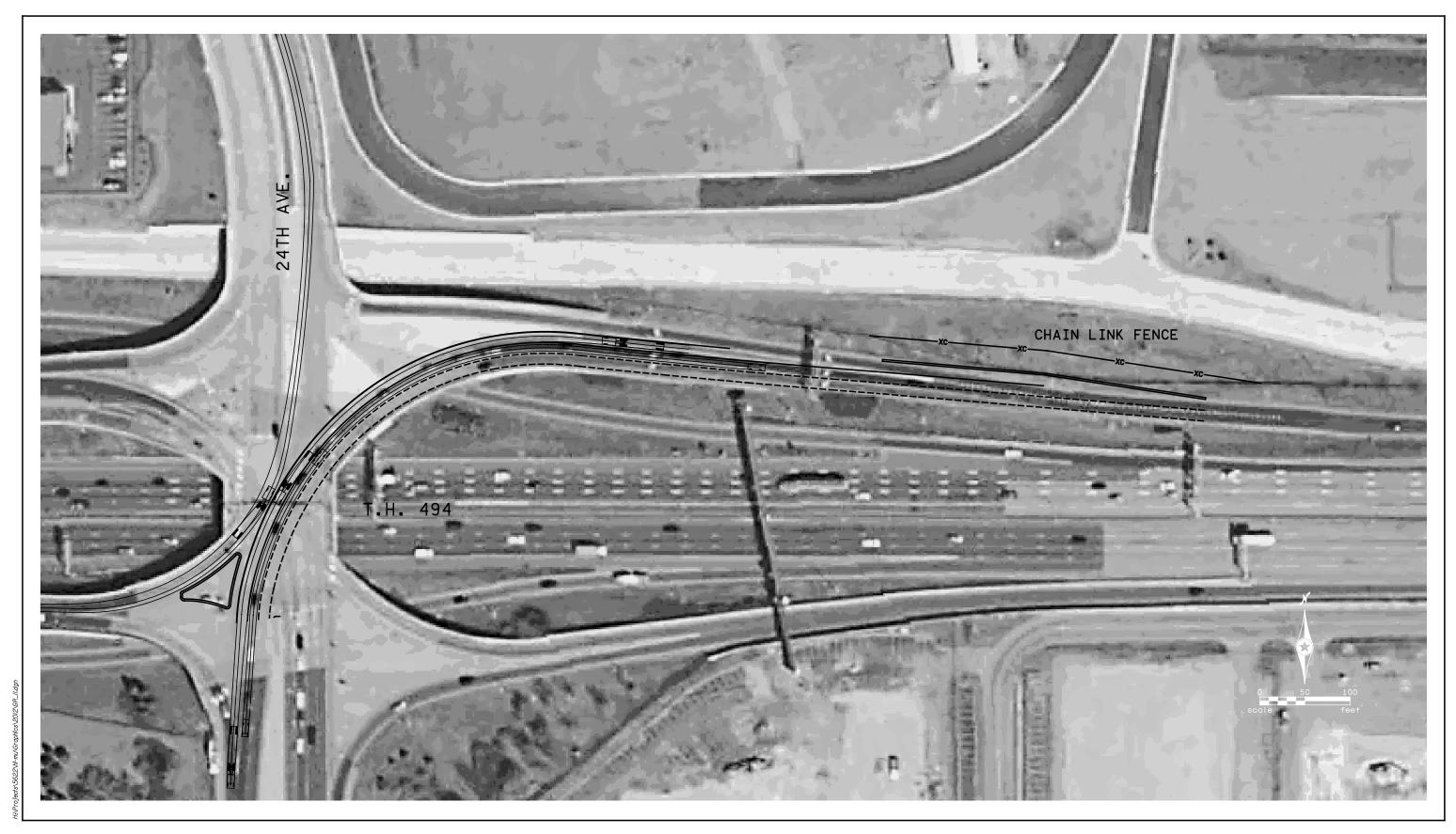


Improvement 10b (2)
Airport South Roadway Infrastructure Improvements City of Bloomington

