

WEST ALLISON ROAD CORRIDOR STUDY

FINAL REPORT

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Volume 1

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Cheyenne Metropolitan Planning Office



TABLE OF CONTENTS

STUDY CORRIDOR LOCATION AND DESCRIPTION	1
CORRIDOR STUDY BACKGROUND	1
IDENTIFICATION AND EVALUATION OF ISSUES	11
ROAD ALIGNMENTS	11
RIGHT OF WAY	12
ROAD TYPICAL SECTIONS	13
INTERSECTIONS	13
TRAFFIC	15
TRAFFIC CALMING	16
DRAINAGE	17
UTILITIES	22
GREENWAY TRAIL / PEDESTRIAN / BICYCLE FACILITIES	23
TRANSIT SERVICES	24
PUBLIC PARTICIPATION PROCESS	24
CONSTRUCTION COSTS	25
EXECUTIVE SUMMARY AND RECOMMENDATIONS	25

APPENDICES

APPENDIX A - PUBLIC PARTICIPATION SUMMARY	
APPENDIX B - PRELIMINARY DESIGN 35% PLAN SHEETS	
APPENDIX C - SURVEY SUMMARY (ROW MAP)	
APPENDIX D – FINAL MEETING BOARDS	
APPENDIX E – SPEED COUNTS	
APPENDIX F - ESTIMATE OF PROBABLE CONSTRUCTION COST	
APPENDIX G ADDITIONAL INFORMATION	

LIST OF FIGURES

Figure 1:	Study Area Location Map	1
Figure 2:	Traffic Accidents per Intersection along West Allison Road	5
Figure 3:	AADT for West Allison Road with South High	6
Figure 4:	Peak Hour Traffic Volumes at Intersections (not including South High estimated traffic)	6
Figure 5:	Peak Hour Traffic Volumes at Intersections (including South High estimated traffic)	7
Figure 6:	West Allison Road Corridor - Current Zoning Map	8
Figure 7:	Cheyenne Area Master Plan – Future Land Use Map	8
Figure 8:	Photos of Existing Residences	10
Figure 9A:	Road Alignment from Cribbon Avenue to Parsley Boulevard	11
Figure 9B:	Road Alignment from Cribbon Avenue to Parsley Boulevard with West Allison Road extension to Parsley Boulevard	11
Figure 10:	North/South Connector	12
Figure 11:	Proposed Typical Road Section	13
Figure 12:	Median Island and Parking Lane Section	16
Figure 13:	Offset Crosswalk and Parking Bump Outs	17
Figure 14:	Drainage Option 1	19
Figure 15:	Drainage Option 2	20
Figure 16:	Recommended Detention Areas.....	21
Figure 17:	Greenway Trail	23

TABLES

Table 1:	Peak Hour LOS Summary for Study Intersections (including South High traffic)	4
Table 2:	Synchro Traffic Analysis	6
Table 3:	Average Speeds	15

STUDY CORRIDOR LOCATION

The West Allison Road Corridor, for purposes of this study, is located in the southwest region of the City of Cheyenne, and runs between US Highway 85 (South Greeley Highway) to the east and South Parsley Boulevard to the west. This section of West Allison Road is approximately 9,000 feet or 1.7 miles in length.

Figure 1. Study Area Location Map



Courtesy of MapQuest

CORRIDOR STUDY BACKGROUND

The West Allison Road Corridor Study was prepared under the direction of a steering committee consisting of some of the following:

- Tom Mason - Cheyenne Metropolitan Planning Organization
- Nancy Olson - Cheyenne Metropolitan Planning Organization
- Doug Vetter - City of Cheyenne Engineering
- Sam Berta – City of Cheyenne
- Bob Nelson – City of Cheyenne
- Tom Bonds – FHWA
- Don Beard – Laramie County Public Works Director
- Gary Kranse - Laramie County Planning Director

Matt Ashby - City of Cheyenne Urban Planning
James Sims - Cheyenne Metropolitan Planning Organization
Dennis Auker – Laramie County School District #1

The purpose of this corridor study as designated in the Request for Proposal for the Corridor Study, was to evaluate transportation needs for West Allison Road between South Greeley Highway and Parsley Boulevard. The portion between Walterscheid Boulevard and Snyder Avenue was excluded from the study because it had recently been upgraded as part of the South High School Project. The common needs determined by the steering committee included transportation demand, safety, legislative direction, urban transportation plan consistency, modal interrelationships, system linkage, and the condition of the existing roadway facility.

This study included the following tasks:

1. Public participation process (open house meetings)
2. Existing conditions analysis and preparation of Baseline Report
3. Drainage Basin Study
4. Data collection and conceptual design process
5. Conceptual Plan and Final Report Preparation including recommendations

This final report summarizes the tasks above and provides a recommendation for improvements along the West Allison Road corridor.

Existing Pavement Conditions

The existing pavement condition of West Allison Road is very poor between Walterscheid Boulevard and South Greeley Highway. The asphalt roadway contains numerous potholes and both longitudinal and transverse cracking. The edge of the pavement along the section of West Allison Road between South Greeley Highway and Walterscheid Boulevard is breaking apart. These details emphasize the need for improvements as described in the recommendations section of this report.

West Allison Road has recently been reconstructed from Snyder Avenue to Walterscheid Boulevard with the construction of South High School. In addition to the improvements on West Allison Road, a new section of Cribbon Avenue was constructed. This new section connects West Allison Road to Pinto Lane

Existing Traffic Conditions

The West Allison Road right-of-way width varies from 50 feet to 80 feet wide. The roadway is classified by the Plan Cheyenne Transportation Master Plan as a collector street. The corridor consists of the following right-of-way segments:

- South Greeley Highway to Walterscheid Boulevard – 50 feet
- Walterscheid Boulevard to Cribbon Avenue – 90 feet
- Cribbon Avenue to Arp Avenue – 65 feet

This study corridor begins with a signalized intersection at South Greeley Highway, has a signalized intersection at Walterscheid Boulevard, a north leg stop controlled T intersection at Desmet Drive, a roundabout at Snyder Avenue, and a four way stop controlled intersection at Cribbon Avenue. There are multiple residential driveways between South Greeley Highway and Walterscheid Boulevard and Cribbon Street and Arp Avenue as well as driveways for Johnson Junior High School and South High School.

West Allison Road does not connect directly to Parsley Boulevard, but connects via Cribbon Avenue and Jefferson Road. West Jefferson Road is a local residential road that runs directly in front of Goins Elementary School. The Cribbon Avenue connection runs along the westerly edge of the South High School property and connects to Pinto Lane. Pinto Lane is designated as a collector street and has a 70-foot right-of-way. Additional connections are West Allison Road to Ahrens Avenue to either West Jefferson Road to the north or Sundance Lane to the south. Both routes connect to Parsley Boulevard to the west. All of these connections have been considered as part of this study, which will reduce traffic in front of the elementary school as well as congestion in general on the local roads within the residential areas. The connections that have been evaluated include Cribbon Avenue to Pinto Lane and other alignments to reduce traffic congestion and provide better vehicular circulation along the west side of the corridor.

Level of Service Analysis

All intersections along the corridor currently operate at a LOS C or better during the am, mid day and pm peak hours, which is an acceptable delay time. The estimated future traffic volumes included South High School being at full capacity by 2014. All intersections along the corridor with the exception of Greeley Highway and Walterscheid Boulevard will continue to operate at a LOS C or better during the peak hours. Known development projects along the corridor were taken into account when evaluating the growth rate for the future level of service. A summary of LOS, calculated in the Baseline Corridor Study, at each intersection along the corridor has been provided in Table 1.

Table 1. Peak Hour LOS Summary for Study Intersections (including South High traffic)