5822X 5/11/2012







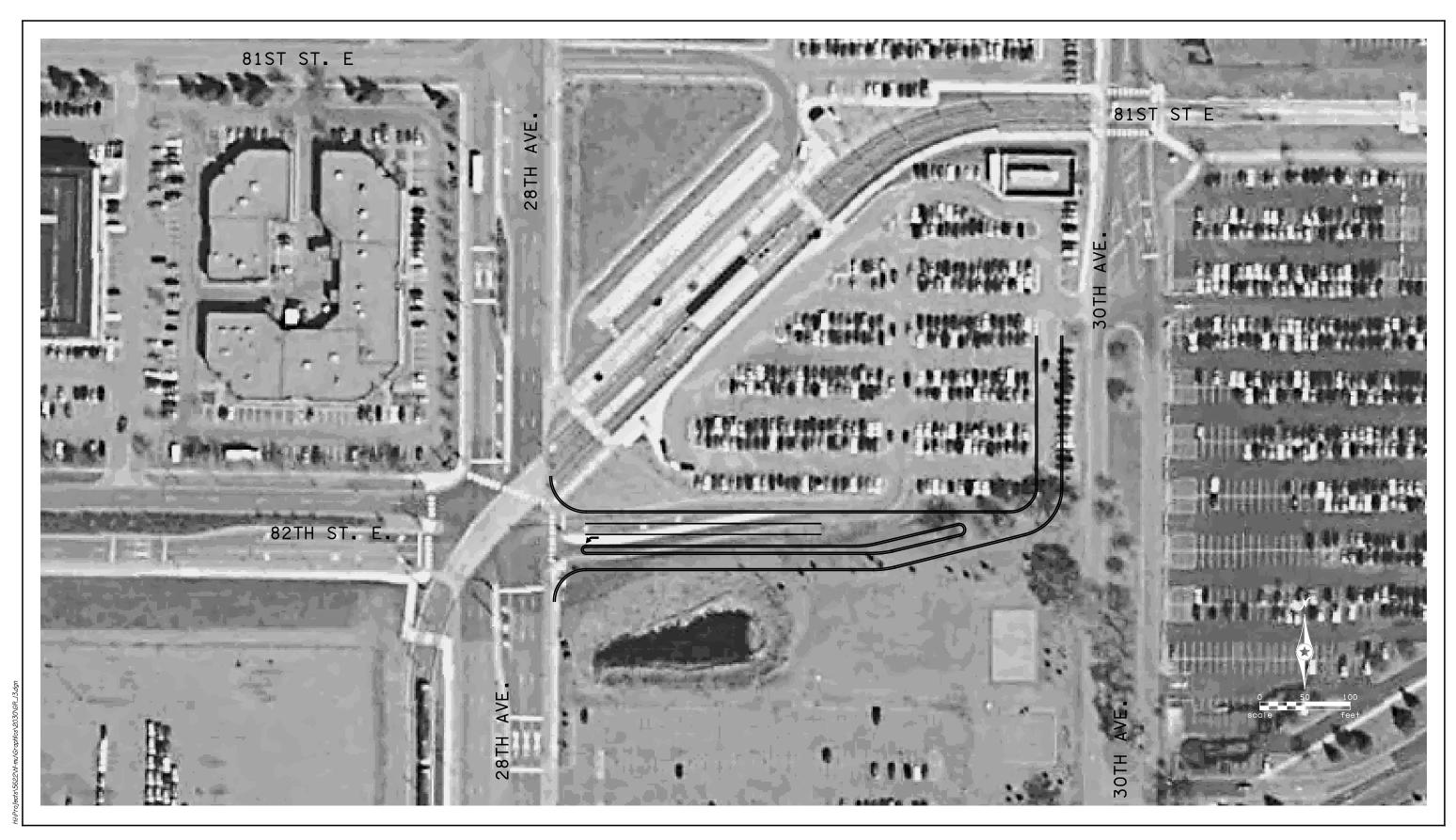








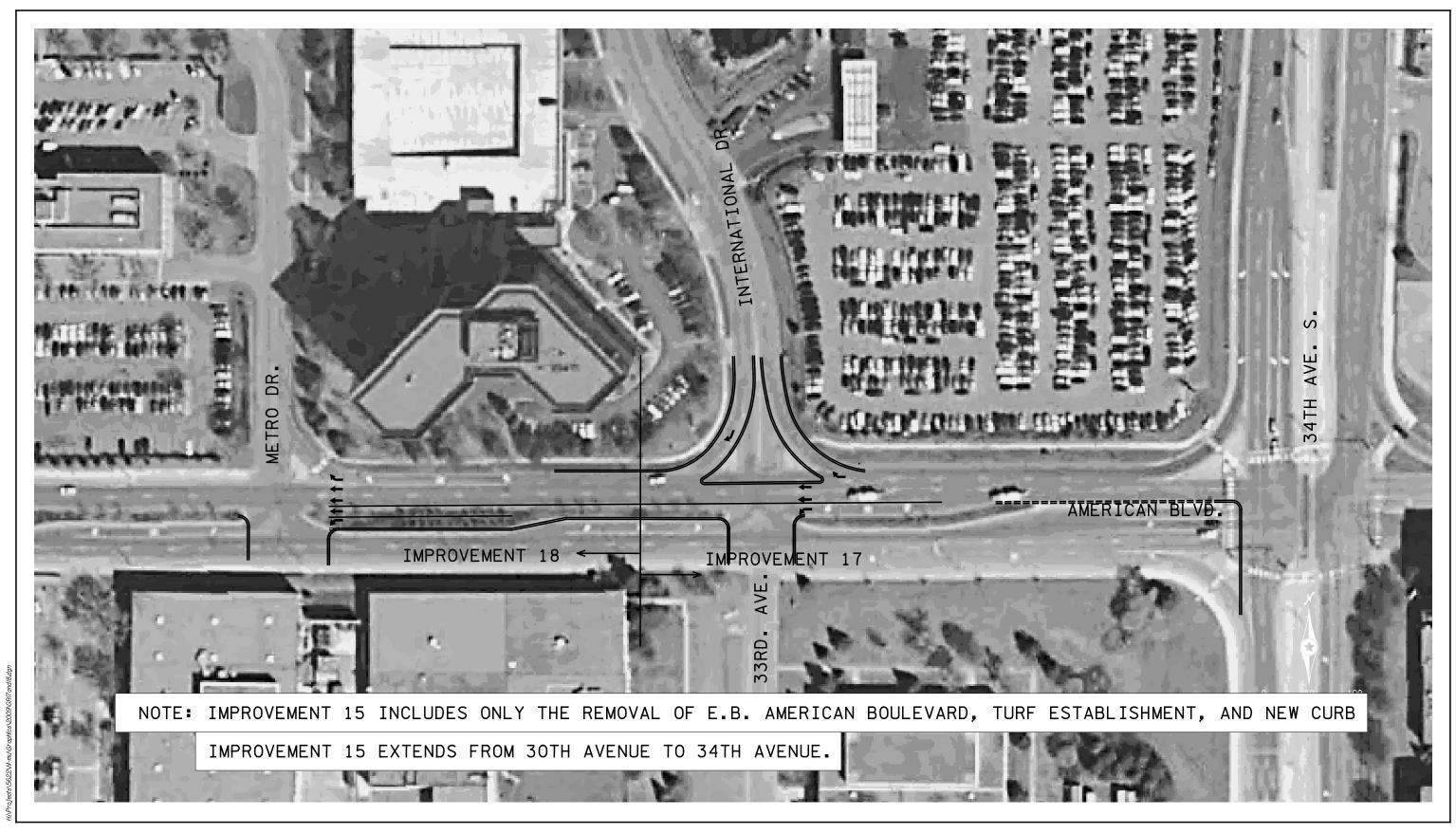




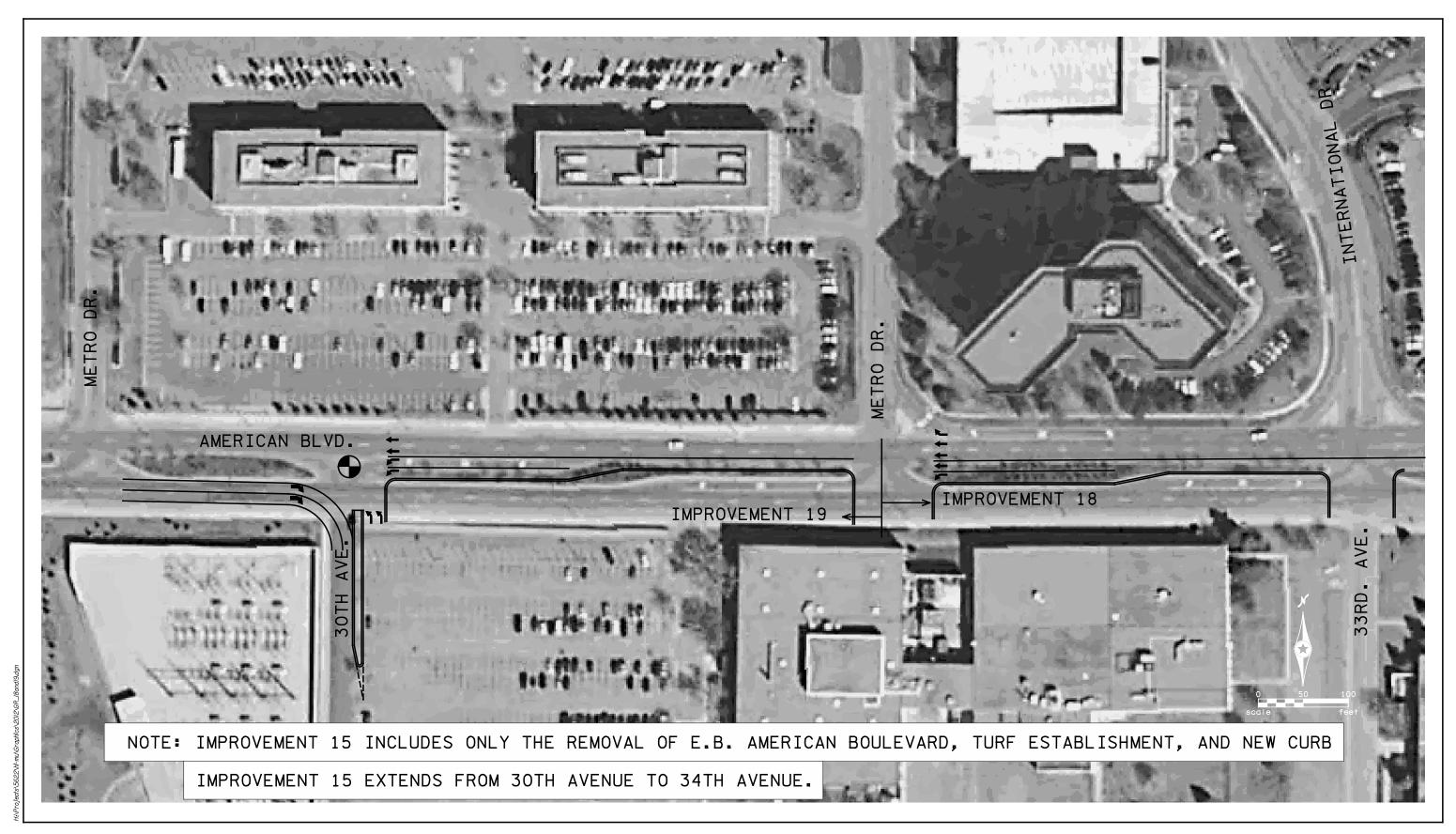




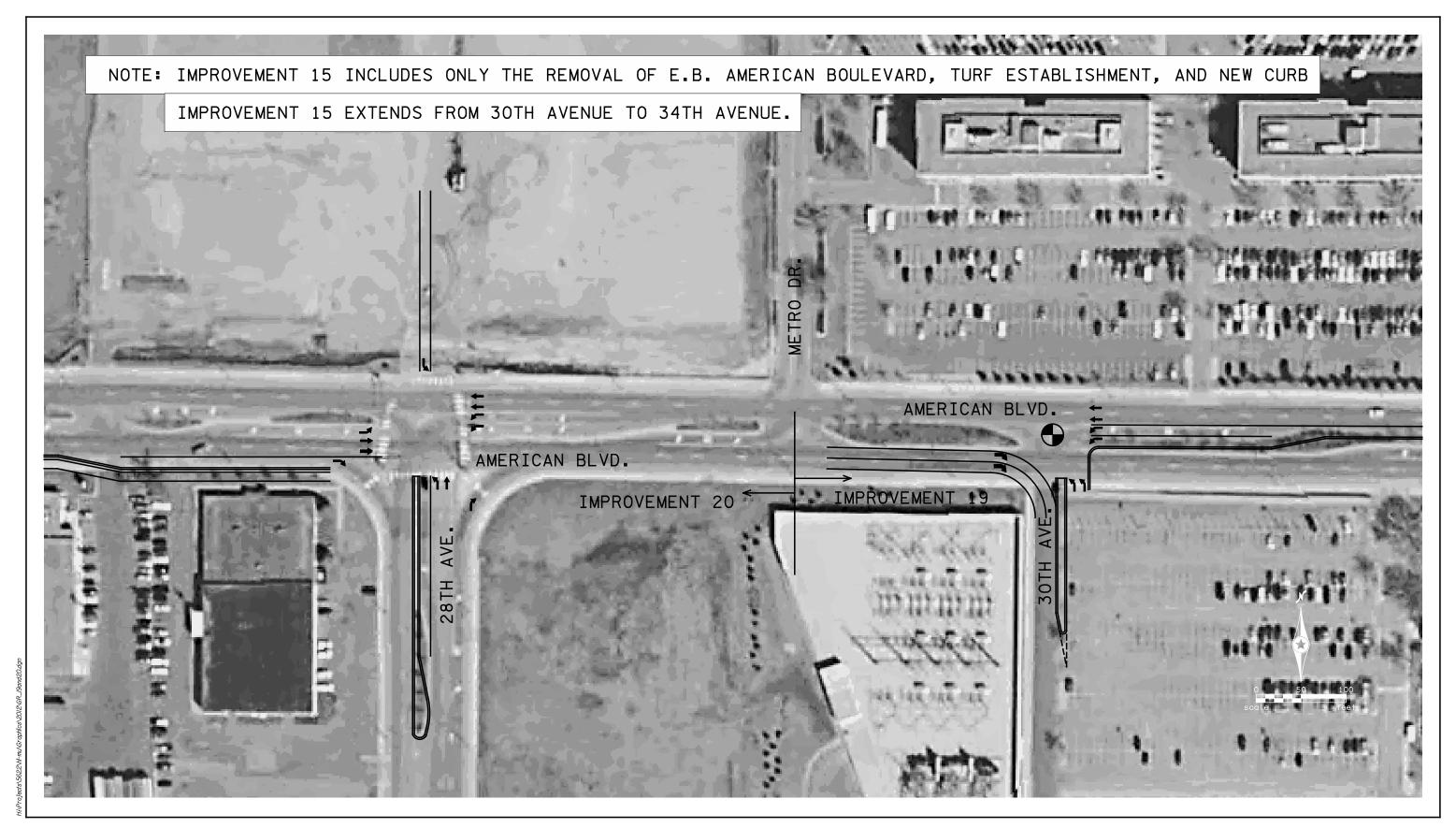




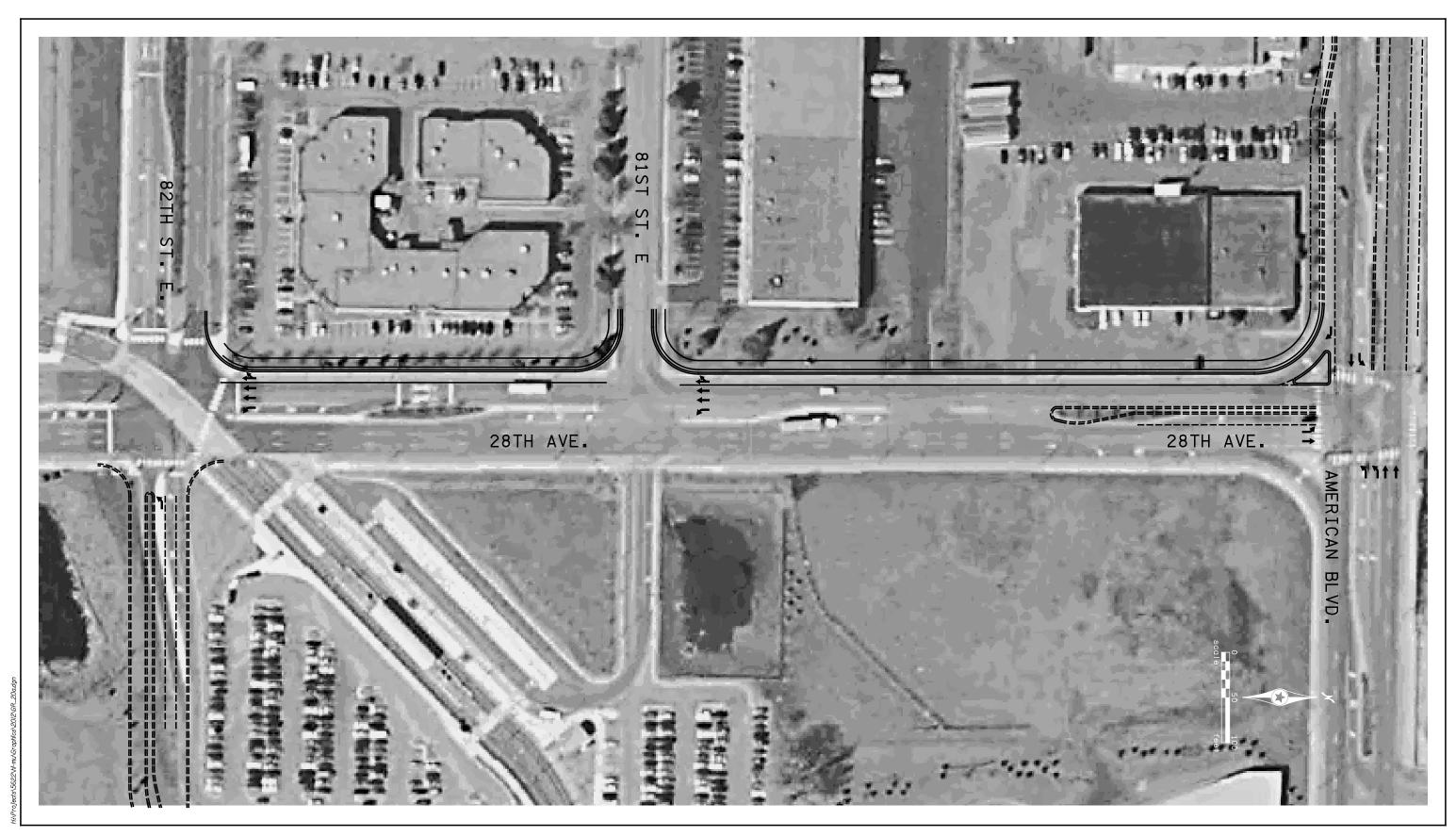




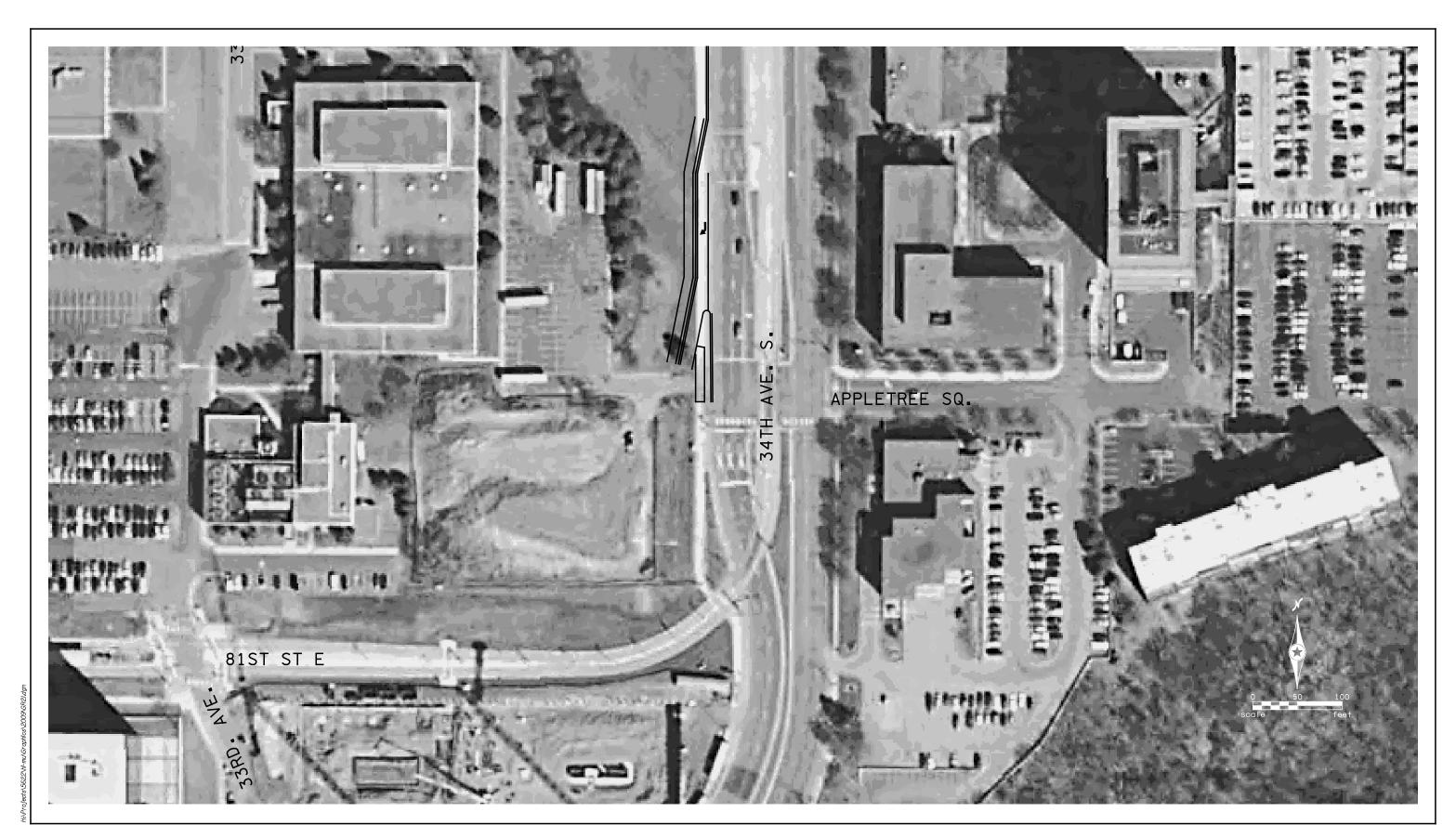




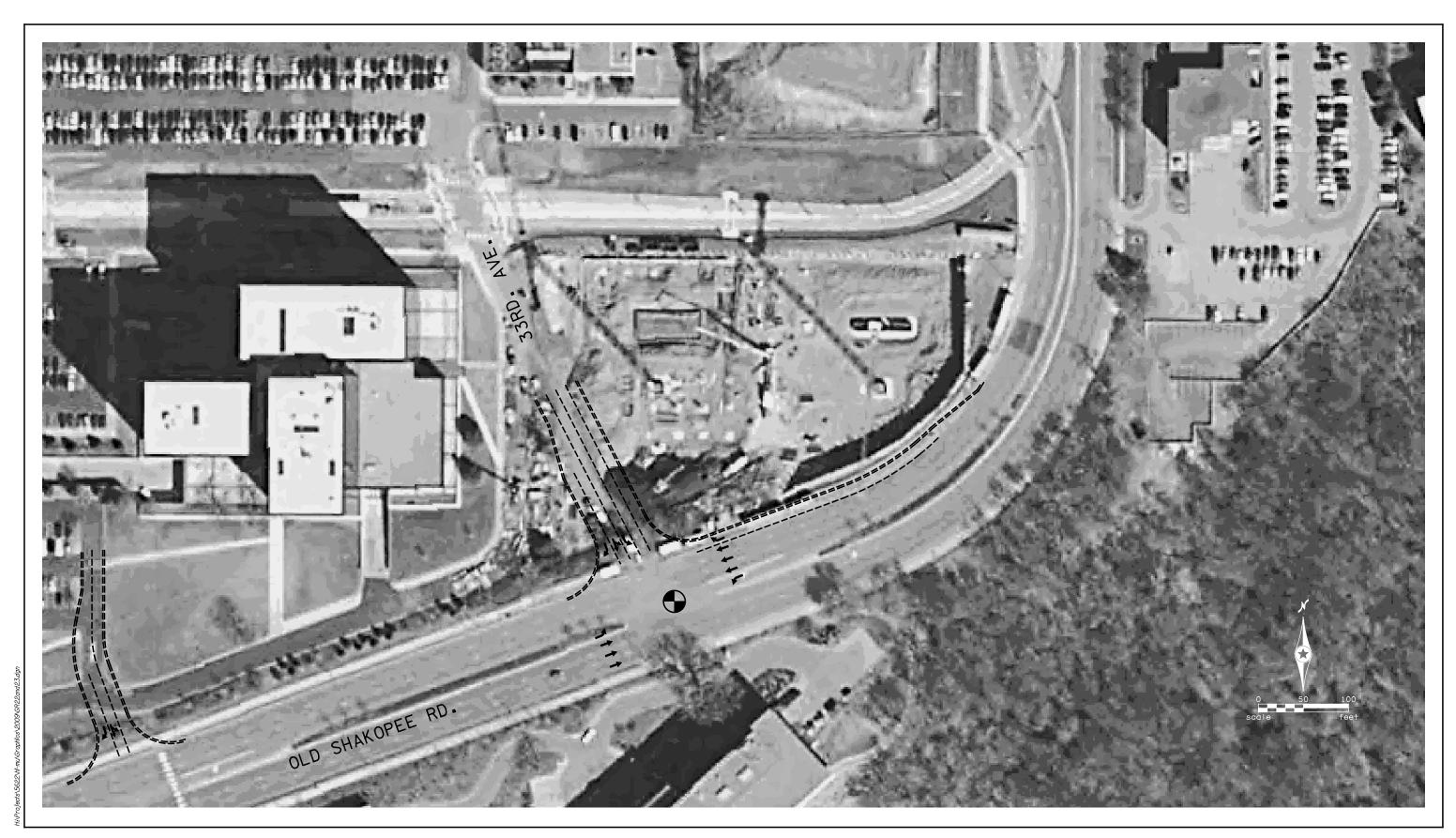










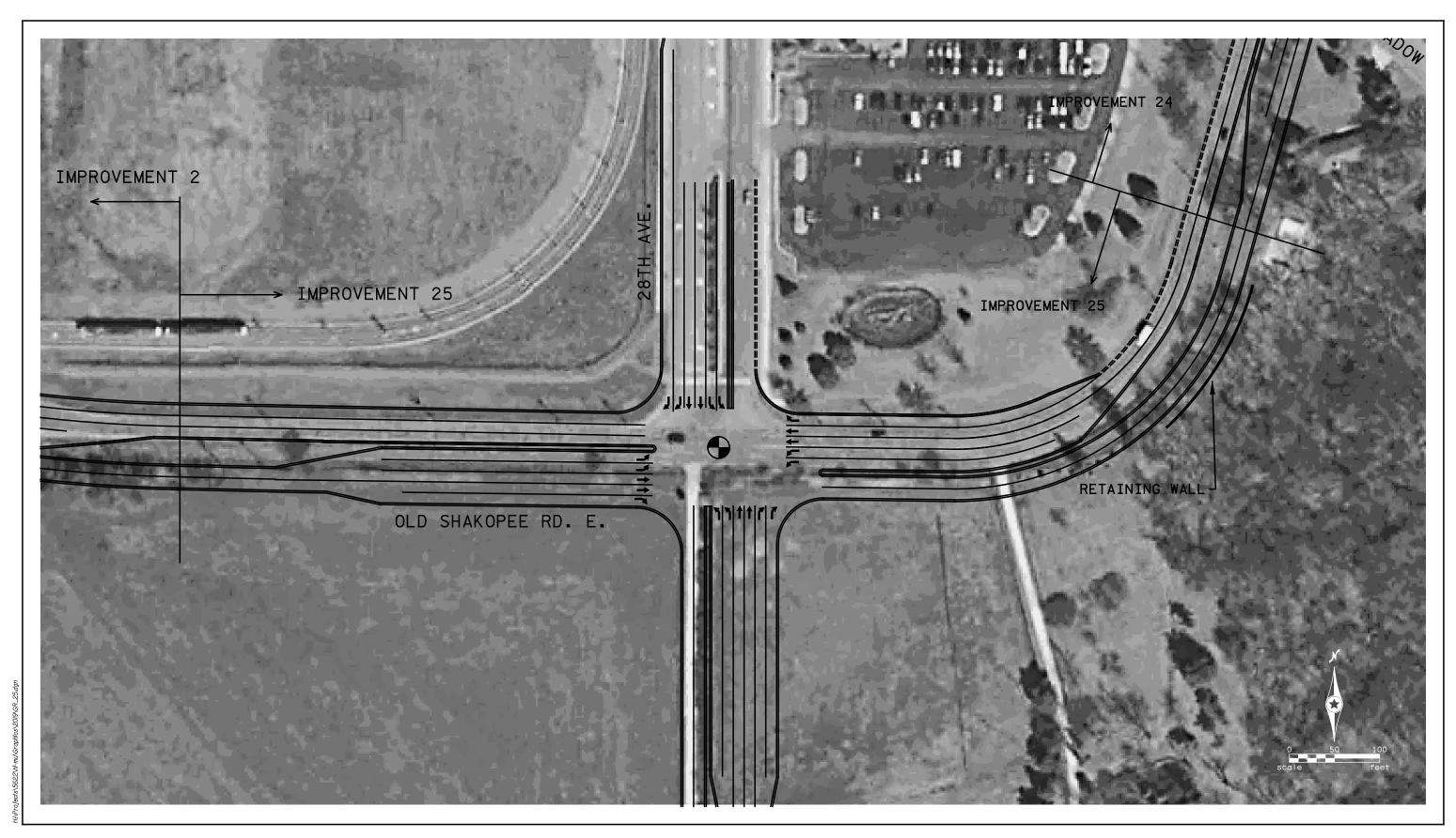