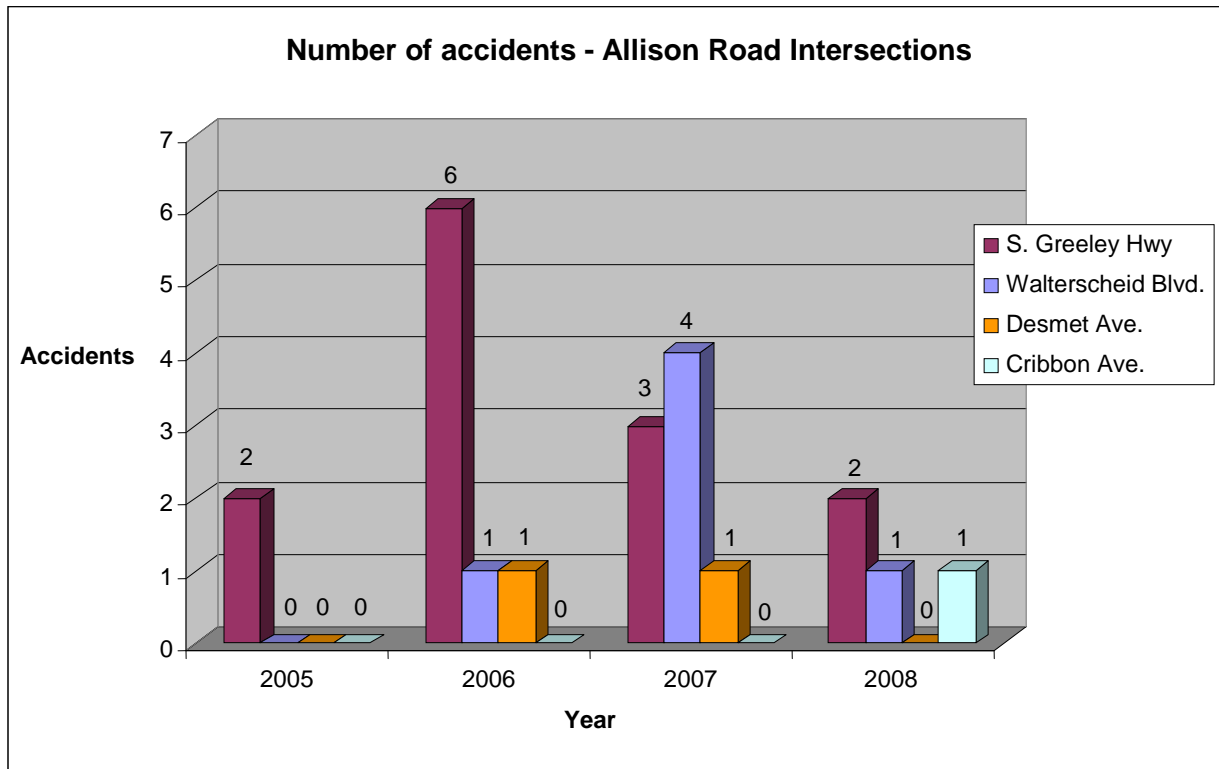
Intersection	Time Period	Delay (sec / vehicle)	Direction of Travel	LOS
West Allison Road & Greeley Hwy	7-8 AM	21.6 / 29.2	West / East	C
		-	North / South	-
	3-4 PM	21.2 / 22.9	West / East	C
		-	North / South	-
	5-6 PM	21.4 / 38.9	West / East	C / D
		-	North / South	-
West Allison Road & Walterscheid Blvd.	7-8 AM	40.7 / 124.8	West / East	E / F
		8.2 / 7.4	North / South	A
	3-4 PM	15.2 / 43.3	West / East	C / E
		7.6 / 7.4	North / South	A
	5-6 PM	14.5 / 14.2	West / East	B
		7.7 / 7.5	North / South	A
West Allison Road & Desmet Avenue	7-8 AM	15.6	South	C
		8.9	East	A
	3-4 PM	14.4	South	B
		7.7	East	A
	5-6 PM	9.8	South	A
		7.5	East	A
West Allison Road & Cribbon Avenue	7-8 AM	7.71 / 9.19	North / South	A
		7.98 / 8.08	West / East	A
	3-4 PM	7.45 / 7.87	North / South	A
		7.40 / 7.80	West / East	A
	5-6 PM	7.24 / 8.10	North / South	A
		7.22 / 7.81	West / East	A
Jefferson Road & Cribbon Avenue	7-8 AM	9.0	East	A
		7.4	North	A
	3-4 PM	9.2	East	A
		7.4	North	A
	5-6 PM	8.9	East	A
		7.3	North	A
Jefferson Road & Parsley Blvd.	7-8 AM	10.2 / 11.0	North / South	B
		7.2	West	A
	3-4 PM	11.6 / 13.0	North / South	B
		7.2	West	A
	5-6 PM	10.0 / 10.5	North / South	A / B
		7.2	West	A
Pinto Lane & Parsley Blvd.	7-8 AM	9.6 / 10.1	North / South	A / B
		7.2 / 7.2	East / West	A
	3-4 PM	10.5 / 11.3	North / South	B
		7.3 / 7.3	East / West	A
	5-6 PM	11.3 / 11.4	North / South	B
		7.5 / 7.2	East / West	A
Parsley Blvd. & Sundance Lane	7-8 AM	9.7 / 9.8	North / South	A
		7.2	West	A
	3-4 PM	9.9 / 10.6	North / South	A / B
		7.2	West	A
	5-6 PM	10.2 / 10.3	North / South	B
		7.2	West	A

Based on the above data and definition of LOS from the Highway Capacity Manual (A-F), the intersections studied, with the exception of Walterscheid Boulevard and South Greeley Highway, will operate at a LOS C or better during the a.m., mid day, and p.m. peak hours once South High School is operating at full capacity.

Vehicle Accident Analysis

From 2005 to 2008 there were a total of 25 vehicle accidents along the corridor. During the four year timeframe, approximately 80 percent of the accidents along the corridor occurred at intersections. The intersection with the most accidents during the four-year period was West Allison Road and South Greeley Highway, with 13 accidents. This intersection also has the highest volume of traffic compared to any other intersection along the corridor. Approximately 20 percent of the accidents occurred within mid-block sections of the corridor. This data helps emphasize the importance of creating safe intersections. The number of accidents for each intersection along the West Allison Road corridor are shown below in Figure 2.

Figure 2: Traffic Crashes per Intersection along West Allison Road



Anticipated Daily Traffic Growth

The forecasted daily 2030 traffic volumes for the West Allison Road Corridor, were developed from Cheyenne MPO’s regional travel demand model. This model incorporates measured volumes reported by WyDOT from the previous eight years. The daily traffic volumes on West Allison Road in the study corridor are expected to increase by approximately 2% per year over this 20+ year period. Based on projected WyDOT volumes. Figure 3 shows a graph of the anticipated traffic volumes over a 30 year period. As peak hour congestion occurs, the increase in traffic will result in a longer peak period and more trips occurring at other times during the day. The peak hour traffic volumes at the analyzed intersections for existing and existing with the proposed South High School are shown in Figures 4 and 5.

Figure 3. Projected Average Annual Daily Traffic Volumes (AADT) for West Allison Road with South High