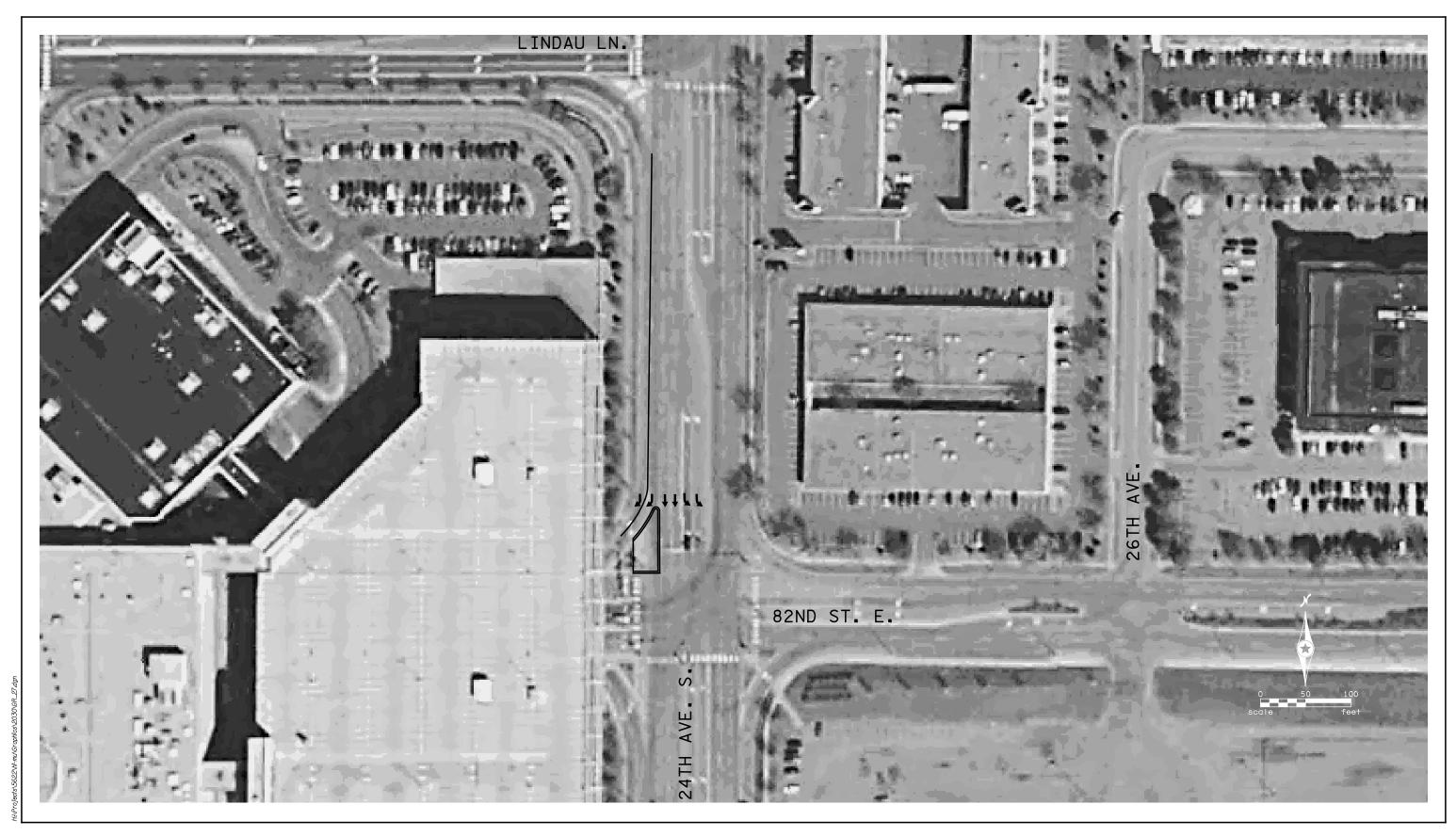
Improvement 22



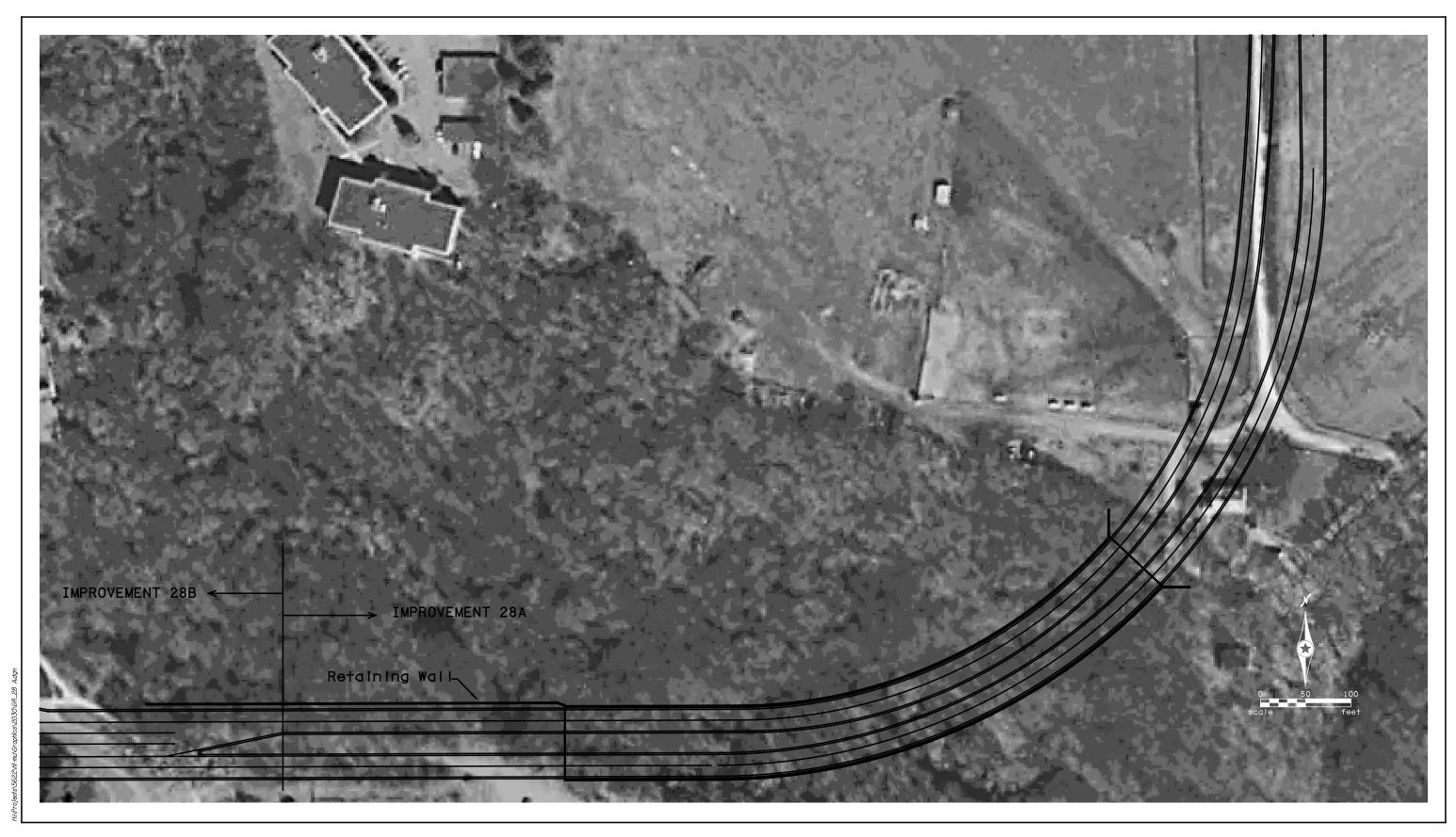




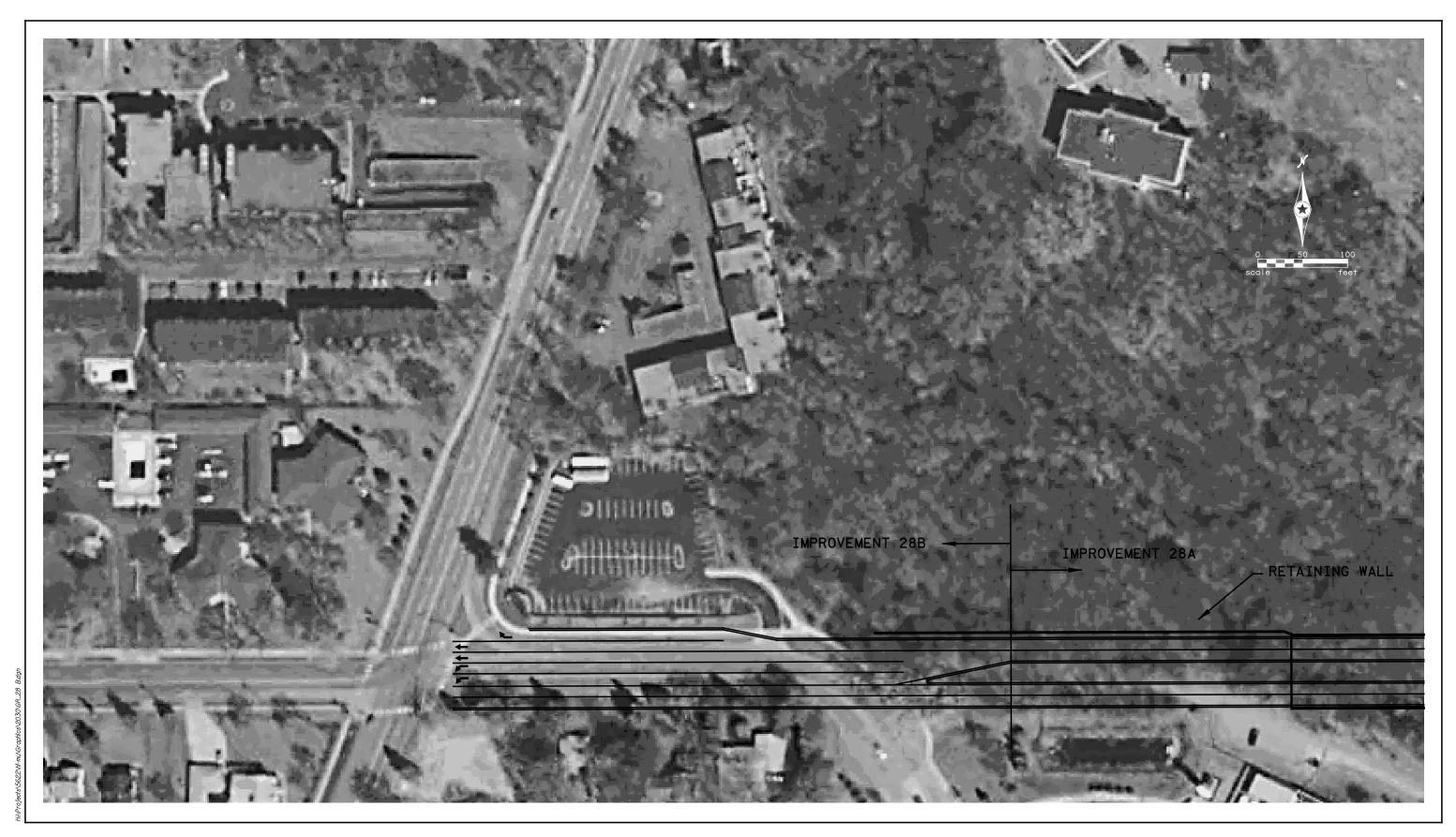






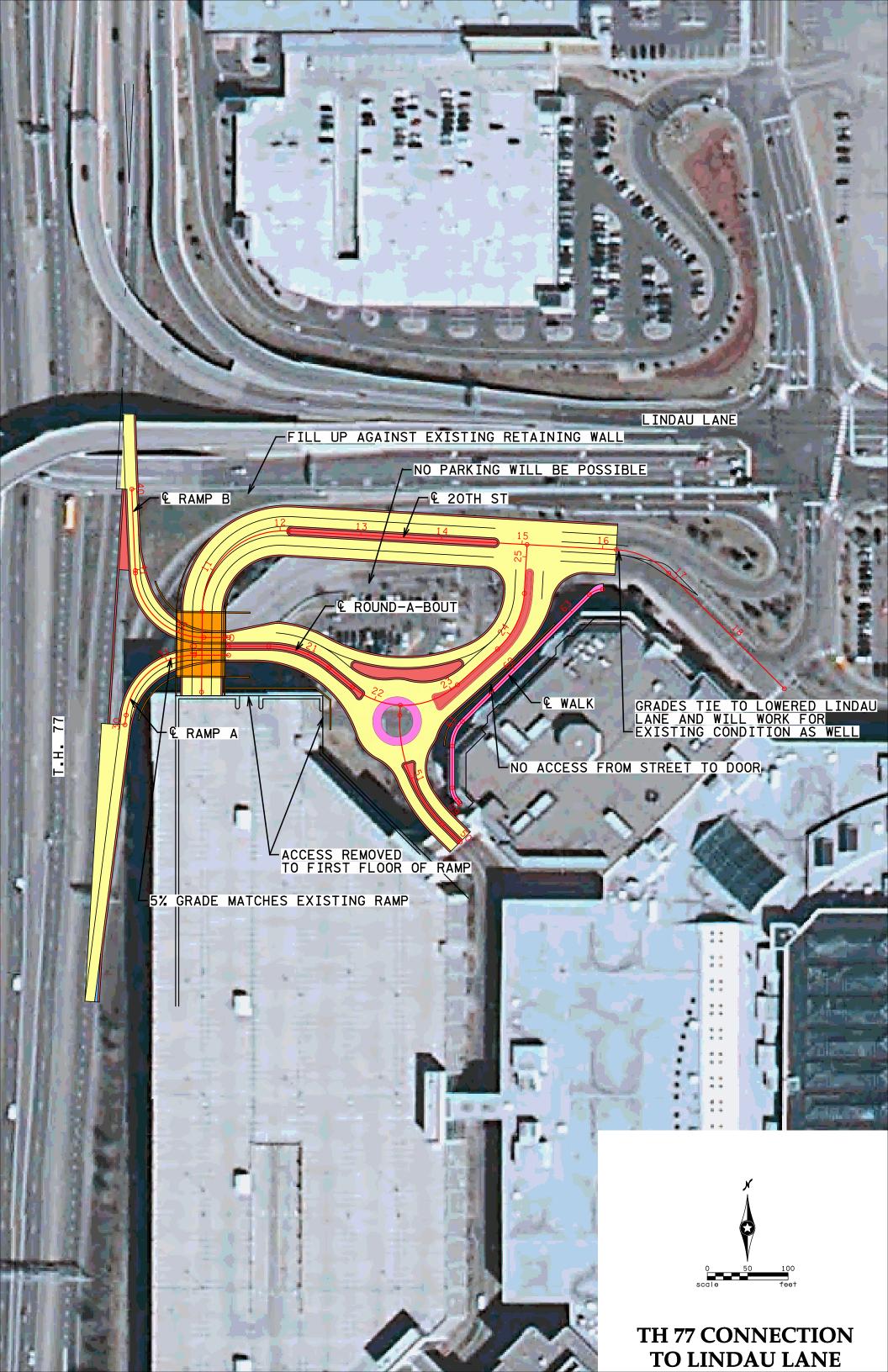


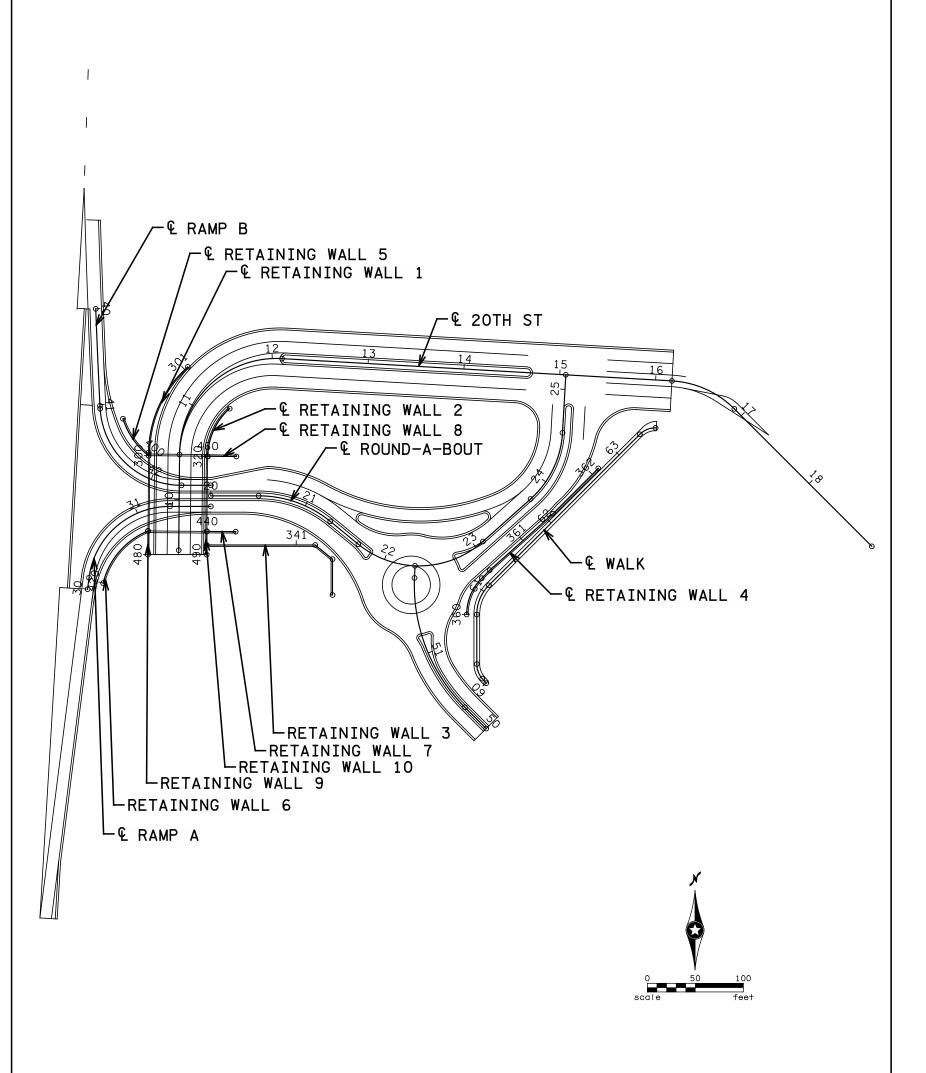






Attachment C



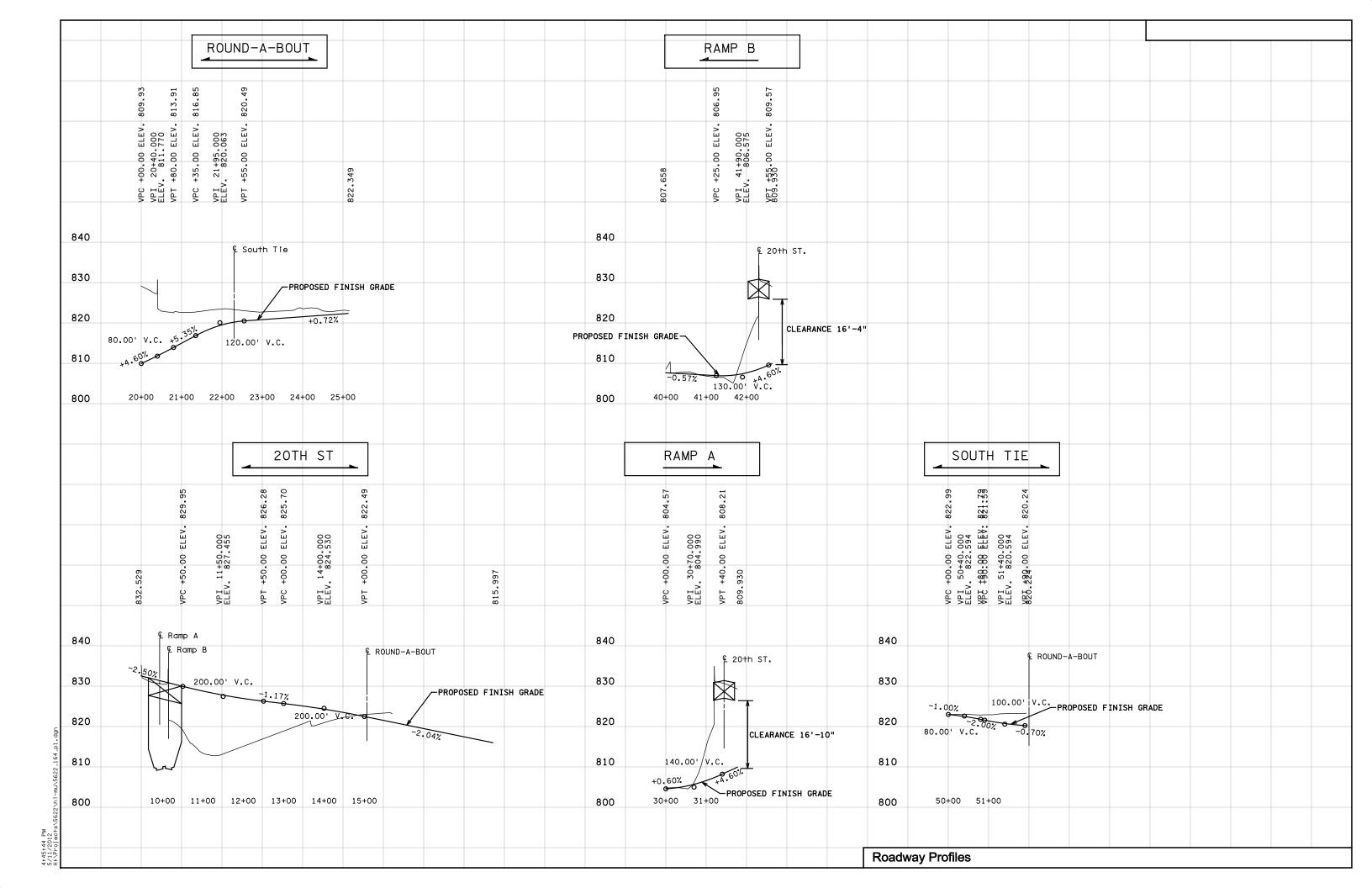




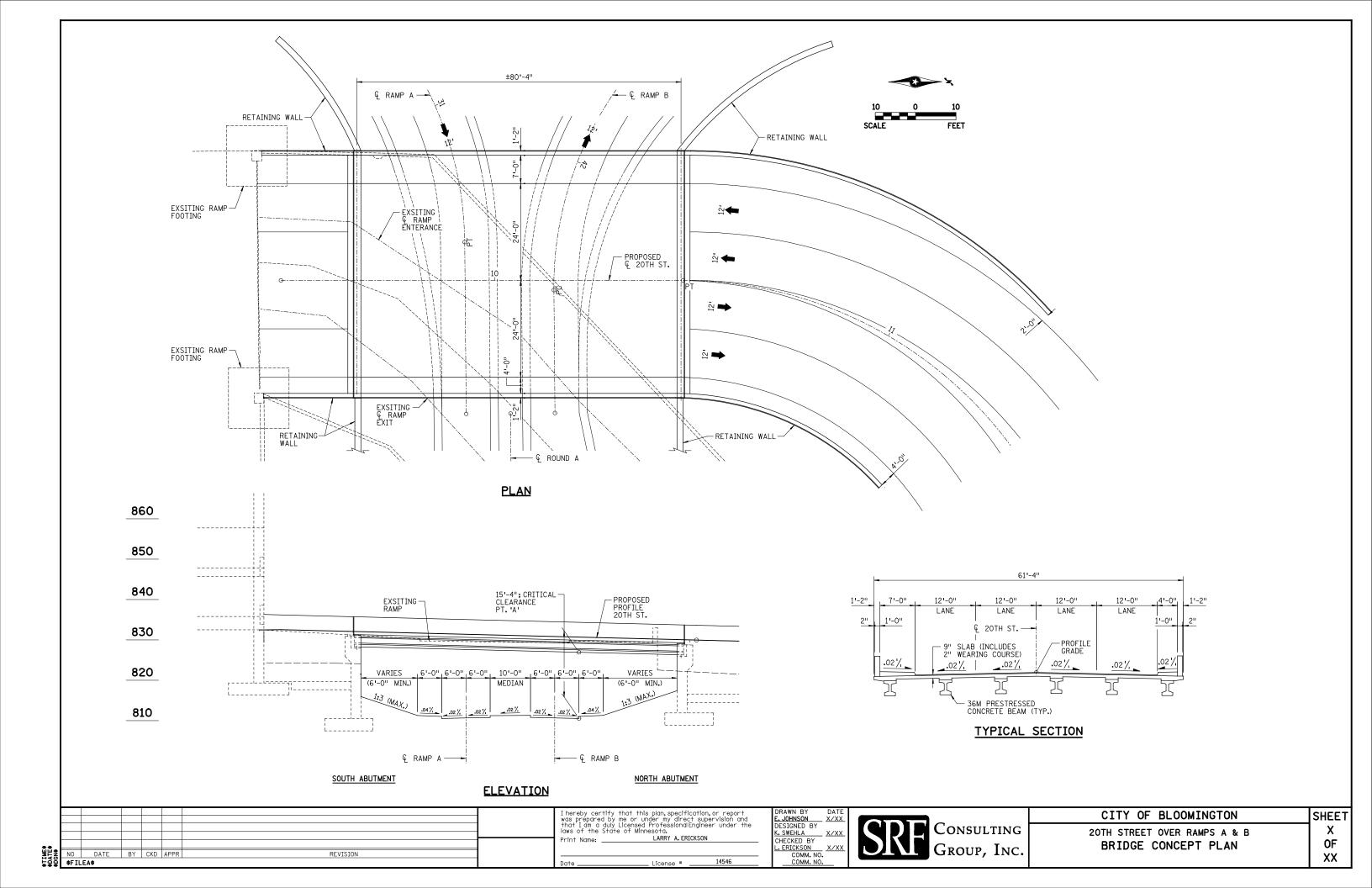
TH 77 Connection to Lindau Lane Wall Locations

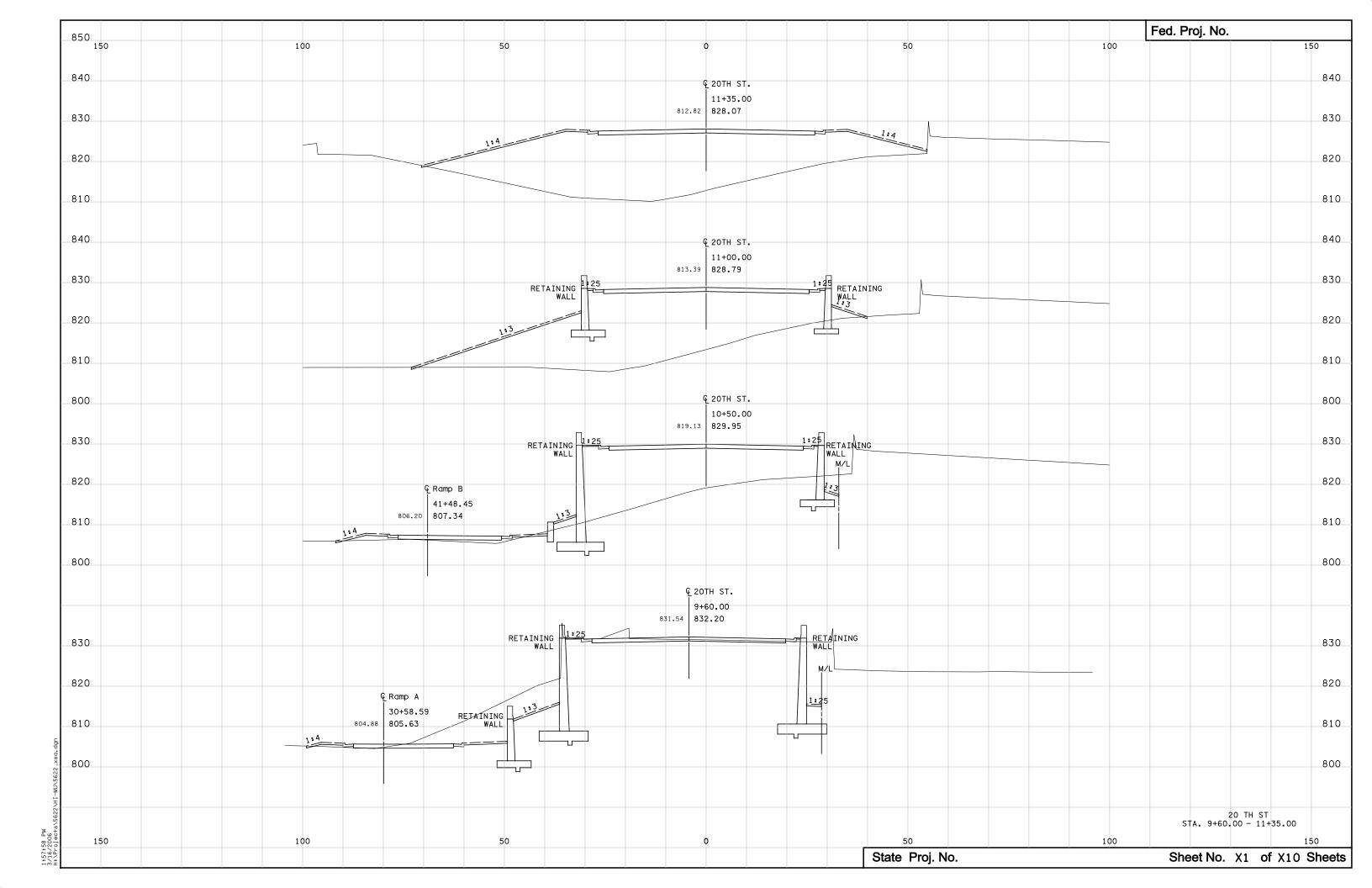
Airport South Roadway Infrastructure Improvements City of Bloomington

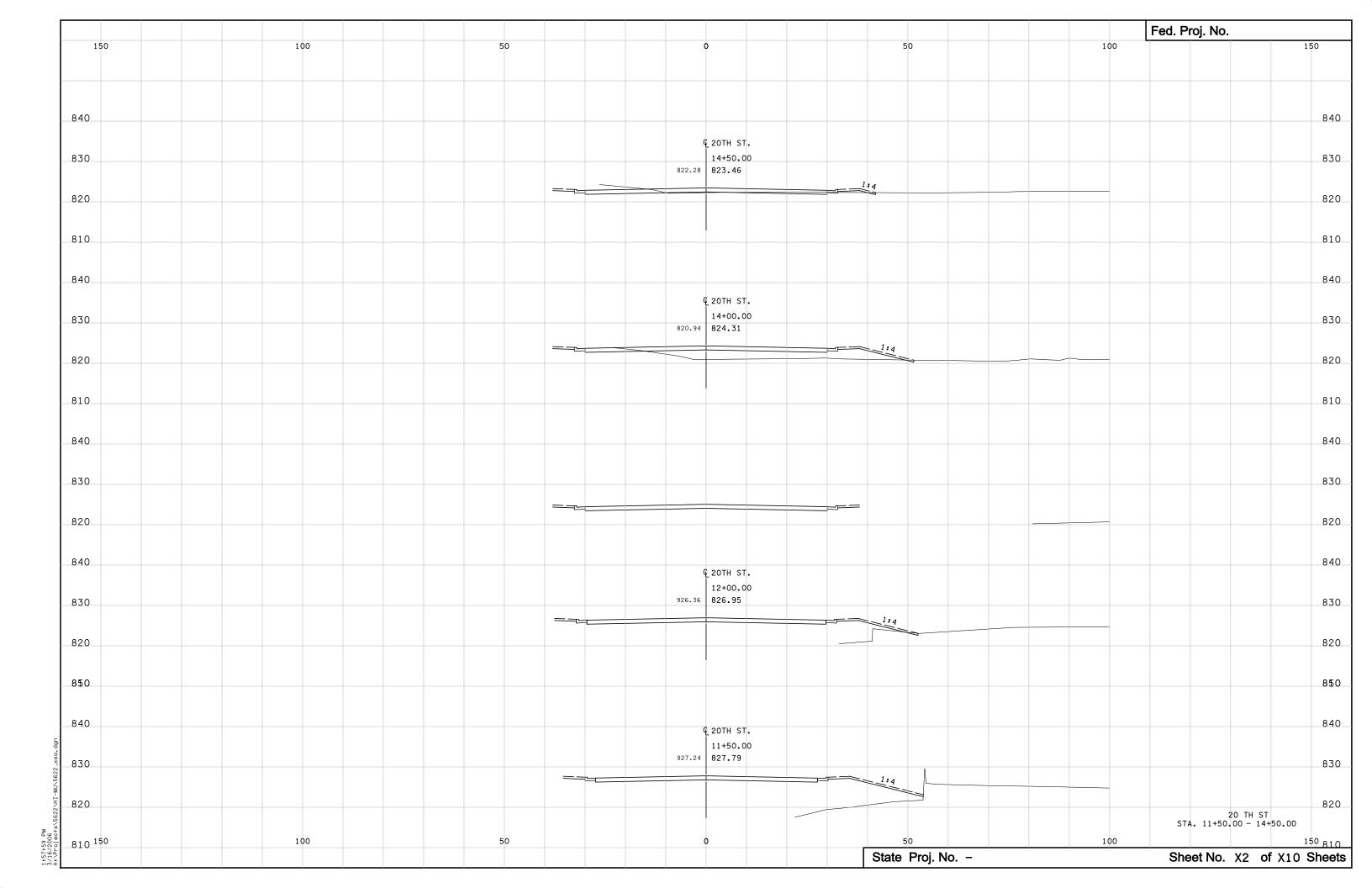
5622 3-22-2006

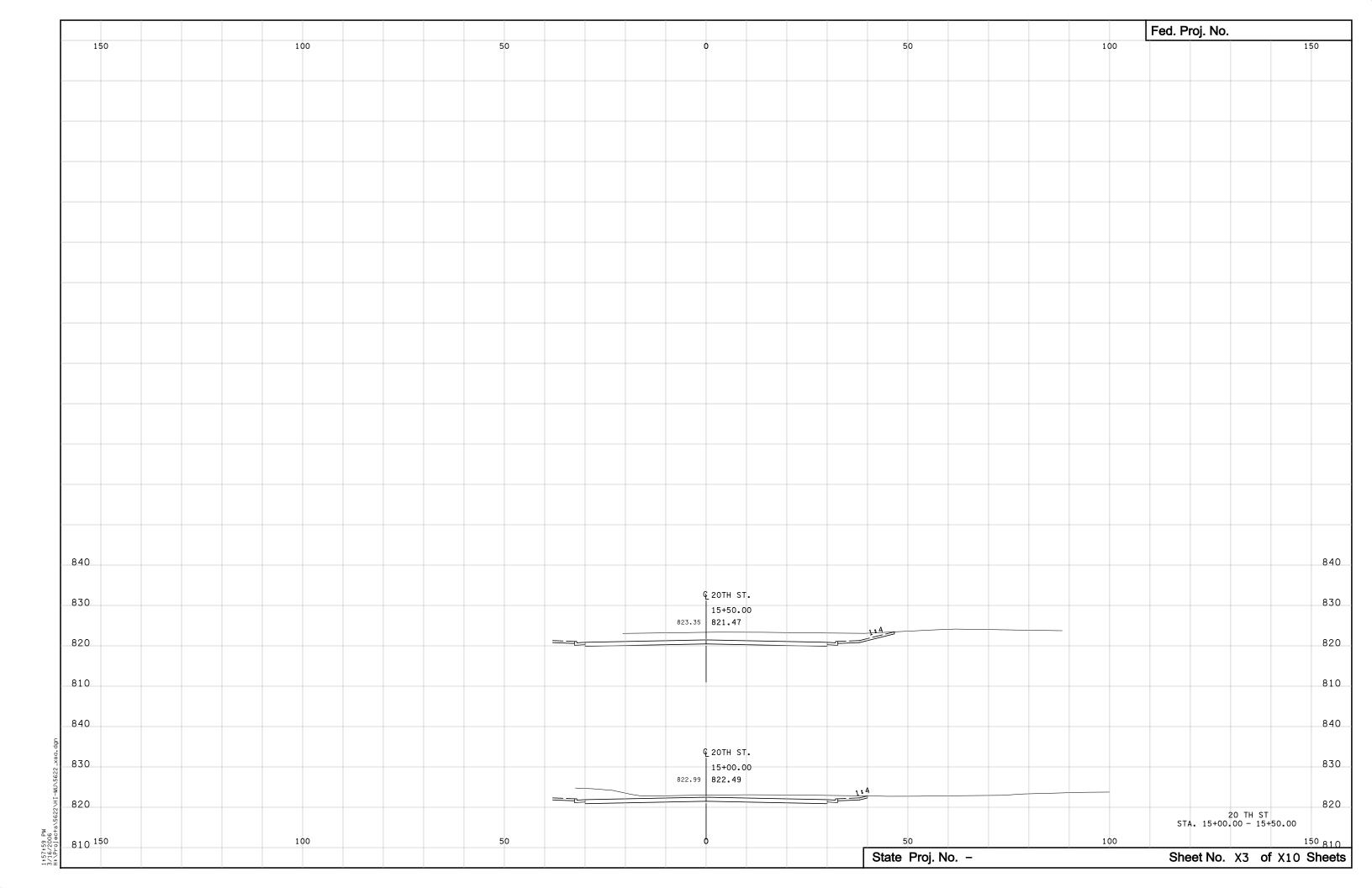


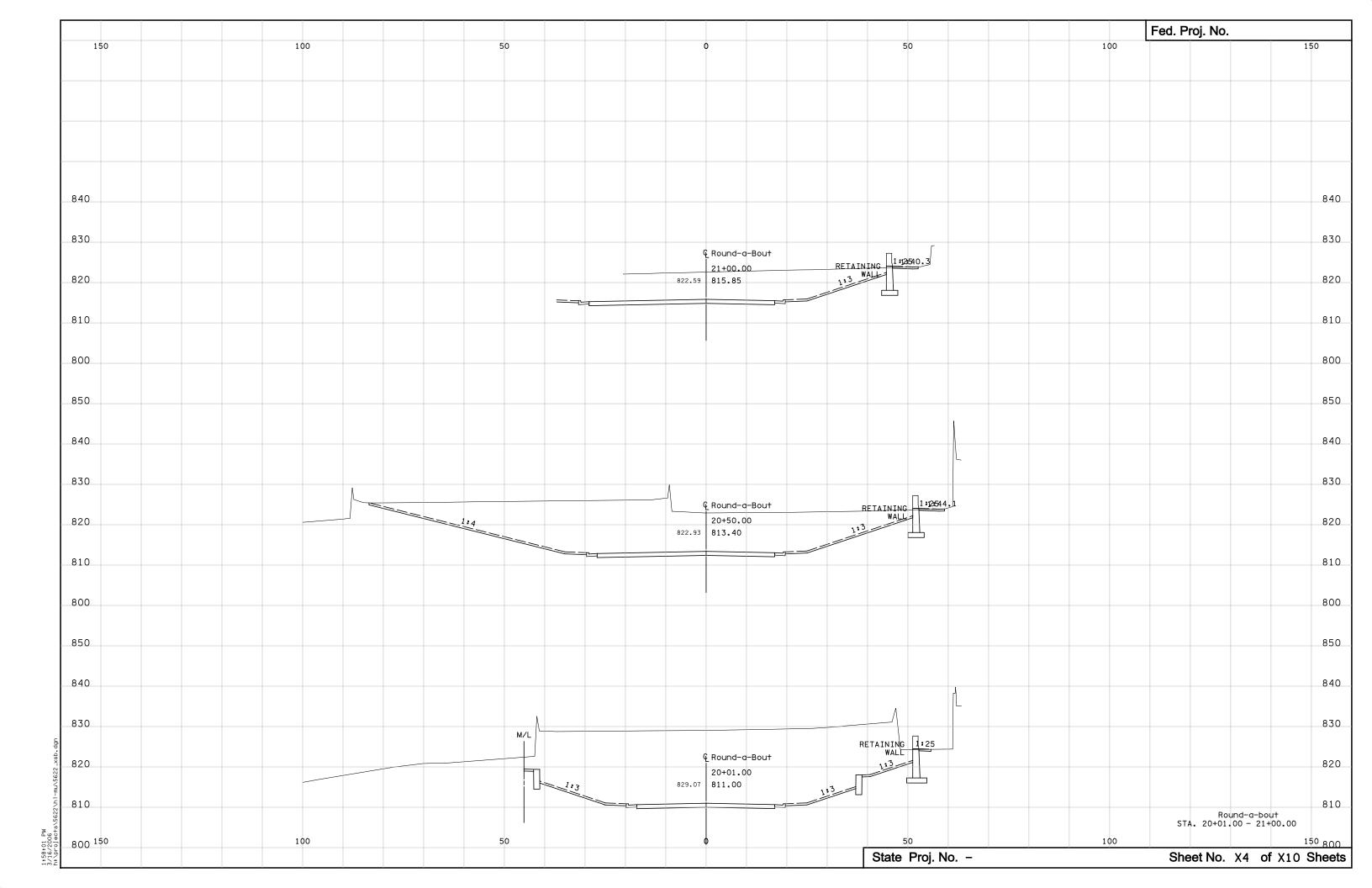
	RETA	ININ	G W	ALL	2		RETAINING WALL 4	830	RE	TAINI	NG W	ALL 6	840	RE	TAIN	IING	WALL	. 8	840	RETAINING WALL 10
	Γ ¹	OP OF RE	TAININ	NG WALL																TOP OF RETAINING WALL LEXISTING GROUND LINE
330		à				830	TOP OF MODULAR BLOCK WALL PROPOSED GROUND AT FACE OF WALL	820		/	STING GRO		830		TEXIST	ING GROUI	ND I TNF		830	CEXISIING GROUND LINE
320	\checkmark	PROPOSE AT FACE EXISTING	OF WA	\LL		820	EXISTING GROUND LINE	810			POSED GROU		820	J		RETAIN:			820	PROPOSED GROUND AT FACE OF WALL
310		-				810	-EATSTING SHOONS ETHE	800	Z	AT F	ACE OF WA	LL	810		PROPOS	SED GROUN	ID		810	<u>, </u>
,10	_B	OTTOM OF	FOOTI	NG		010		300		POTTOU	OF FOOTI	NC .	010		AT FAC	E OF WAL	L		310	BOTTOM OF FOOTING
300	320+00					800	360+00 361+00 362+00	790	420+		OF F0011	VG	800	460+	+00				800	490+00
	RETA	ININ	G W	/ALL	1		RETAINING WALL 3		RE	TAINI	ING W	ALL 5		RE	TAIN	IING	WALL	7		RETAINING WALL 9
						840							840							
		TOP OF I	RETAIN	ING WAL	.L	840							840							
		PROP AT F	OSED C ACE OF	ROUND WALL		830	TOP OF RETAINING WALL	820					830						830	TOP OF RETAINING WALL
320						820	PROPOSED GROUND AT FACE OF WALL	810			RETAININ		820			ING GROUI			820	EXISTING GROUND LINE
							EXISTING GROUND LINE			AT FA	ACE OF WAL	L			TOP OF	RETAIN:	ING WALL		020	PROPOSED GROUND AT FACE OF WALL
310		LEXIST		ROUND L	INE	810	BOTTOM OF FOOTING	800		LEXISTIN	IG GROUND	LINE	810		\PROPOS AT FAC	SED GROUN SE OF WAL	ID L		810	-
300	300+00	\воттом (301+00	OF F00	TING		800	340+00 341+00	790	400+	-00			800	440-	+00				800	LBOTTOM OF FOOTING
														Retain						