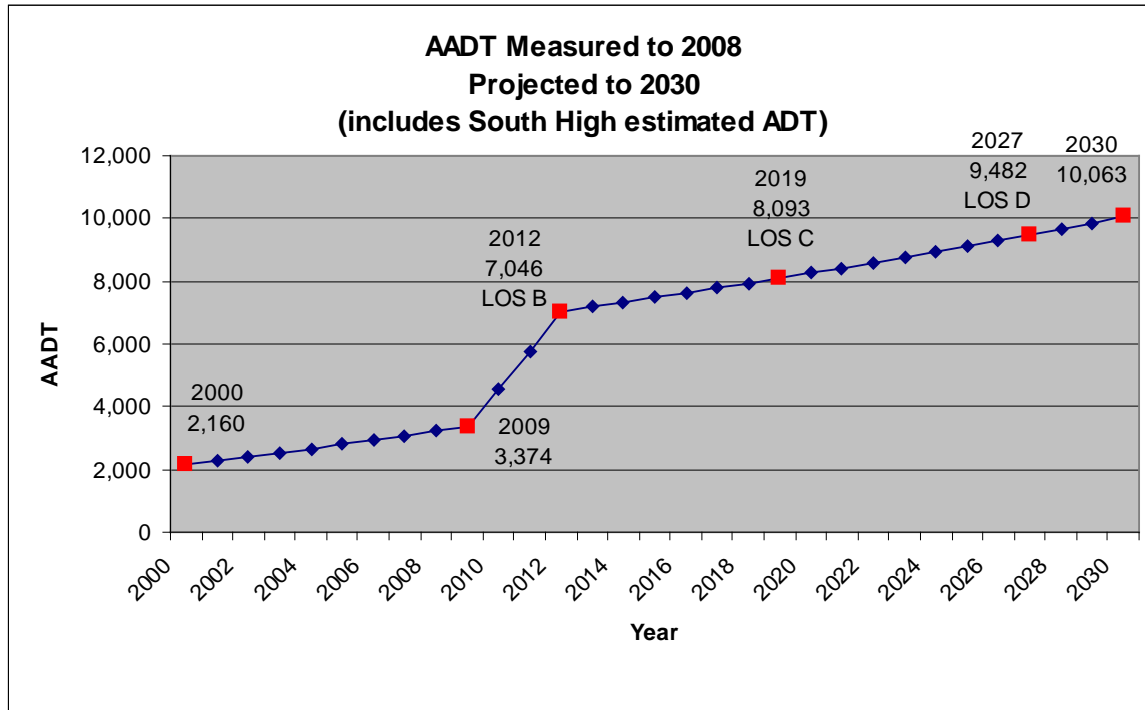
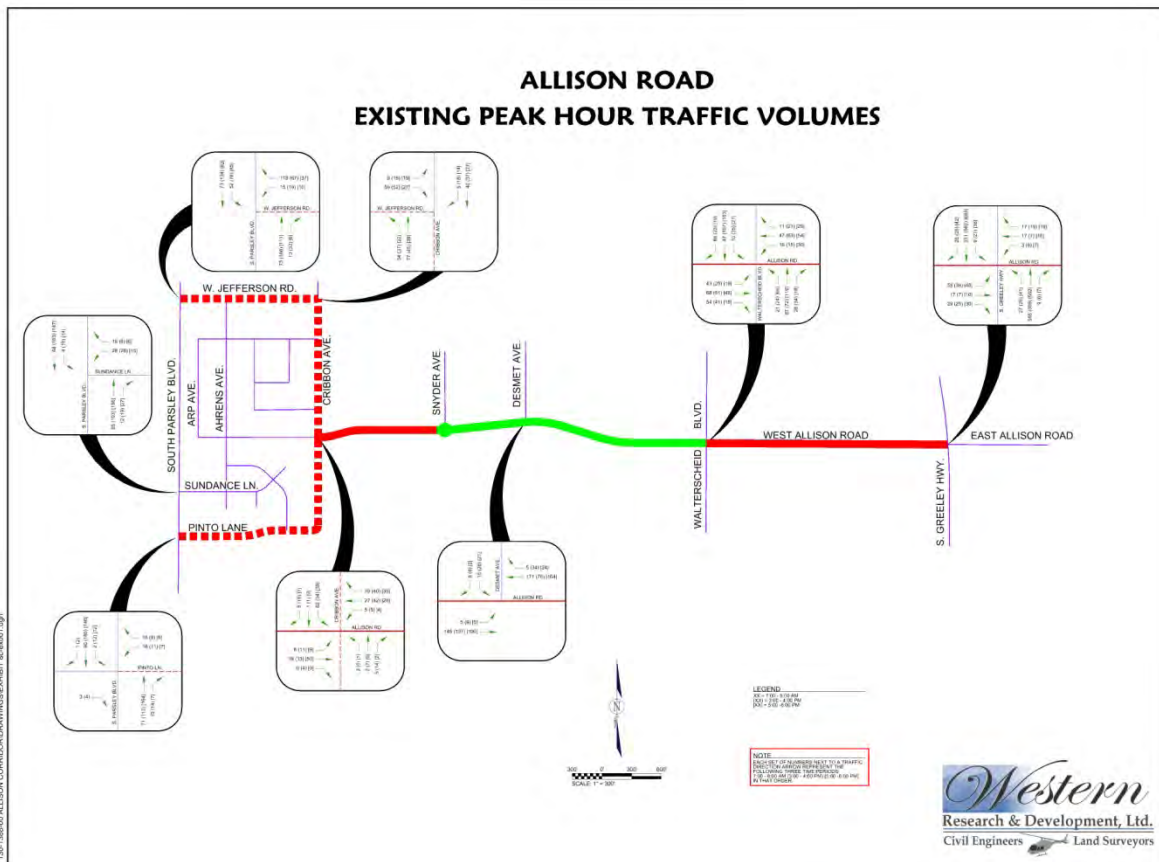