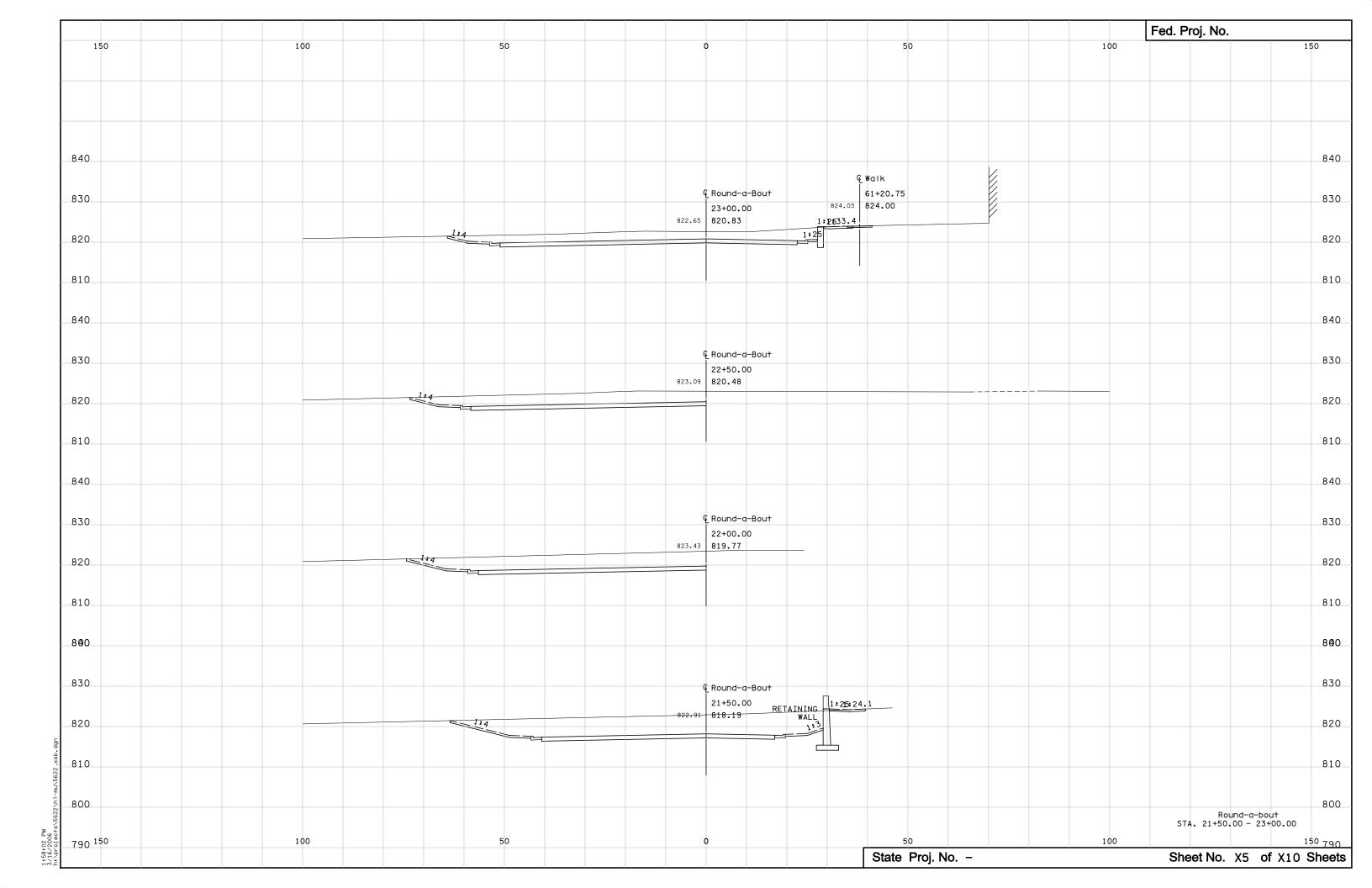


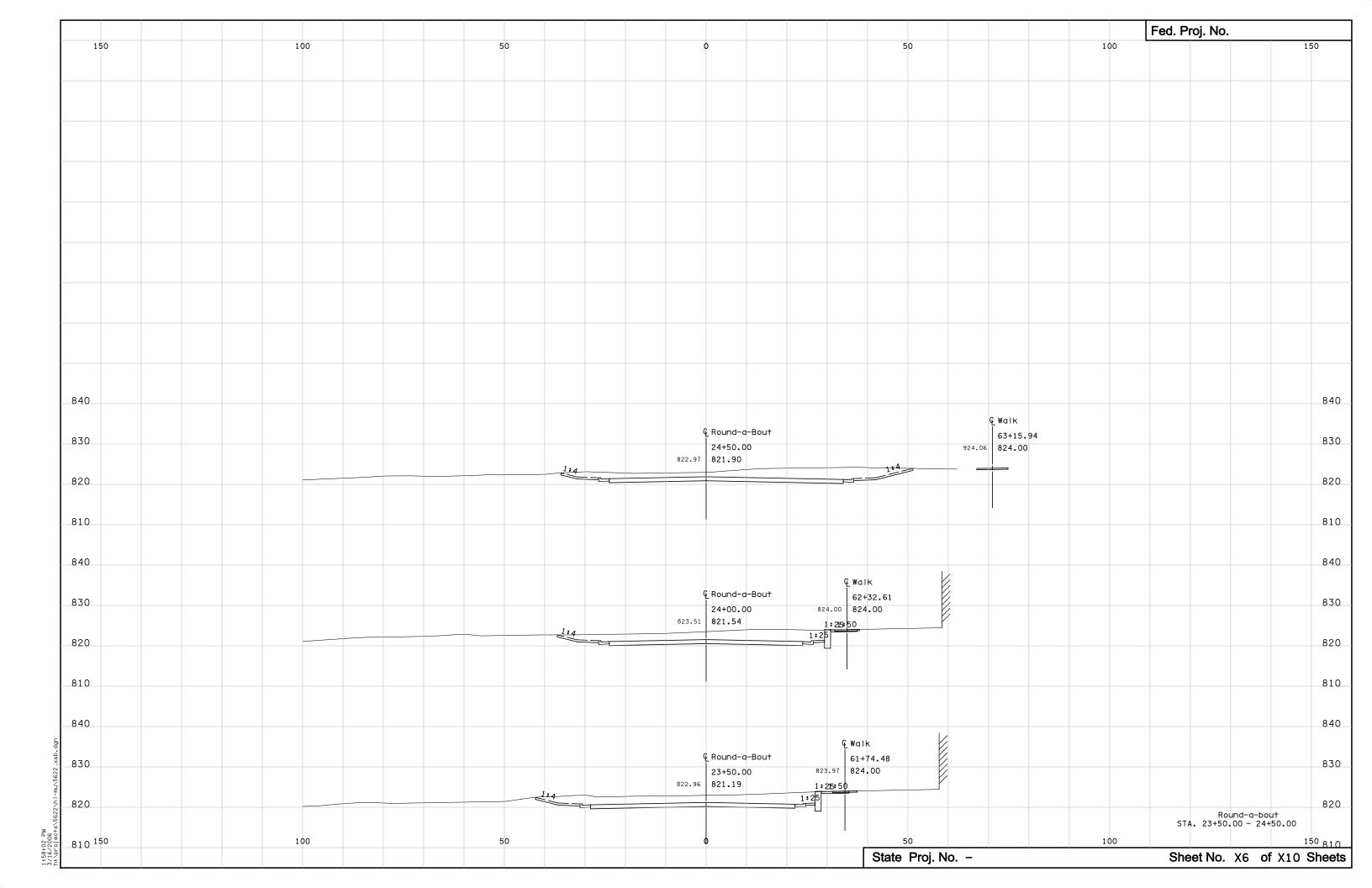


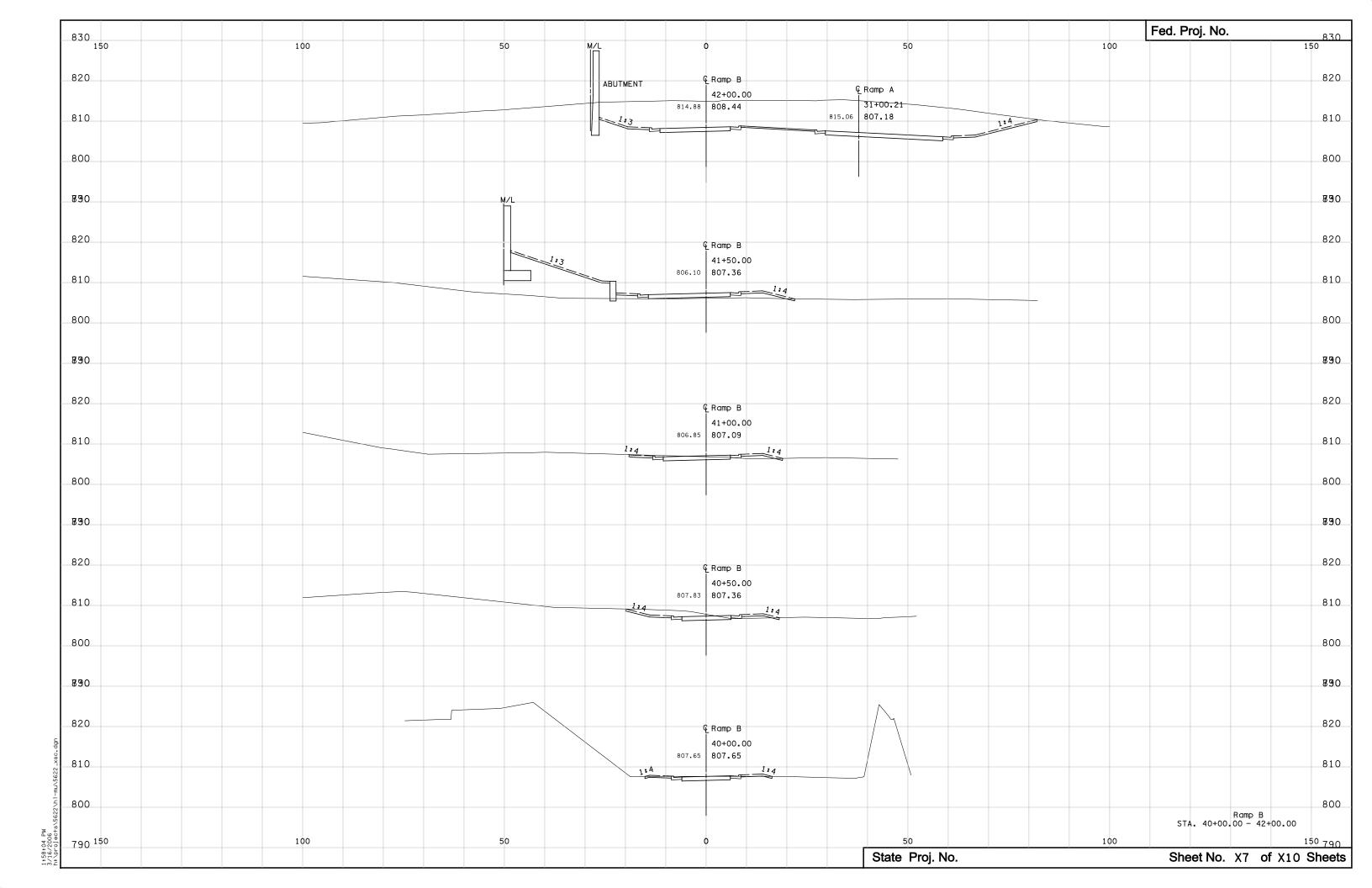


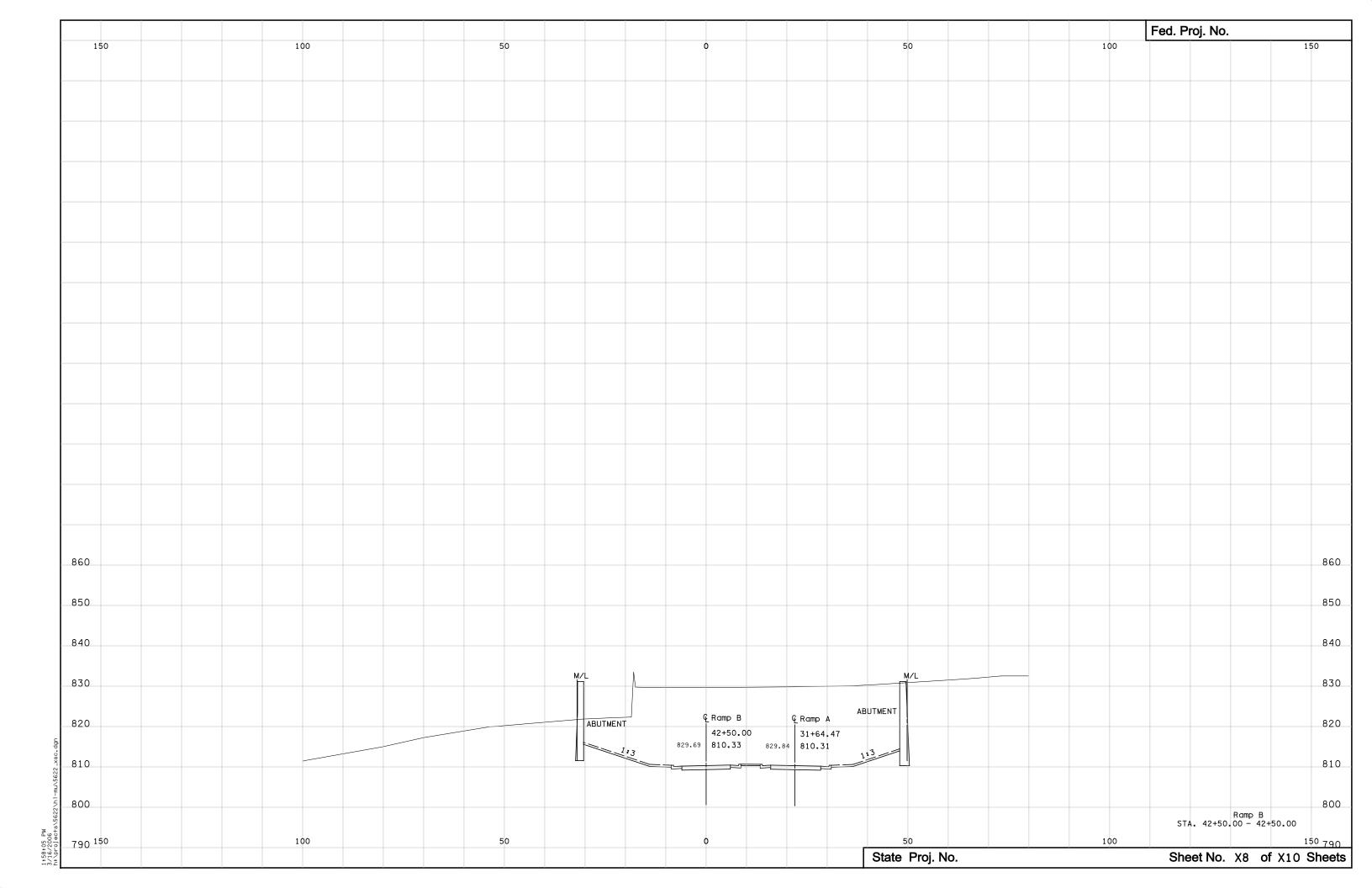


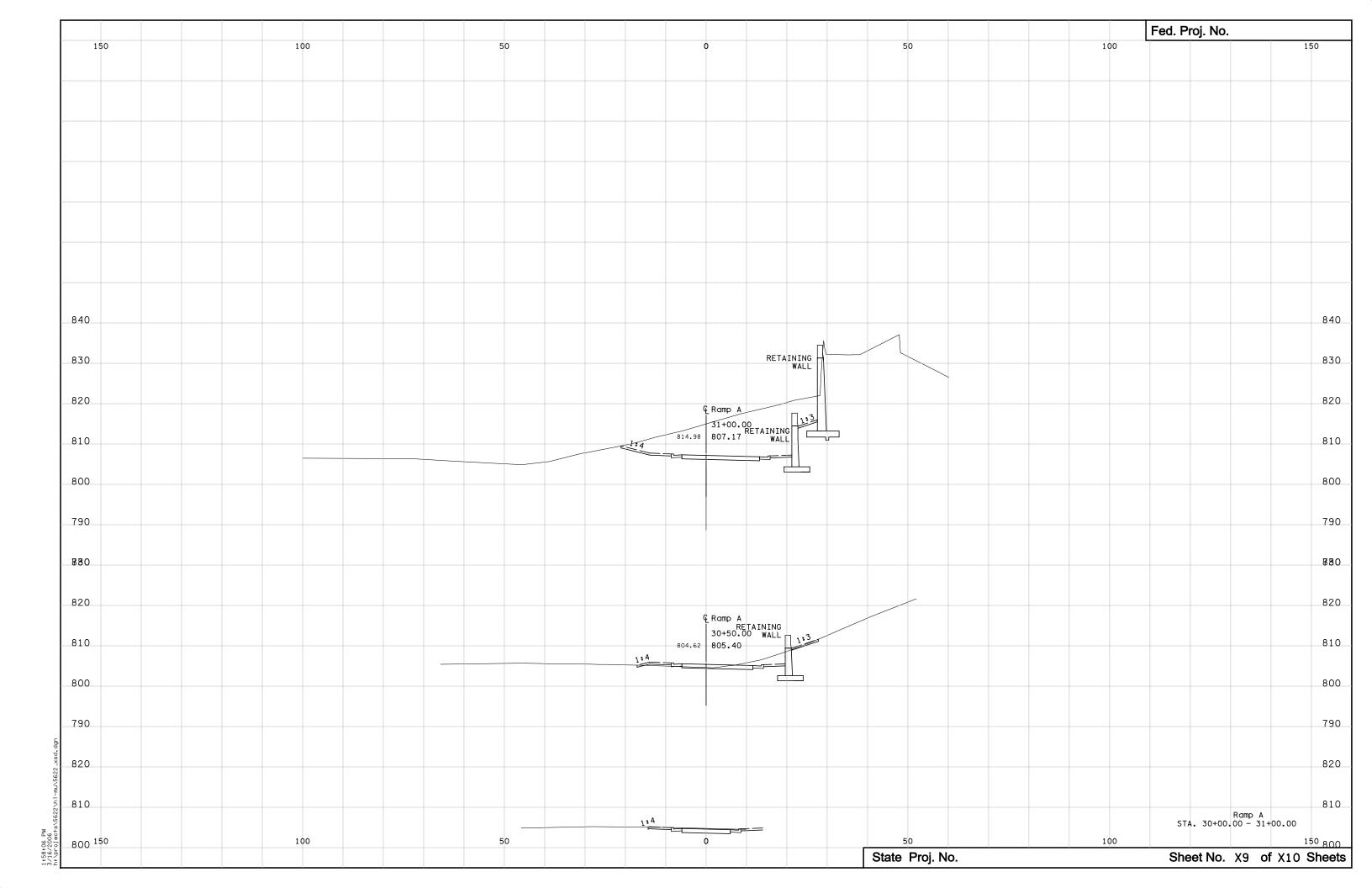


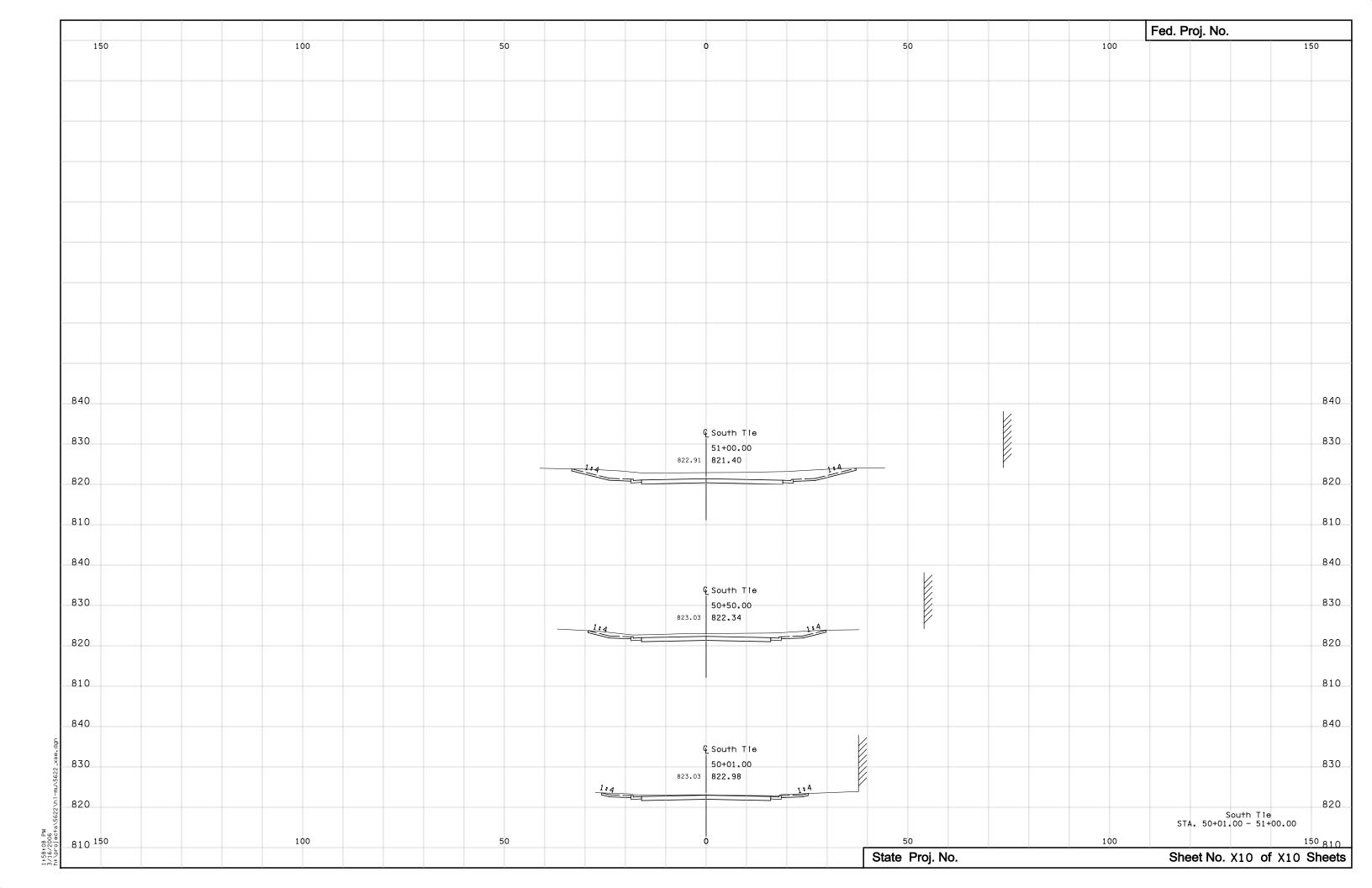












Attachment D



2030 Weekday PM Peak Hour Fu	II Build Scenario - Inc	dividual Site	Breakdown																																			W	eekday Individu	ual Site Breakdo
	Intersection Location	New NB TH 77 Acc to Existing MO/ (Roundabout)		ve / Killebrew Dr e 22nd Aven	TH 77 Ramps 20th Avenue	2012 Interim Acces from CD Roadway/ 77 to Thunderbird F	2012 Interim According Thunderbird to Eastbound I-494 Road	Permanent Acces from CD Roadway/ 77 to Thunderbird		and m Thunderbird Road East Roundabout	24th Ave / I-494 Single-Point Interchange Avenue (W	/ 24th Boulevard /	24th 28th Avenue /	Old Shakopee Road, Cedar Avenue to Killebrew Drive	American Blvd One- way Conversion (30 to 34th)	American Boulevard / 34th Avenue	American Boulevard / International Drive		merican Americ evard / 30th Avenue Avenu		34th Aveni Driveway	Old Shakopee Rd / 33rd Avenue	Old Shakopee Rd / 31st Avenue	Old Shakopee Rd / 30th Avenue Old Sh Road Ave	hakopee d / 28th enue	th Avenue / I- North Ramps Ra	renue / I- South mps 24th Ave 82nd S	nue / reet	28th Road / 86th	e 30th Avenue	Wayfinding Signs	Lindau Lane Improvements (Lowering / TH 77 Ramps / IKEA Way		Lindau Lane / 77 Ramps / IK Way	TH American EA Boulevard / IKEA Driveway	American Boulevard / Thunderbird Road	American Boulevard / Metro Drive (West)	Lindau Lane / Lind 22nd Avenue 24th	lau Lane / 34th Aven h Avenue Appletree S	nue / Square TOTAL
	Improvement #	1, 6, 7	2	3	4	8	9	10A	10B	10C	11 12A	12B	13	14	15	16	17	18	19 20	20A	21	22	23	24 2	25	26	26 27	28A	28B	29	30	31, 5	-				$\overline{}$			
Development	Improvement Costs	\$3,779,513	\$881,104	\$848,078	3 \$1,860,924	\$512,549	\$759,845	\$1,258,795	\$16,352,940	\$1,178,231	\$646,121 \$1,524,2	96 \$4,076,98	7 \$2,207,017	\$10,295,604	\$474,094	\$2,252,575	\$170,138	\$234,356 \$6	617,779 \$690,8	16 \$1,676,140	\$394,051	1 \$300,300	\$0	\$2,433,499 \$7,76	68,665	\$29,826,046 \$29,8	26,046 \$96,0	09 \$28,261,14	1 \$1,608,896	\$1,677,315	\$549,600	\$12,900,000	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$170,439,47
Existing	% Trips at Intersection	100%	39%	49%	56%	3%	18%	0%	12%	5%	27% 28%	28%	12%	39%	5%	24%	7%	6%	10% 11%	20%	0%	18%	23%	23% 23	23%	34% 2	6% 46%	3%	40%	23%	0%	0%	50%	41%	57%	21%	8%	48%	45% 22%	28%
	Trips Cost per Development	575 \$3,779,513	1898 \$344,102	1781 \$412,572	2365 2 \$1,036,769	15 \$15,224	117 \$138,476	0 \$0	82 \$1,918,371	\$2 \$55,272	1945 2323 \$174,035 \$427,59	2323 98 \$1,143,68	204 3 \$273,199	1349 \$4,009,460	98 \$23,608	1296 \$531,658	98 \$11,709	88 \$14,382 \$	205 286 559,766 \$73,44	97 17 \$327,794	0 \$0	611 \$54,738	705 \$0	941 10 \$558,790 \$1,78	059 88,871 \$	1314 1 \$10,028,512 \$7,7	585 165 53,696 \$44,0	62 05 \$798,628	1379 \$639,939	551 \$386,857	\$0	0 \$0	\$1,250,000	1782 \$0	725 \$0	793 \$0	200 \$0	1442 \$0	1879 720 \$0 \$0	34,632 \$38,074,675
1 BCS - Northwest Office - (472D)	% Trips at Intersection	0%	1%	1%	1%	0%	0%	0%	0%	0%	2% 2%	2%	0%	1%	7%	2%	1%	1%	6% 5%	0%	0%	3%	3%	5% 3	2%	1%	% 0%	1%	1%	9%	0%	0%	0%	0%	1%	0%	5%	0%	0% 3%	2%
T BGG - NOTHWEST Office - (472B)	Trips	0	71	51	51	0	0	0	0	0	122 131	131	0	40	128	114	19	20	131 131	0	0	95	95	185	91	28 1	14 0	20	40	207	0	0	0	0	10	10	131	0	0 95	2,261
	Cost per Development	\$0	\$12,872	\$11,814	\$22,357	\$0	\$0	\$0	\$0	\$0	\$10,916 \$24,11	3 \$64,495	\$0	\$118,887	\$30,835	\$46,766	\$2,270	\$3,269 \$	33,64	12 \$0	\$0	\$8,511	\$0	\$109,858 \$15	53,718	\$213,697 \$55	7,679 \$0	\$257,622	\$18,562	\$145,335	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$1,885,412
2 BCS - SW Office - (472D)	% Trips at Intersection Trips	0%	3% 141	3% 101	2% 101	0%	0%	0%	0%	0%	3% 3% 241 262	3% 262	8% 134	2% 80	0%	4% 228	0%	0%	6% 5% 127 127	0%	0%	7% 228	7% 229	8% 4 331 1	4% 181	1% 4 57 2	% 4% 28 134	2%	2% 80	19% 458	0%	0%	0%	0%	2% 21	1% 21	5% 127	0%	3% 7% 134 228	3% 4.301
	Cost per Development	\$0	\$25,563	\$23,397	\$44,276	\$0	\$0	\$0	\$0	\$0	\$21,564 \$48,22	7 \$128,99	\$179,454	\$237,774	\$0	\$93,533	\$0	\$0 \$	37,026 \$32,61	15 \$0	\$0	\$20,426	\$0	\$196,556 \$30)5,747	\$435,027 \$1,1	15,358 \$3,5	\$1 \$515,244	\$37,125	\$321,561	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$3,823,024
3 BCS - Central Park - (472D)	% Trips at Intersection	0%	3%	3%	3%	0%	0%	0%	0%	0%	3% 3%	3%	0%	3%	13%	5%	4%	14%	11% 9%	0%	0%	7%	6%	5% 4	4%	3% 5	% 0%	2%	3%	2%	0%	0%	0%	0%	2%	1%	10%	0%	0% 7%	4%
	Trips Cost per Development	0 \$0	154 \$27,920	110 \$25,482	110 \$48,222	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	219 241 \$19,596 \$44,36	241 1 \$118,65	0 \$0	88 \$261,551	251 \$60,466	292 \$119,787	58 \$6,930	194 \$31,705 \$	241 241 670,262 \$61,89	0 \$0	0 \$0	234 \$20,964	197 \$0	197 1 \$116,984 \$33:	197 32,774	102 2 \$778,469 \$1,4	92 0 28,441 \$0	\$566,769	88 \$40,837	\$33,701	0 \$0	0 \$0	0 \$0	0 \$0	22 \$0	<u>22</u> \$0	\$0 241	0 \$0	0 234 \$0 \$0	4,358 \$4,215,762
4 BCS - Hotel - (472D)	% Trips at Intersection	0%	19/	10/-	10/	0%	0%	0%	0%	094	00/2 00/2	0%	0%	194	30/	19/	50/	20/	20/, 10/.	0%	0%	20/	10/-	19/. 1	10/	10/	0/. 00/.	0%	19/	0%	0%	0%	0%	0%	0%	0%	19/	0%	0% 1%	19/
4 DC3 - Hoter - (472D)	Trips	0	31	22	22	0	0	0	0	0	27 32	32	0	18	68	72	68	22	32 32	0	0	65	39	39	39	30	73 0	9	18	10	0	0	0	0	4	4	32	0	0 26	866
	Cost per Development	\$0	\$5,620	\$5,096	\$9,644	\$0	\$0	\$0	\$0	\$0	\$2,416 \$5,890	\$15,755	\$0	\$53,499	\$16,381	\$29,537	\$8,125	\$3,595	\$9,329 \$8,21	8 \$0	\$0	\$5,823	\$0	\$23,159 \$65	5,879	\$228,961 \$35	7,110 \$0	\$115,930	\$8,353	\$7,021	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$985,343
6 BCS - NE Housing - (472D)	% Trips at Intersection	0%	3% 122	2% 87	2% 87	0%	0%	0%	0%	0%	0% 0%	0% 17	0%	2% 70	3% 57	7% 407	4% 57	0% 6	1% 1% 17 17	0%	100% 205	9% 308	5% 157	4% 3 157 1	3% 157	5% 5	7% 0% 07 0	2% 35	2% 70	0% 11	0%	0%	0%	0%	1% 17	0% 17	1%	0%	0% 5%	2% 2,866
	Cost per Development	\$0	\$22,118	\$20,154	\$38,139	\$0	\$0	\$0	\$0	\$0	\$0 \$3,129	\$8,370	\$0	\$208,052	\$13,731	\$166,964	\$6,810	\$981	\$4,956 \$4,36	6 \$0	\$394,051	1 \$27,593	\$0	\$93,231 \$26	65,206	\$1,495,882 \$1,95,882	91,012 \$0	\$450,839	\$32,484	\$7,723	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$5,255,790
7 BCS - SE Housing - (472D)	% Trips at Intersection	0%	1%	1%	1%	0%	0%	0%	0%	0%	0% 0%	0%	0%	1%	0%	2%	0%	0%	0% 0%	0%	0%	5%	1%	1% 1	1%	1% 2	% 0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 4%	1%
	Trips Cost per Development	0 \$0	34 \$6.164	25 \$5,791	25 \$10.960	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 5 \$0 \$920	5 \$2.462	0 \$0	18 \$53.499	2 \$482	114 \$46,766	2 \$239	2 \$327	5 5 \$1.458 \$1.28	0 4 \$0	0 \$0	157 \$14.065	43 \$0	\$25,535 \$72	43 2.636	55 1 \$419.763 \$55	14 0 7.679 \$0	9 \$115.930	18 \$8,353	\$2,106	0 \$0	0 \$0	0 \$0	0 \$0	5 \$0	5 \$0	5 \$0	0 \$0	0 114 \$0 \$0	\$56 \$1,346,418
8 BCS - Health Partners Expansion - (472D)	% Trips at Intersection	0%	19/	10/-	10/	0%	0%	00%	0%	004	00% 00%	0%	0%	19/	00%	30/	0%	0%	0% 0%	0%	0%	50/	30/.	29/. 1	10/	20/	0/. 00/.	10/	19/	0%	0%	0%	00%	0%	10/	0%	0%	0%	0% 5%	196
o BCS - Realth Partners Expansion - (4/2D)	Trips	0	48	35	35	0	0	0	0	0	0 7	7	0	26	6	160	0	6	7 7	0	0%	160	106	62 6	61	88 1	61 0	13	26	1	0	0	0	0	7	7	7	0	0 160	1,203
	Cost per Development	\$0	\$8,702	\$8,108	\$15,343	\$0	\$0	\$0	\$0	\$0	\$0 \$1,289	\$3,446	\$0	\$77,276	\$1,445	\$65,637	\$0	\$981	\$2,041 \$1,79	8 \$0	\$0	\$14,334	\$0	\$36,817 \$10	03,042	\$671,620 \$78	7,599 \$0	\$167,454	\$12,066	\$702	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$1,979,701
9 Park and Ride - (472E)	% Trips at Intersection	0%	5% 246	2% 58	1% 58	0%	0%	0%	0%	0%	0% 1%	1% 48	21% 338	11% 376	0%	0%	0%	0%	1% 2% 24 48	1% 4	0%	0%	0%	3% 9	9% 134	0%	0%	9% 188	11% 376	6% 144	0%	0%	0%	0%	4% 48	1% 48	1%	0%	0% 0%	2%
	Cost per Development	\$0	\$44,599	\$13,436	\$25,426	\$0	\$0	\$0	\$0	\$0	\$0 \$8,835	5 \$23,632	\$452,653	\$1,117,537	\$0	\$0	\$0	\$0 9	\$6,997 \$12,32	27 \$13,517	\$0	\$0	\$0	\$71,259 \$73	33,116	\$0	50 \$0	\$2,421,64	\$174,487	\$101,102	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$5,220,570
10 BCS - Retail/Grocery - (472E)	% Trips at Intersection	0%	2%	2%	1%	0%	0%	0%	0%	0%	2% 2%	2%	18%	1%	1%	2%	2%	2%	2% 4%	10%	0%	3%	3%	2% 2	2%	1% 2	% 2%	1%	1%	5%	0%	0%	0%	0%	1%	0%	1%	0%	2% 3%	2%
	Trips Cost per Development	0 \$0	86 \$15,592	61 \$14,131	61 \$26,741	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	163 176 \$14,585 \$32,39	7 \$86,650	290 \$388,371	50 \$148,609	27 \$6,504	122 \$50,048	27 \$3,226	27 \$4,413	33 104 \$9,621 \$26,70	49 08 \$165,586	0 \$0	95 \$8,511	95 \$0	95 1 \$56,413 \$18	111 37,502	54 1 \$412,131 \$59	22 82 6,814 \$2,1	25 '9 \$322,028	50 \$23,203	117 \$82,146	0 \$0	0 \$0	0 \$0	0 \$0	12 \$0	12 \$0	17 \$0	0 \$0	82 95 \$0 \$0	2,516 \$2,684,108
11 BCS - West Office - (472D)	% Trips at Intersection	0%	30/	30/.	20/	0%	0%	0%	0%	094	30/ 30/	30/-	0%	20/	20/	494	30/	30/	129/ 99/	0%	0%	59/	6%	80/.	10/	10/	9/ 09/	20/	20/	25%	0%	0%	0%	0%	10/	0%	10%	0%	0% 5%	30/.
TI BOS - West Office - (472b)	% Trips at Intersection Trips	0	132	94	94	0	0	0	0	0	219 238	238	0	76	40	217	40	40	262 239	0	0	177	177	346 1	169	58 2	16 0	38	76	608	0	0	0	0	18	18	239	0	0 177	4,246
	Cost per Development					\$0		\$0	\$0		\$19,596 \$43,80																						\$0						\$0 \$0	
12 AUAR - (472C)	% Trips at Intersection	0%	1% 62	1%	1%	0%	0%	0%	0%	0%	5% 5% 333 427	5% 427	3% 53	2% 56	42% 817	6% 345	57% 817	39% 555	27% 18%	11% 53	0%	4%	4% 129	3% 2	2%	2% 5	0%	1%	2%	4% 91	0%	0%	0%	2%	2%	1% 25	20%	2%	2% 4% 69 129	6% 6.953
	Cost per Development	\$0	\$11,240	\$7,876	\$14,905	\$0	\$0	\$0	\$0	\$0	\$29,796 \$78,59	9 \$210,22	\$70,978	\$166,442	\$196,817	\$141,529	\$97,615	\$90,703 \$1	164,139 \$123,2	68 \$179,104	\$0	\$11,557	\$0	\$76,604 \$15	52,029	\$602,932 \$1,4	67,576 \$0	\$360,671	\$25,987	\$63,891	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$4,344,482
14 AUAR - (471B)	% Trips at Intersection	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	1%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0%	0% 0	0%	0%	% 0%	2%	1%	0%	0%	0%	0%						0% 0%	
	Trips Cost per Development	0 \$0			11 \$4,822		0 \$0	0 \$0	0 \$0	0 \$0	6 7 \$537 \$1,289	7 9 \$3,446	0 \$0	34 \$101.054	0 \$0			0 \$0	0 0 \$0 \$0	0	0 \$0	15 \$1.344	15 \$0	15 \$8,907 \$25	15 5,338	2 \$15,264 \$73	15 8 3,379 \$21	49 3 \$631.174	34 \$15.778	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	1 \$0	1 \$0	0 \$0	0 \$0	8 15 \$0 \$0	303 \$894.691
15 AUAR - Kelly Farms - (471C)							201	00/	00/		2% 2%					¥-7,			7.			1,7		, , , , , , , , , , , , , , , , , , ,	-,	, ,, ,	, ,	, , , , ,	, , , ,			00/	00/							
13 AUAK - Kelly Farms - (4/1C)	Trips	0	591	440	440	0	0	0	0	0	110 151	151	0	371	0	412	0	0	0 0	0	0	412	412	412 10	003	70	12 151	1374	371	0	0	0	0	0	41	41	0	0	151 412	7,928
	Cost per Development							\$0	\$0		\$9,843 \$27,79																												\$0 \$0	
16 AUAR - (471D)	% Trips at Intersection						0%	0%	0%	0%	1% 1%	1% 64		2%	0%	3%	0%	0%	2% 1%	0%	0%	5%	5% 154	13% 7 514 3	7%	1%	% 1%	1%	2% 62			0%	0%	0%	1%	0%	1%	0%	1% 5% 34 154	2%
	Cost per Development				231 \$101,266		\$0	\$0	\$0	\$0	\$4,653 \$11,78			62 \$184,275																Ţ.		U	•						\$0 \$0	
17 AUAR - (471E)	% Trips at Intersection	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0%	2%	0%	0%	0% 0%	0%	0%	0%	1%	0%	0%	1% 2	% 0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%
	Trips Cost per Development	0			0 \$0		0 \$0	0	0	0	0 5 \$0 \$920	5 \$2.462		16 \$47.555	3 \$723		3 \$358		4 5 \$1 166 \$1 28					16 \$9.501 \$25					16 \$7.425		0 \$0	0	0	0	3 \$0				2 16 \$0 \$0	
10 1110 (1715)									φυ																								φυ							
18 AUAR - (471F)	% Trips at Intersection	0%	1%	0%	0%	0%	0%	0%	0%	0%	0% 1%	1%	0%	4%	3%	15%	4%	4%	3% 2%	1%	0%	3%	3%	2% 2	2%	10% 1	1% 1%	4%	4%	0%	0%	0%	J 0%	0%	2%	1%	2%	0%	1% 3%	3%