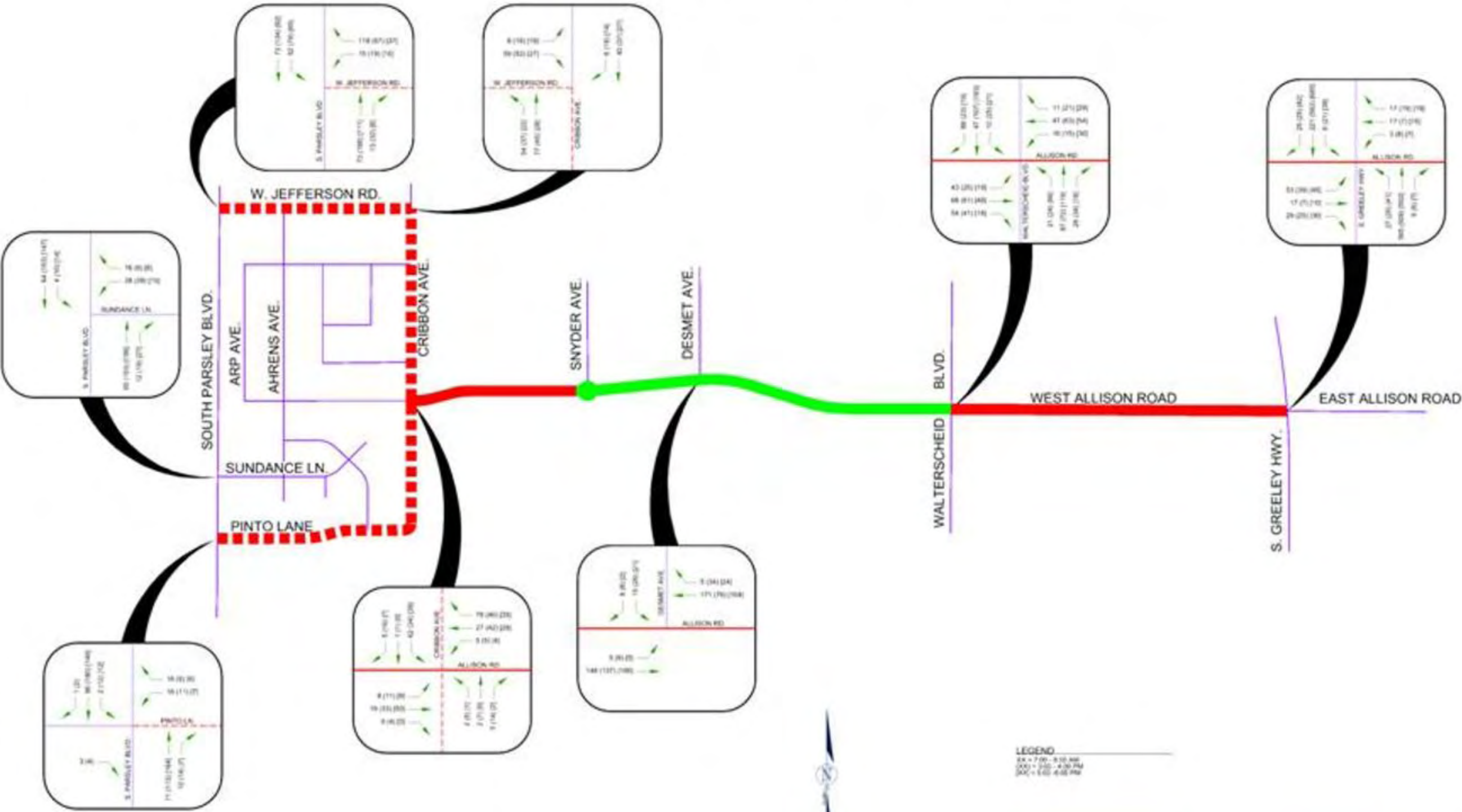