	Intersection Location	New NB TH 77 Access to Existing MOA (Roundabout)	Killebrew Drive / Kille 24th Avenue 22	orew Drive / d Avenue Killebro TH 77 20th	ew Drive / 2012 Ramps / from Avenue 77 to	2 Interim Access	2012 Interim Access from Thunderbird Rd o Eastbound I-494 CD Road		Thunderbird Rd to Eas of 34th Ave	d Thunderbird Road st Roundabout	Single-Point Interchange	Boulevard / 24th Avenue (West)	Avenue (East) 82n	Avenue / Ced ad Street Kil	dar Avenue to way C	onversion (30th Bo	oulevard / 34th	nerican Americ illevard / Bouleva rnational Metro Di Orive (East	ard / Boulevard / 30 Avenue	0th Boulevard / 28th		34th Avenue Driveway	Old Shakopee Old Rd / 33rd Avenue Rd / 3	Shakopee Old S 11st Avenue Rd / 30	hakopee th Avenue Old Shakopee Road / 28th Avenue	34th Avenue / I- 494 North Ramps	4th Avenue / I- 494 South Ramps	82nd Street from		Street	Sigi	Ramps / IKEA	nts Transporta H 77 Systems (Way) Improvem	ITS) // Ramps	s / IKEA Boulevard	ican American Boulevard / Thunderbird way Road	American Boulevard / Metro Drive (West)	Lindau Lane / Lir 22nd Avenue 2/	indau Lane / 34th Aven 4th Avenue Appletree S	venue / T
	Improvement #	1, 6, 7	2	3	4	8	9	10A	10B	10C	11	12/(12B	10	14	15	16	17 18		20	20A	21	22	23	24 25	26	26			28B	,	31, 5			$\overline{}$	_				
Development	Improvement Costs	\$3,779,513	\$881,104	848,078 \$1,8	60,924	\$512,549	\$759,845	\$1,258,795	\$16,352,940	\$1,178,231	\$646,121	\$1,524,296	\$4,076,987 \$2,	,207,017 \$	\$10,295,604	\$474,094	\$2,252,575 \$1	70,138 \$234,3	56 \$617,779	\$690,816	\$1,676,140	\$394,051	\$300,300	\$0 \$2,4	33,499 \$7,768,665	\$29,826,046	\$29,826,046	\$96,009	\$28,261,141	\$1,608,896	1,677,315 \$549,	\$12,900,00	00 \$2,500,0	00 \$0	\$0	\$0	\$0	\$0	\$0 \$0	\$17
fic - City of Bloomington	% Trips at Intersection	0%	19%	16%	9%	3%	18%	0%	12%	5%	11%	9%	9%	12%	25%	4%	21%	6% 6%	5%	7%	20%	0%	14%	19%	4% 18%	13%	18%	12%	3%	26%	3% 0%	0%	50%	3%	o 29°	6 10%	4%	4%	11% 18%	/0
	Trips	0	910	603	381	15	117	0	82	82	809	771	771	204	856	83	1148	83 83	99	185	97		478	572	559 812	520	1077	439	62	886	65 0	0	1	121	363	363	99	121	464 587	37 1 0 \$20
	Cost per Development	\$0	\$164,980	139,686 \$16	57,023	\$15,224	\$138,476	\$0	\$1,918,371	\$55,272	\$72,388	\$141,919	\$379,587 \$2	273,199	\$2,544,179	\$19,995	\$470,944 \$	9,917 \$13,56	55 \$28,863	\$47,510	\$327,794	\$0	\$42,823	\$0 \$3	\$1,949 \$1,371,636	\$3,968,665	\$5,268,599	\$11,666	\$798,628	\$411,157	\$45,636 \$0	\$0	\$1,250,0	00 \$0	\$0	\$0	\$0	\$0	\$0 \$0	\$2
ca	% Trips at Intersection	100%	15%	30%	15%	0%	0%	0%	0%	0%	13%	15%	15%	0%	9%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	33%	0%	9%	0% 0%	0%	0%	30%	6 119	4%	0%	41%	32% 0%	<u> </u>
	Trips	575	728 \$131,984	1091 1	897	0	0	0	0	0	973	1256	1256 \$618.367	0	320 \$951.095	0	0	0 0	0	0	0	0	0	0	0 0	0	0	1204 \$31.994	0	320 \$148.499	0 0	0	0	1291	1 133	133	0	1252	1346 0) \$7
	Cost per Development	\$3,779,513	\$131,964	252,732 \$63	31,007	ΦΟ	Φ0	\$0	⊅ 0	Φ0	\$67,062	\$231,194	\$616,367	\$0	\$951,095	\$0	Φ0	20 20	\$0	Φ0	Φ0	ΦΟ	\$0	Ф О	20 20	Φ0	ΦΟ	\$31,994	Φ0	\$146,499	20 20	\$0	\$0	\$0	\$0	\$0	Φ0	\$0	20 20	***************************************
	% Trips at Intersection	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%		0%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%		6 13%		0%	2%	2% 0%	
	Trips Cost per Development	0 \$0	13 \$2,357	0 \$0	\$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	132 \$11.811	195 \$35,894	195 \$96,004	0 \$0	13 \$38,638	0 \$0	0 \$0	0 0 \$0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	0 0	0 \$0	0 \$0	13 \$345	0 \$0	13 \$6.033	0 0	0 \$0	0 \$0	370 \$0	159	\$0	0	69	69 0 \$0 \$0	0 \$
	Goot per Bevelopment	ΨΟ	ΨΣ,001	ΨΟ	ΨΟ	Ψ	Ψΰ	ΨΟ	ΨΟ	ΨΟ	Ψ11,511	ψου,συ-ι	400,00 4	Ψΰ	ψου,σου	Ψΰ	Ψΰ	ψ0 ψ0	ΨΟ	Ψΰ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	ΨΟ	Ψΰ	Ψΰ	ψονο	Ψ	ψ0,000	ΨΟ	Ψ0	ΨΟ	ΨΟ	40	Ψΰ	ΨΟ	40	φυ	
rs	% Trips at Intersection	0%	5%	2%	2%	0%	0%	0%	0%	0%	0%	1%	1%	0%	5%	1%	3%	1% 0%	5%	4%	0%	0%	4%	4%	9% 5%	1%	2%	0%	0%	5%	20% 0%	0%	0%	0%	6%	2%	4%	0%	0% 4%	
	Cost per Development	\$0	\$44.780	87 520,154 \$3	87 8.139	\$0 \$0	\$0 \$0	\$0	\$0	\$0	31 \$2,774	101 \$18.591	101 \$49.725	\$0 \$0	160 \$475.548	15 \$3,614	148 \$60.714 \$	15 5 1.792 \$817	106 7 \$30.904	101 \$25.938	\$0	\$0 \$0	133 \$11.915	133 \$0 \$2	382 247 26.842 \$417.234	53 \$404.499	148 \$724.004	\$0 \$0	\$0 \$0	160 \$74.250	486 0 \$341.220 \$6	\$0	\$0	\$0	\$6	70 \$0	101 \$0	\$0	\$0 133 \$0 \$0	
			4 1 1,1 0 0		5,100	Ţ	•	7.	4	***	4 =,::::	713,331	, · · · · · · · · · · · · · · · · · · ·	,		40,011	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	450,501	4 -5,000	***	**	4 1 1 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	, , , , , , , , , , , , , , , , , , ,	4.11 ,	V 10 1, 100	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, i	4,0	4.1.1,233	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4.	-	-			4,0		, , ,	
	% Trips at Intersection	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	19%	6%	0%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	
	Cost per Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$5,655,348	\$1,761,092	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	0
rica Phase II	% Trips at Intersection	0%	2%	0%	0%	97%	82% 525	85%	75% 525	58%	22%	19% 1580	19% 1580	0%	2%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	2%	0%	2%	0% 100	% 100% 2280	50%	46%	% 10% 87 126	51%	0%	33%	9% 0%	
	Cost per Development	\$0	\$15,229	\$0	\$0	\$497,325	\$621,368	\$1,070,850	\$12,282,251						\$249,662	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$2,232	\$0	\$38,981	\$0 \$549,	500 \$12,900,00	00 \$1,250,0		\$0	\$0	\$0	\$0	\$0 \$0	
2	A = 1		.=-/	1001		201		201		201		1001	1001		1001	2224	2121		1201	2.121	1001	10001	1=01			1=01		201	1101	1001	2121		201				2.10			
n Central Station	% Trips at Intersection Trips		17% 819		4% 586	0%	0% 0	0%	0%	0%	991	13%	13%	424	13% 466	579	0.170	19% 22% 271 317			10% 49	100% 205	,.	37% 1138	455 1049	668	28% 1727	6% 216	11% 233		61% 0% 1463 0	0%	0%	0%	9%	6 3% 6 116	34% 816	0%	216 1280	80
	Cost per Development		\$148,482			\$0	\$0	\$0	\$0																\$4,017 \$1,771,979						1,027,171 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	BO \$
lopments	9/ Tring at Interspection	0%	37%	249/	200/	09/	09/	150/	120/	270/	279/	200/	39%	410/	240/	669/	450/	740/ 720/	409/	E49/	709/	09/	36%	40%	100/	20%	270/	469/	700/	249/	100/	00/	00/	139/	200	229/	E79/	109/	410/ 300	0/
eropinents	% Trips at Intersection Trips		1813		236	0	0%	86	92	651	2704	3221			1189	1291	2469	1055 1029	49%	1453	346	0	1222	1222	582 2057	781	2255	1657	1711	1162	231 0	0	0 %	575	5 24	839	1384	575	1736 1227	/2
	Cost per Development		\$328,692			\$0	\$0	\$187,945							\$3,533,913	\$311,004	\$1,012,859 \$1	26,051 \$168,1	68 \$301,747	\$373,143	\$1,169,243	\$0	\$109,477	\$0 \$9	39,433 \$3,474,700	\$5,960,630	\$11,031,283	\$44,032	\$22,039,568	\$539,238	\$162,185 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	0 9
al Expansion	% Trips at Intersection	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0%	0%	0%	0% 0%	29%	9%	0%	0%	0%	0% 0%	. 0%	0%	0%	6 09	0%	0%	0%	0% 0%	6
ar Expansion	Trips	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0	0	0	0	0	0	0 0	1145	530	0	0	0	0 0	0	0	0	0	0	0	0	0 0	
	Cost per Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$8,738,696	\$2,592,718	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	9
le Expansion	% Trips at Intersection	0%	5%	2%	1%	0%	0%	0%	0%	0%	0%	1%	1%	21%	11%	0%	0%	0% 0%	1%	2%	1%	0%	0%	0%	3% 9%	0%	0%	0%	9%	11%	6% 0%	0%	0%	0%	6 49	1%	1%	0%	0% 0%	
	Trips	<u> </u>		00	58	0	0	0	0	0	0	48	48	338	376	0	0	0 0	21	40	4	0	0	0	120 434	0	0	0	188	376	144 0	0	0	0	48	48	24	0	0 0	
	Cost per Development	\$0	\$44,599	\$13,436 \$2	5,426	\$0	\$0	\$0	\$0	\$0	\$0	\$8,835	\$23,632 \$4	152,653	\$1,117,537	\$0	\$0	\$0 \$0	\$6,997	\$12,327	\$13,517	\$0	\$0	\$0 \$7	1,259 \$733,116	\$0	\$0	\$0	\$2,421,647	\$174,487	\$101,102 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	0 \$
	% Trips	100%	100%	100% 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 100%	6 100%	100%	100%	100%	100%	100% 1	00% 100%	100%	100%	100%	100%	100%	100% 100	% 100%	100%	100%	0% 100%	/6 100%	100%	100% 3023	100% 100%)%
TOTAL	Trips Cost per Development	575 \$3,779,513	4860 \$881,104	3661 4 848.078 \$1.8	245	505 \$512,549	642 \$759,845	576 \$1,258,795	699 \$16,352,940	1748 \$1,178,231	7221 \$646 121	\$281 \$1.524.296	8281 \$4,076,987 \$2,	1648 207.017	3464 \$10.295.604	100% 1968 \$474,094	5491	1424 1434 70,138 \$234,3	2119	2690	496	205	\$352 \$300.300	3065 4 \$0 \$2.4	098 4599 33,499 \$7,768,665	3908 \$29,826,046	\$29.826.046	3613 \$96,009	2194 \$28.261.141	3467 \$1,608,896	2389 1 1.677.315 \$540	2280 600 \$12,900,00	2 00 \$2,500,0	4344	44 1262 0 \$0	3702	2424 \$0	3023 \$0	\$0 \$0	<u> </u>
CDE	Total pa. Severepinent	1 40,. 10,010	,,,,,,	, σ . σ . σ . σ . σ . σ . σ . σ . σ	,	,,	Ţ. 00,010	Ţ., <u>=00,</u> 100	Ţ. J,OOZ,OTO	Ţ.,110, 2 01	+++++,121	¥.,021,200	τ.,σ.σ,σσ. ψ2,	,, + +	,,	Ţ.,,,,,,,,	,, · · · · · · · · · · · · · · · · · · ·	,	specific development	+300,010		\$55 A,661	+000,000	, υ μ <u>ν</u> ,	ed at the intersection	+-0,0-0,0-0	,,	+20,000		÷.,000,000 (.,, 4040;	Ψ1 2 ,000,00	Ψ2,000,0	Ψ0			+•		_ τ, σ	

SRF CONSULTING GROUP, INC.

1/25/2007

2030 Saturday Peak Hour Full Build Scenario - Individual Site Breakdown

2030 Saturday Peak Hour Full I	ulia Scenario - individ	duai Site Breakdo	wn																															Saturday indi	vidual Site Breakdown
	Intersection Location	New NB TH 77 Access to Existing MOA (Roundabout)	Killebrew Drive / Killebrew Drive 24th Avenue 22nd Avenue	Killebrew Drive TH 77 Ramps 20th Avenue	2012 Interim Access from CD Roadway/TH 77 to Thunderbird Rd	2012 Interim Access from Thunderbird Rd to Eastbound I-494 CD Road	Permanent Access from CD Roadway/TH 77 to Thunderbird Rd	Permanent Access and CD Roadway from Thunderbird Rd to East of 34th Ave	Thunderbird Road Roundabout	24th Ave / I-494 Single-Point Interchange Aven	merican Americ evard / 24th Boulevard nue (West) Avenue (I	28th Avenue / 82nd Street	Old Shakopee Road, Cedar Avenue to Killebrew Drive	American Blvd One- way Conversion (30th to 34th)	American Boulevard / 34th Avenue	International Me	American coulevard / etro Drive (East) Ameri Boulevar Aver	ican American rd / 30th nue Avenue	28th Avenue	34th Avenue Old Driveway Rd / 3	d Shakopee 33rd Avenue Rd / 31st A	copee Old Shakopee Avenue Rd / 30th Avenue	Old Shakopee Road / 28th Avenue	34th Avenue / I- 494 North Ramps R	Avenue / I- 4 South amps 24th Avenu 82nd Stree	86th Street Extension from EOSR to 28th Avenue	Old Shakopee Road / 86th Street 30th Avenue	Wayfinding Signs	Lindau Lane Improvements (Lowering / TH 77 Ramps / IKEA Way)	Intelligent Transportation Systems (ITS) Improvements	Lindau Lane / TH 77 Ramps / IKEA Way	Boulevard / Thund	rican American vard / Boulevard / erbird Metro Drive ad (West)	lindaulano / lindaulano /	a Avenue / opletree TOTAL Square
	Improvement #	1, 6, 7	2 3	4	8	9	10A	10B	10C	11	12A 12B	13	14	15	16	17	18 19	9 20	20A	21	22 23	24	25	26	26 27	28A	28B 29	30	31, 5	-					
Development	Improvement Costs	\$3,779,513	\$881,104 \$848,078	\$1,860,924	\$512,549	\$759,845	\$1,258,795	\$16,352,940	\$1,178,231	\$646,121 \$1,	,524,296 \$4,076,9	987 \$2,207,017	\$10,295,604	\$474,094	\$2,252,575	\$170,138 \$	\$234,356 \$617,	,779 \$690,816	\$1,676,140	\$394,051	\$300,300 \$0	\$2,433,499	\$7,768,665	\$29,826,046 \$29,	,826,046 \$96,009	\$28,261,141	\$1,608,896 \$1,677,315	\$549,600	\$12,900,000	\$2,500,000	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$170,439,471
Evisting	% Trips at Intersection	100%	56% 77%	82%	8%	8%	5%	4%	3%	42%	41% 41%	18%	43%	21%	28%	13%	18% 159	% 23%	30%	0%	27% 34%	5 31%	31%	49%	35% 50%	3%	44% 4%	0%	0%	50%	53%	64% 10	% 17%	50% 61%	33% 42%
Existing	Trips	750	1590 2515	3362	44	39	29	24	53	2600	2770 2770) 141	694	201	717	103	100 11	0 205	85	0	383 383	397	411	1244	1062 1953	12	680 21	0	0	1	3046	565 72	25 119	2268 2687	403 35262 \$0 \$47,794,838
	Cost per Development	\$3,779,513	\$491,046 \$656,484	\$1,527,448	\$41,079	\$58,914	\$56,861	\$665,204	\$34,886	\$269,433 \$6	629,067 \$1,682,5	547 \$388,987	\$4,446,266	\$101,809	\$639,136	\$22,438	\$43,319 \$94,9	910 \$160,382	\$494,694	\$0	\$80,996 \$0	\$757,131	\$2,397,088	\$14,671,254 \$10,	,558,420 \$56,751	\$971,730	\$703,117 \$63,927	\$0	\$0	\$1,250,000	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$47,794,838
1 BCS - Northwest Office - (472D)	% Trips at Intersection	0%	1% 0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	1%	3%	1%	2%	3% 4%	6 3%	0%	0%	1% 1%	3%	2%	1%	1% 0%	1%	1% 9%	0%	0%	0%	0%	0% 0'	% 4%	0% 0%	1% 1%
	Cost per Development	\$0	\$4,941 \$2,871	\$4,998	\$0	\$0	\$0	\$0	\$0	\$2,902	\$6,813 \$18,22	23 \$0	\$64,067	\$14,182	\$23,176	\$3,050	\$6,065 \$25,8	885 \$23,471	\$0	\$0	\$2,538 \$0	\$61,028	\$122,479	\$165,111 \$2	268,434 \$0	\$404,887	\$10,340 \$146,118	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$1,381,578
2 BCS - SW Office - (472D)	% Trips at Intersection	0%	10/, 10/,	10/	0%	0%	0%	0%	0%	19/	10/, 10/,	10/	10/.	0%	20/	0%	0% 4%	/	0%	0%	19/ 19/	5%	30/	10/.	20/, 10/,	30/	19/, 189/,	0%	0%	0%	0%	0%	0/_ 10/_	0% 1%	4% 1%
2 BC3 - 3W Office - (472D)	Trips	0	32 23	23	0	0	0	0	0	55	58 58	30	18	0	52	0	0 28	3 28	0	0	52 51	69	41	27	51 30	9	18 97	0	0	0	0	4	28	0 30	52 968
	Cost per Development	\$0	\$9,883 \$6,004	\$10,450	\$0	\$0	\$0	\$0	\$0	\$5,700 \$	\$13,172 \$35,23	30 \$82,763	\$115,321	\$0	\$46,353	\$0	\$0 \$24, ²	159 \$21,906	\$0	\$0	\$10,997 \$0	\$131,592	\$239,126	\$318,428 \$5	507,043 \$872	\$728,797	\$18,612 \$295,281	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$2,621,686
3 BCS - Central Park - (472D)	% Trips at Intersection	0%	2% 1%	170	0%	0%	0%	0%	0%	1%	1% 1%	0%	1%	8%	3%	6%	6% 109	% 8%	0%	0%	3% 5%	4%	4%	2%	3% 0%	3%	2% 6%	0%	0%	0%	0%	1% 0'	% 10%	0% 0%	170
	Trips Cost per Development	0 \$0	\$13,589 \$8,353		0 \$0	0 \$0	0 \$0	0 \$0	0 \$0	64 \$6,632 \$	69 69 \$15,670 \$41,91	0 12 \$0	24 \$153,761	76 \$38,495	\$4 \$74,878	\$9,367	34 69 \$14,728 \$59,5	9 69 535 \$53,982	0 \$0	0 \$0	42 57 \$8,882 \$0	\$108,706	56 \$326,611	42 \$495,332 \$8	84 0 335,129 \$0	12 \$971,730	24 35 \$24,816 \$106,545	0 \$0	0 \$0	0 \$0	0 \$0	6 0 \$0 \$	69 0 \$0	0 0 \$0 \$0	42 1241 \$0 \$3,383,191
1700 1141 (1707)		00/	40/	40/	201	00/	00/		00/	40/	10/	201	10/	400/	407	100/	50/	504	201	2007	201/	40/	40/	20%	201	00/	201/	00/	00/	00/	200/	10/	200	00/	200/
4 BCS - Hotel - (472D)	% Trips at Intersection Trips	0%	1% 1% 41 29	29	0%	0%	0%	0%	0%	35	1% 1% 40 40	0%	1%	93	99	93	26 40	0 40	0%	0	84 52	52	52	41	98 0	12	2% 3%	0	0	0%	0	5 !	6% 6% 40	0 0 0	3% 1% 32 1140
	Cost per Development	\$0	\$12,662 \$7,570	\$13,175	\$0	\$0	\$0	\$0	\$0	\$3,627	\$9,084 \$24,29	97 \$0	\$153,761	\$47,106	\$88,249	\$20,260	\$11,263 \$34,5	513 \$31,294	\$0	\$0	\$17,764 \$0	\$99,171	\$303,281	\$483,538 \$9	74,317 \$0	\$971,730	\$24,816 \$42,618	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$3,374,096
6 BCS - NE Housing - (472D)	% Trips at Intersection	0%	4% 2%	2%	0%	0%	0%	0%	0%	0%	0% 0%	0%	4%	5%	15%	7%	1% 2%	% 2%	0%	100%	21% 13%	6 11%	11%	7%	13% 0%	9%	4% 2%	0%	0%	0%	0%	2% 0'	% 2%	0% 0%	13% 3%
	Trips Cost per Development	0 \$0	112 80 \$34.589 \$20.882	80 \$36,346	0 \$0	0 \$0	0	0 \$0	0 \$0	0 \$0	16 16 \$3.634 \$9.71	9 \$0	64 \$410.030	51 \$25,832	375 \$334.276	\$1 \$11 110	7 16 \$3.032 \$13.8	6 16 805 \$12.518	0 \$0	46 \$394.051	298 144 \$63.021 \$0	\$274 627	144 \$839.856	183 \$2 158 231	375 0 728 256 \$0	\$2 591 279	64 9 \$66,176 \$27,397	0 \$0	0	0	0 \$0	16 1 \$0 \$	6 16 0 \$0	0 0	154 2525 \$0 \$11,058,667
		4 0	ΨΕ0,002	Ψ00,040	Ψ0	Ψΰ	Ψ0	Ψΰ	Ψ0	Ψΰ	φο,οση φο,ττ	Ψ	Ψ-10,000	Ψ20,002	ψ00-1,210	ΨΤΙ,ΤΙΟ	ψ10,002	ψ12,010	Ψ0	\$004,001	φοσ,σΣ1 φο	ΨΕΙ -1, ΟΕΙ	ψοσο,σσο	Ψ2,100,201 φ0,	720,200	ΨΕ,001,210	Ψ21,001	Ψ0	ΨΟ	\$ 0	Ψΰ	Ψ0	Ψ0	ΨΟ	ψ. Ψ.1.,300,301
7 BCS - SE Housing - (472D)	% Trips at Intersection Trips	0%	1% 1% 28 20	0% 20	0%	0%	0%	0% 0	0%	0%	0% 0% 4 4	0%	1% 16	0% 2	4% 95	2	0% 19 2 4	% 0% 4	0%	0%	9% 3% 132 37	3%	3% 36	2% 47	3% 0% 96 0	2% 8	1% 0% 16 2	0%	0%	0%	0%	0% 0	% 1% 4	0% 0%	8% 1% 95 719
	Cost per Development	\$0	\$8,647 \$5,221	\$9,087	\$0	\$0	\$0	\$0	\$0	\$0	\$908 \$2,43	0 \$0	\$102,508	\$1,013	\$84,683	\$436	\$866 \$3,4	\$3,129	\$0	\$0	\$27,915 \$0	\$70,564	\$209,964	\$554,300 \$9	54,433 \$0	\$647,820	\$16,544 \$6,088	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$2,710,007
8 BCS - Health Partners Expansion - (472D)	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	1%	0%	0% 0%	6 0%	0%	0%	2% 2%	1%	1%	1%	1% 0%	1%	0% 0%	0%	0%	0%	0%	0% 0'	% 0%	0% 0%	3% 0%
	Trips Cost per Development	0	10 7	7 \$2.180	0	0	0	0	0	0	2 2	0	6	1	33	0	1 2	2	0	0	34 24 \$7,100 \$0	13	13	17	34 0	3 \$242.022	6 1	0	0	0	0	2 2	2 2	0 0	33 257 \$0 \$980,355
	Cost per Development	40	\$3,000 \$1,027	\$3,180	\$0	\$ 0	\$ 0	Φ0	Φ0	\$0	\$434 \$1,21	5 \$0	\$36,440	\$307	\$29,410	\$ 0	\$433 \$1,7	\$1,303	Φ0	\$ 0	\$7,190	\$24,793	\$75,620	\$200,491 \$3	336,029 \$0	\$242,932	\$5,044	Φ0	Φ0	\$0	Φ0	\$0 \$	0 \$0	\$0 \$0	\$980,333
9 Park and Ride - (472E)	% Trips at Intersection Trips	0%	2% 0% 54 13	0% 13	0%	0%	0%	0%	0%	0%	0% 0%	9%	5% 82	0%	0%	0%	0% 19	% 1% 10	1%	0%	0% 0%	2%	7% 95	0%	0% 0%	12% 41	5% 6% 82 31	0%	0%	0%	0%	1% 0'	% 1% 1 5	0% 0%	0% 1%
	Cost per Development	\$0	\$16,677 \$3,393	\$5,906	\$0	\$0	\$0	\$0	\$0	\$0 \$	\$2,498 \$6,68	2 \$201,390	\$525,351	\$0	\$0	\$0	\$0 \$4,3	314 \$7,824	\$11,640	\$0	\$0 \$0	\$49,585	\$554,071	\$0	\$0 \$0	\$3,320,077	\$84,788 \$94,368	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$4,888,565
10 BCS - Retail/Grocery - (472E)	% Trips at Intersection	0%	3% 2%	1%	0%	0%	0%	0%	0%	2%	2% 2%	34%	3%	3%	5%	3%	5% 4%	6 11%	16%	0%	6% 8%	7%	8%	2%	4% 2%	7%	3% 20%	0%	0%	0%	0%	1% 0'	% 2%	0% 2%	8% 3%
	Trips Cost per Development	0	81 58	58	0	0	0	0	0	154	165 165	274	46	26	117	26	26 31	1 99	47	0	91 91	91	104	51	116 77	23	46 112	0	0	0	0	11 1	1 16	0 77	91 2381 \$0 \$6.590,230
	Cost per Development	\$0	\$25,016 \$15,140	\$26,351	\$0	\$0	\$0	\$0	\$0	\$15,959 \$	\$37,472 \$100,2	\$755,903	\$294,709	\$13,169	\$104,294	\$5,664	\$11,263 \$26,	747 \$77,453	\$273,537	\$0	\$19,245 \$0	\$173,549	\$606,562	\$601,474 \$1,	153,274 \$2,237	\$1,862,482	\$47,564 \$340,942	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$6,590,230
11 BCS - West Office - (472D)	% Trips at Intersection	0%	1% 1%	1%	0%	0%	0%	0%	0%	1%	1% 1%	0%	1%	3%	2%	4%	6% 119	% 7% 8 61	0%	0%	2% 2%	6%	3%	1%	2% 0%	3%	1% 27%	0%	0%	0%	0%	1% 0	% 9% 61	0% 0%	2% 1%
	Cost per Development	\$0	\$10,809 \$6,526	\$11,358	\$0	\$0	\$0	\$0	\$0	\$5,907	614,080 \$37,66	60 \$0	\$128,134	\$14,689	\$49,919	\$6,318	\$12,996 \$67,3	300 \$47,723	\$0	\$0	\$5,710 \$0	\$135,406	\$256,623	\$342,015 \$5	556,753 \$0	\$809,775	\$20,680 \$453,575	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	27 1100 \$0 \$2,993,955
12 AUAR - (472C)	% Trips at Intersection	0%	1% 0%	0%	0%	0%	0%	0%	0%	1%	2% 2%	2%	1%	28%	6%	33%	24% 199	% 13%	4%	0%	3% 4%	3%	2%	2%	4% 0%	3%	1% 4%	0%	0%	0%	0%	1% 0'	% 16%	0% 0%	3% 2%
	Trips		22 13 \$6,794 \$3,393			0	0	0	0	79 \$8,187 \$	102 102	12	18	258	147	257	130 13	5 114	12	0	42 42	41	31	38	125 0	9 \$728,797	18 24	0 \$0	0	0	16	8 8	3 115	16 16 \$0 \$0	
	Cost per Development	\$0	\$6,794 \$3,393	\$5,906	\$0	\$0	\$0	\$ 0	\$ 0	\$8,187	\$23,164 \$61,95	57 \$33,105	\$115,321	\$130,680	\$131,036	\$55,987	\$56,315 \$116,	,481 \$89,188	\$69,839	\$ 0	\$8,882 \$0	\$78,192	\$180,802	\$448,157 \$1,4	242,752 \$0	\$728,797	\$18,612 \$73,059	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$3,686,607
14 AUAR - (471B)	% Trips at Intersection	0%	0% 0% 9 5	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	1% 14	0%		0%					0% 1% 6 6	0%		0% 3	0% 0% 6 4		1% 0% 14 0	0% 0	0% 0	0%	0%	0% 0	% 0%	0% 0% 0 4	0% 0% 6 126
	Cost per Development	\$0	\$2,780 \$1,305		\$0	\$0	\$0	\$0	\$0	\$207	\$454 \$1,21		\$89,694	\$0	\$5,348	\$0		\$0		\$0	\$1,269 \$0	\$11,443	\$34,994	\$35,381 \$5	59,652 \$116	\$1,619,550		\$0	\$0	\$0	\$0	\$0 \$	0 \$0	0 4 \$0 \$0	\$0 \$1,880,155
15 AUAR - Kelly Farms - (471C)	% Trips at Intersection	0%	1% 1%	1%	0%	0%	0%	0%	0%	0%	0% 0%	0%	2%	0%	1%	0%	0% 0%	6 0%	0%	0%	2% 2%	2%	5%	1%	1% 0%	27%	2% 0%	0%	0%	0%	0%	0% 0'	% 0%	0% 0%	2% 1%
	Trips	0	41 30			0		0		7			26	0	28	0	0 0	0	0	0	28 28	28	69	15			26 0		0	0	0	3 3	0	0 11 \$0 \$0	28 557
	Cost per Development	\$0	\$12,662 \$7,831	\$13,630	\$0	\$0	\$0	\$0	\$0	\$725	\$2,498 \$6,68	\$0	\$166,575	\$0	\$24,959	\$0	\$0 \$0	5 \$0	\$0	\$0	\$5,921 \$0	\$53,400	\$402,431	\$176,904 \$2	278,376 \$320	\$7,692,861	\$26,884 \$0	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	
16 AUAR - (471D)	% Trips at Intersection		1% 0%			0%	0%	0%		0%																	0% 0%		0%	0%				0% 0% 0 2	7,0
	Cost per Development	\$0	19 15 \$5,868 \$3,915	\$6,815	\$0	\$0	\$0	\$0	\$0	\$415	\$908 \$2,43	0 \$0	\$25,627	\$0	\$8,914	\$0	\$0 \$1,7	726 \$1,565	\$0	\$0	\$2,115 \$0	\$62,935	\$122,479	\$58,968 \$9	99,420 \$58	\$161,955	4 2 \$4,136 \$6,088	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$576,337
17 AUAR - (471E)	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	1%	1%	6%	1%	1% 1%	6 1%	0%	0%	1% 2%	1%	1%	2%	4% 0%	5%	1% 0%	0%	0%	0%	0%	0% 0	% 1%	0% 0%	1% 1%
	Trips	0	4 0	0	0	0	0	0					20	6													20 1 \$20,680 \$3,044		0	0	0	4 4	7	0 4 \$0 \$0	18 537
	Cost per Development	\$0	\$1,235 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,817 \$4,85	9 \$2,759	\$128,134	\$3,039	\$124,796	\$1,307	\$2,599 \$6,0	940 \$6,259	\$5,820	\$0	\$3,807 \$0	\$34,328	\$99,150	\$672,236 \$1,	153,274 \$116	\$1,295,640	\$20,680 \$3,044	\$0	\$0	\$0	\$0	\$0 \$	0 \$0	\$0 \$0	\$0 \$3,570,939
18 AUAR - (471F)	% Trips at Intersection		0% 0%			0%	0%			0%														4%			3% 1%			0%		.,,	-/-	0% 0%	***
	Trips Cost per Development	0 \$0	8 0 \$2,471 \$0	\$0	\$0	0 \$0	0 \$0	0 \$0	\$0	0 \$0	\$3,634 \$9,715	9 \$5,518	\$249,862	\$6,078	\$241,570	\$2,614	\$5,198 \$12,0	+ 16 079 \$12,518	\$11,640	\$0	\$7,402 \$0	35 \$66,750	\$192,467		223 8 217,069 \$232		39 3 \$40,326 \$9,132	\$0	0 \$0	0 \$0	\$0	\$0 \$	0 \$0	0 8 \$0 \$0	\$0 \$6,915,672
19 AUAR - (472A and 472B)	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	1%	0%	2%	0%	1%	3% 19/	6 4%	1%	0%	0% 0%	0%	1%	0%	0% 0%	1%	0% 0%	0%	0%	0%	0%	0%	6%	0% 0%	0% 0%
	Trips		6 4			0	0	0	0	24	32 32	7	4	16				39			3 3		8		11 0	2	4 2	0	0	0	2	2 6	6 40	2 2	3 315

	Intersection Location	(Roundabout)	Killebrew Drive / Killebrew 22nd Avenue	Orive / Killebrew Driv TH 77 Ramps 20th Avenue	2012 Interim Acce from CD Roadway 77 to Thunderbird	2012 Interim Acce from Thunderbird to Eastbound I-494 Road		Permanent Access CD Roadway fro Thunderbird Rd to of 34th Ave	m Thunderbird Road East Roundabout	24th Ave / I-494 Single-Point Interchange	American Boulevard / 24th Avenue (West)	American oulevard / 24th Avenue (East)	enue / Old Shakop Cedar Ave Killebrev	enue to way Conve	rsion (30th Boulev	/ard / 34th /enue Boule Internation	erican Americ evard / Bouleva ational Metro D ive (East	American Boulevard / 3 Avenue Avenue	0th Boulevard / 28th	28th Avenue	34th Avenue Control Co	Old Shakopee Ol Rd / 33rd Avenue Rd	d Shakopee / 31st Avenue Rd / 30	nakopee th Avenue Old Shako Road / 28 Avenue	th 34th Avenue	34th Avenue / I- 494 South Ramps	24th Avenue / 82nd Street	86th Street Extension from EOSR to 28th Avenue		30th Avenue	Wayfinding Signs	Lindau Lane Improvements (Lowering / TH 77 Ramps / IKEA Way)	Intelligent Transportation Systems (ITS) Improvements	Lindau Lane / TH 77 Ramps / IKEA Way Drivew	IKEA Boulevard /	American Boulevard / Metro Drive (West)	Lindau Lane / Linda 22nd Avenue 24th	ndau Lane / 34th Aven th Avenue Appletree S	
	Improvement #	1, 6, 7	2 3	4	8	9	10A	10B	10C	11	12A	12B	3 14	1	5	16 1	17 18	3 19	20	20A	21	22	23	24 25	26	26	27	28A	28B	29	30	31, 5	-						
Development	Improvement Costs	\$3,779,513	\$881,104 \$848,0	78 \$1,860,924	\$512,549	\$759,845	\$1,258,795	\$16,352,940	\$1,178,231	\$646,121	\$1,524,296	\$4,076,987 \$2,2	,017 \$10,29	5,604 \$474	,094 \$2,2	252,575 \$170	0,138 \$234,3	356 \$617,779	\$690,816	\$1,676,140	\$394,051	\$300,300	\$0 \$2,4	33,499 \$7,768,66	\$29,826,04	\$29,826,046	\$96,009	\$28,261,141	\$1,608,896	\$1,677,315	\$549,600	\$12,900,000	\$2,500,000	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$170,439
c - City of Bloomington	% Trips at Intersection	0%	13% 11%	5%	8%	8%	5%	4%	3%	7%	4%	4% 1	% 19%	ž 21	% 2	28% 13	3% 18%	% 15%	23%	30%	0%	27%	34%	31% 397 411	16%	21%	5%	3%	19%	4%	0%	0%	50%	2% 11%	3%	17%	3%	5% 33%	6 10%
	Trips Cost per Development	0	357 357 \$110,254 \$93,18	218 7 \$99.043	44 \$41,079	39 \$58.914	29 \$56,861	24 \$665,204	53 \$34,886	441 \$45,700	289	289 1 \$175,544 \$38	1 30° 987 \$1.928	20 424 \$101	900 \$63	717 10 39.136 \$22	03 100 2.438 \$43.3	0 110	205	85	0	27% 383 \$80.996	383 \$0 \$7	397 411 57.131 \$2.397.08			170 \$4.940	12	299 \$309 164	21	0	0	1	115 99	99	119	115	221 403	3 8398 3 \$22,327 .
	Cost per Development	ΦU	\$110,254 \$93,10	7 \$99,043	\$41,079	\$58,914	\$50,00 I	\$665,204	\$34,666	\$45,700	\$65,632	\$175,544 \$36	967 \$1,926	424 \$101	,809 \$63	39,136 \$22	1,436 \$43,3	\$94,910	\$160,382	\$494,694	\$0	\$60,996	\$0 \$7:	57,131 \$2,397,00	58 \$4,656,96	56 \$6,313,180	\$4,940	\$971,730	\$309,164	\$63,921	ΦΟ	\$ 0	\$1,250,000	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$22,321,
ı	% Trips at Intersection	100%	42% 66% 1188 2158		0%	0%	0%	0%	0%	29%	30%	30%	22%	6 00	6	0% 0	% 0%	6 0%	0%	0%	0%	0%	0%	0%	0%	0%	53% 1738	0%	22%	0%	0%	0%	0%	38% 16%	4%	0%	52%	52% 0%	6 27% 22301
	Cost per Development	\$3,779,513	\$366,895 \$563,2		\$0	\$0	\$0	\$0	\$0	\$184,458	\$460,559	\$1,231,843) \$2,248	,760 \$	0	\$0 \$	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$50,503	\$0	\$352,592	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	
	0/ Tring at Interspection	0%	20/	00/	00/	00/	00/	00/	00/	60/	70/	70/	/ 20/	01	1	00/	00/	, 00/	00/	00/	00/	00/	00/	20/	00/	00/	40/	00/	20/	00/	00/	00/	00/	120/ 260/	420/	00/	40/	20/	40
	% Trips at Intersection Trips	0%	45 0	0	0%	0	0%	0	0%	379	453	453	42	()	0 0	0 0	0	0	0	0	0%	0	0 0	0%	0%	45	0%	40	0%	0	0	0%	745 324	484	0%	147	147 0	330
	Cost per Development	\$0	\$13,898 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$39,275	\$102,876	\$275,160	\$269,)82 \$	0	\$0 \$	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$1,308	\$0	\$41,360	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$742,9
ners	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6 0%	04	%	0% 0	% 0%	6 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0% 0%	0%
	Trips Cost per Development	0	0 0	0	0	0	0	0	0	0	0	0 \$0	0	()	0	0 0	0	0	0 \$0	0	0	0	0 0	0	0 \$0	0	0	0	0 \$0	0	0	0	0 0	0	0	0	0 0	0 \$0
	Cost per Development	Φ0	\$0 \$0	\$0	φ0	Φ Ο	\$0	φυ	\$ 0	\$ 0	\$0	\$ 0	\$0	a a	0	20 4	3 0	3 0	\$0	\$ 0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$ O	Ф О	\$ O	ΦU	ΦΟ	\$U	⊕ 0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$0
	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6 0%	00	/6	0% 0	0%	6 0%	0%	0%	0%	0%	0%	0%	33% 832	14%	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	0%	0% 0%	2%
	Cost per Development	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$	0	\$0 \$	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0		85 \$4,245,240		\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0) \$14,057,
erica Phase II	9/ Tring at Interportion	09/	39/ 09/	09/	92%	039/	709/	709/	E49/	20%	200/	200/	, 69/	01	·	0% 0	9/ 09/	′ 09/	00/	09/	09/	09/	09/	09/	00/	00/	39/	09/	69/	09/	100%	1009/	F09/	400/ 170/	E09/	09/	210/	09/ 09/	245
erica Friase ii	% Trips at Intersection Trips	0%	99 0	0%	505	92% 464	505	464	969	1860	1860	1860	99	()	0	0 0	0	0	0	0	0	0	0 0	0	0	99	0	99	0	1	2644	1	2299 148	2284	0	1171	419 0	
	Cost per Development	\$0	\$30,575 \$0	\$0	\$471,471	\$700,930	\$990,174	\$12,860,617	\$637,824	\$192,748	\$422,406	\$1,129,797	\$634,	266 \$	0	\$0 \$	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$2,877	\$0	\$102,365	\$0	\$549,600	\$12,900,000	\$1,250,000	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$32,875,
ton Central Station	% Trips at Intersection	0%	14% 9%	7%	0%	0%	0%	0%	0%	6%	7%	7% 3	% 149	33	% 3	37% 33	3% 26%	% 42%	40%	16%	100%	54%	43%	4% 38%	18%	31%	3%	33%	15%	85%	0%	0%	0%	0% 6%	1%	38%	0%	2% 45%	6 13%
	Trips Cost per Development	0	399 285 \$123,225 \$74,39	285	0	0	0 \$0	0	0	393 \$40.726	446 \$101.287	446 3 \$270,908 \$83	4 228	733 \$157	992 \$83	937 25	58 140	0 298 647 \$257,120	349	47 \$273 537	46 \$304.051	772 \$163.262	495	566 511	451	937 19 \$9,315,668	107	114	228 \$235,751	467 \$1,421,608	0 \$0	0	0	0 55	55 \$0	266	0	107 538 \$0 \$0	8 10836
	Cost per Development	Φ0	\$123,223 \$74,33	5 \$129,405	Ψ0	φ0	\$ 0	Φ0	Ψ0	\$40,720	\$101,207	\$270,900 \$00	91,400	,733 \$134	,992 400	33,244 \$30	,,203 \$00,0	9237,120	Ψ273,041	\$213,331	ψ394,031	\$103,202	\$1,0	79,430 \$2,900,32	ψ5,516,91	19 \$9,515,000	\$5,109	ψ9,231,433	Ψ233,731	\$1,421,000	φυ	ΨΟ	φυ	\$0	Ψ0	Ψ0	\$0	\$0 \$0	\$33,093,
velopments	% Trips at Intersection	0%		11% 436	0%	0%	17% 108	17%	43%	22%	24% 1625	24% 3 1625 2	% 31% 2 504		% 3	35% 54	4% 56% 20 301			53%	0%	19%	23%	2% 24%	15%	26%	35% 1145	52%	30%	6% 32	0%	0%	0%	7% 12%	20%	45%	10%	28% 22%	22%
	Cost per Development		\$219,581 \$113,8		\$0	\$0	\$211,760	\$2,827,118	\$505,520	\$143,214	\$369,038	\$987,054 \$77	974 \$3,228	,988 \$217	,293 \$77	78,195 \$91	,496 \$130,3	390 \$261,434	\$249,570	\$896,269	\$0	\$56,042	\$0 \$5	7,347 \$1,837,18	34 \$4,410,81	11 \$7,744,830	\$33,272	\$14,737,902	\$482,876	\$97,412	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	5 18352 3 \$42,154,
ninal Expansion	% Trips at Intersection	0%	0% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4 09/	0	/-	0% 0	0/. 00/.	4 00%	0%	0%	0%	0%	0%	0% 0%	189/	70/.	0%	0%	0%	0%	0%	0%	0%	0% 0%	0%	0%	00%	0% 0%	10/
illiai Expansion	Trips	0	0 0	0	0	0	0	0	0	0	0	0	0	()	0	0 0	0	0	0	0	0	0	0 0	460	222	0	0	0	0	0	0	0	0 0	0	0	0	0 0	687
	Cost per Development	\$0	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$	0	\$0 \$	\$0 \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$5,425,06	62 \$2,207,127	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$7,632,1
Ride Expansion	% Trips at Intersection	0%	2% 0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6 5%	04	/6	0% 0	% 0%	6 1%	1%	1%	0%	0%	0%	2% 7%	0%	0%	0%	12%	5%	6%	0%	0%	0%	0% 1%	0%	1%	0%	0% 0%	1%
	Trips Cost per Development	0	54 13 \$16.677 \$3.39	13	0	0	0	0	0	0	11 \$2,498	11 \$6.682 ¢20	3 82 390 \$525	(S51 ©)	0 9	0 0	5 \$4 314	10 \$7,824	2 \$11,640	0	0 \$0	0 \$0 \$4	26 95 9.585 \$554.07	1 \$0	0	0	41 \$3 320 077	82 \$84.788	31 \$94.368	0	0 \$0	0 \$0	0 11	11	5	0	0 0 \$0 \$0	576
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	% Trips	100%	100% 100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 10	% 100	% 100	10%	00% 10	10%	% 100%	100%	100%	100%	100%	100% 1	00% 100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 100%	100%	100%	100%	100% 100°	% 100
TOTAL	Trips	750 \$3,779,513	100% 100% 2853 3249	4096	549	503 \$759,845	100% 642	100% 590	100% 1790	6235	100% 6712	6712 8	0 160	7 93	6 2	2527 78	81 541	1 716	883	288	46	1420	1143 1	276 1332	2529		3304	349	1556	100% 551	1	2644	100% 2	100% 100% 5732 888	3850	705	3826	4438 120F	% 100% 06 83558
	Cost per Development	\$3,779,513	\$881,104 \$848,0	78 \$1,860,924	\$512,549	\$759,845	\$1,258,795	\$16,352,940	\$1,178,231	\$646,121	\$1,524,296	\$4,076,987 \$2,2	7,017 \$10,29	5,604 \$474	,094 \$2,2	252,575 \$170	0,138 \$234,3	356 \$617,779	\$690,816	\$1,676,140	\$394,051	\$300,300	\$0 \$2,4	33,499 \$7,768,66	\$29,826,04	\$29,826,046	\$96,009	\$28,261,141	\$1,608,896	\$1,677,315	\$549,600	\$12,900,000	\$2,500,000	\$0 \$0	\$0	\$0	\$0	\$0 \$0	\$170,435

SRF CONSULTING GROUP, INC.

1/25/2007