Figure 4: Peak Hour Traffic Volumes at Intersections (not including South High estimated traffic)



ALLISON ROAD EXISTING PEAK HOUR TRAFFIC VOLUMES



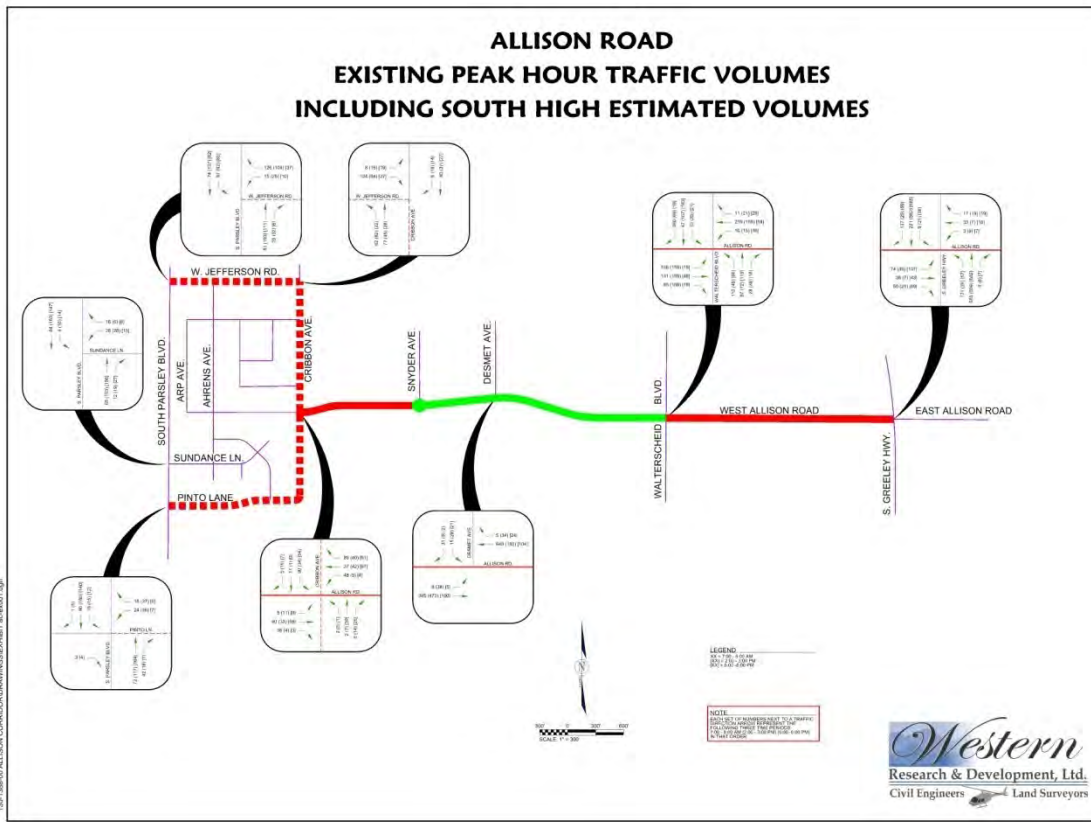
LEGEND

- AM - 7:00 - 9:59 AM
- PM - 3:00 - 5:59 PM
- AD - 4:00 - 6:59 PM

NOTE

EACH SET OF NUMBERS NEXT TO A TRAFFIC DIRECTION ARROW REPRESENTS THE FOLLOWING THREE TIME PERIODS:
 1. AM - 7:00 AM TO 9:59 AM
 2. PM - 3:00 PM TO 5:59 PM
 3. AD - 4:00 PM TO 6:59 PM

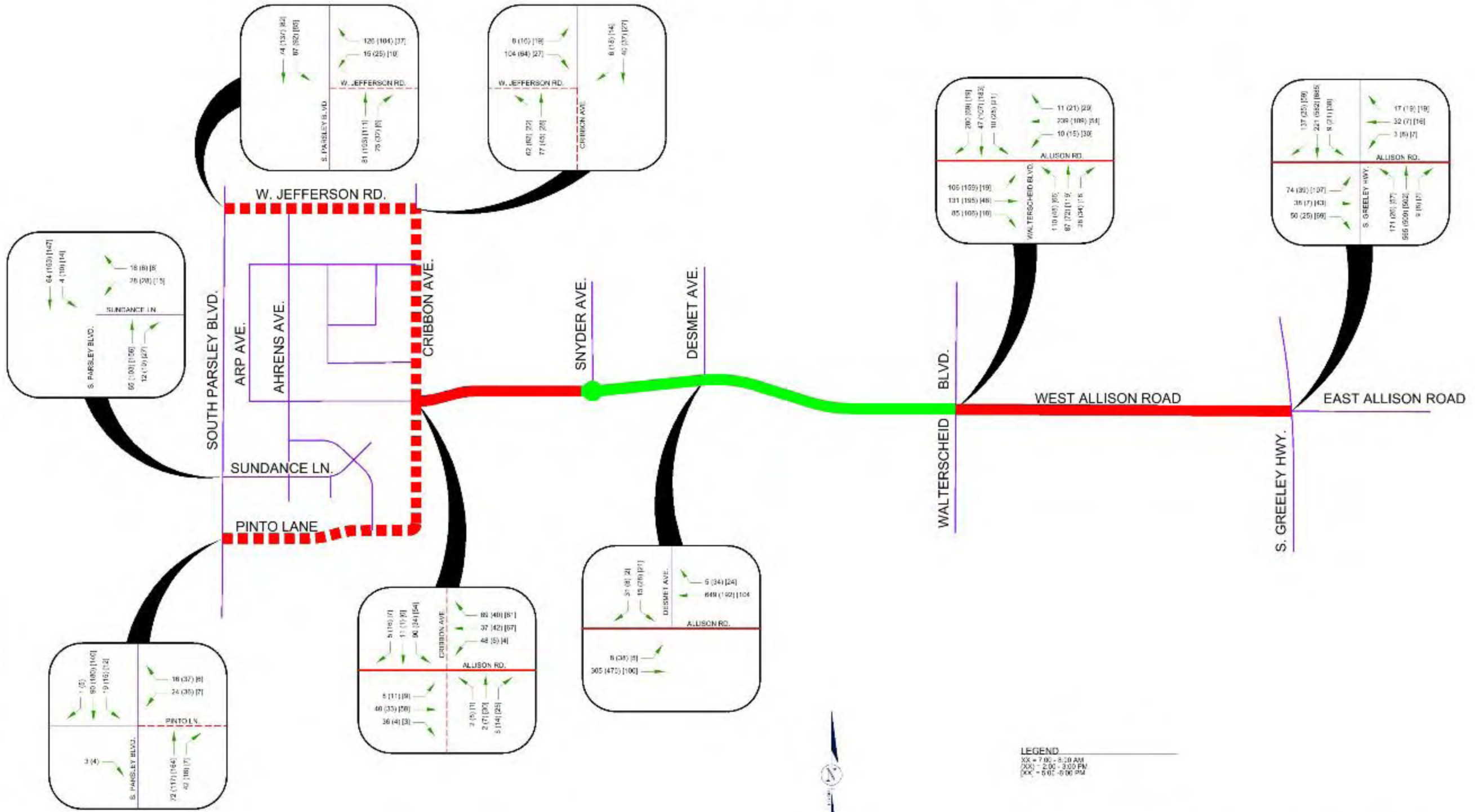
Figure 5: Peak Hour Traffic Volumes at Intersections (including South High estimated traffic)



An additional, potentially larger cause of daily traffic increase on West Allison Road in future years is new development. With the large amount of undeveloped and sparsely developed land along the corridor, it is expected that additional residential and commercial development will occur. The undeveloped land is approximately one square mile north and south of West Allison Road between South Greeley Highway and Walterscheid Boulevard. As this area continues to grow and the traffic volumes continue to increase, it is possible that the increased congestion will eventually require additional road improvements including road widening. The current zoning and future land use is shown in Figures 6 and 7.

ALLISON ROAD

EXISTING PEAK HOUR TRAFFIC VOLUMES INCLUDING SOUTH HIGH ESTIMATED VOLUMES



LEGEND
 XX = 7:00 - 9:30 AM
 XX = 2:00 - 3:30 PM
 XX = 5:00 - 9:00 PM

NOTE
 EACH SET OF NUMBERS NEXT TO A TRAFFIC DIRECTION ARROW REPRESENT THE FOLLOWING THREE TIME PERIODS (7:00 - 9:30 AM; 2:00 - 3:30 PM; 5:00 - 9:00 PM) IN THAT ORDER.

130-1388-00 ALLISON CORRIDOR DRAWINGS EXHIBIT Bc-0x001.dgn



Figure 6. West Allison Road Corridor - Current Zoning Map

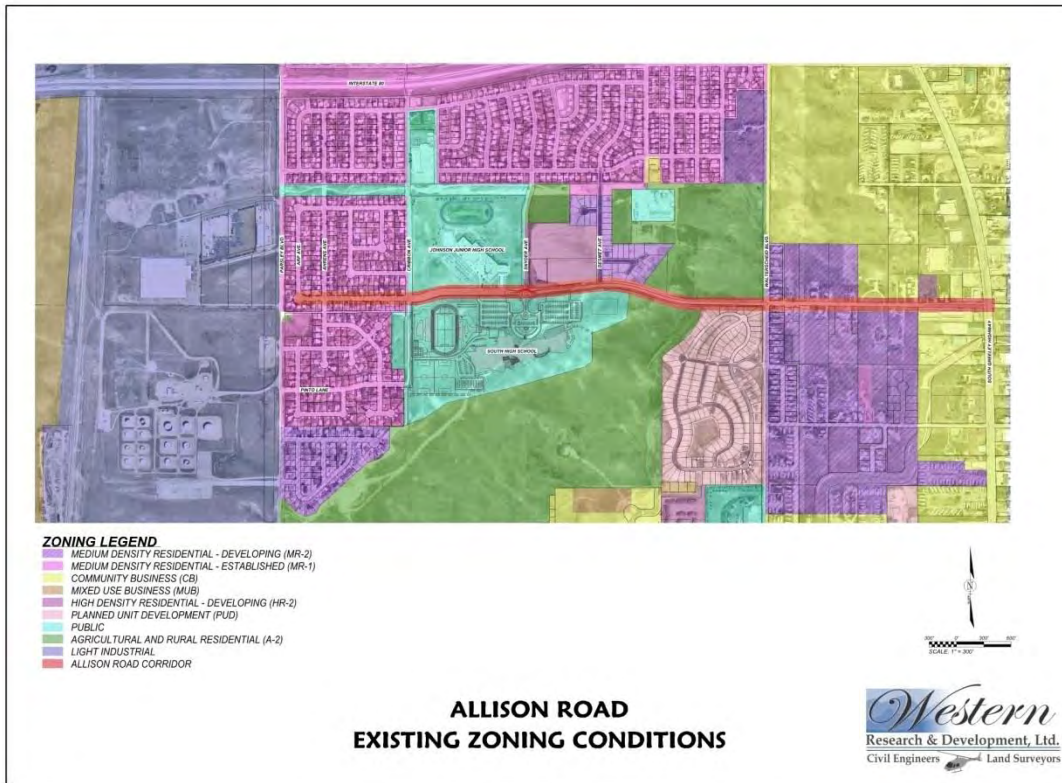
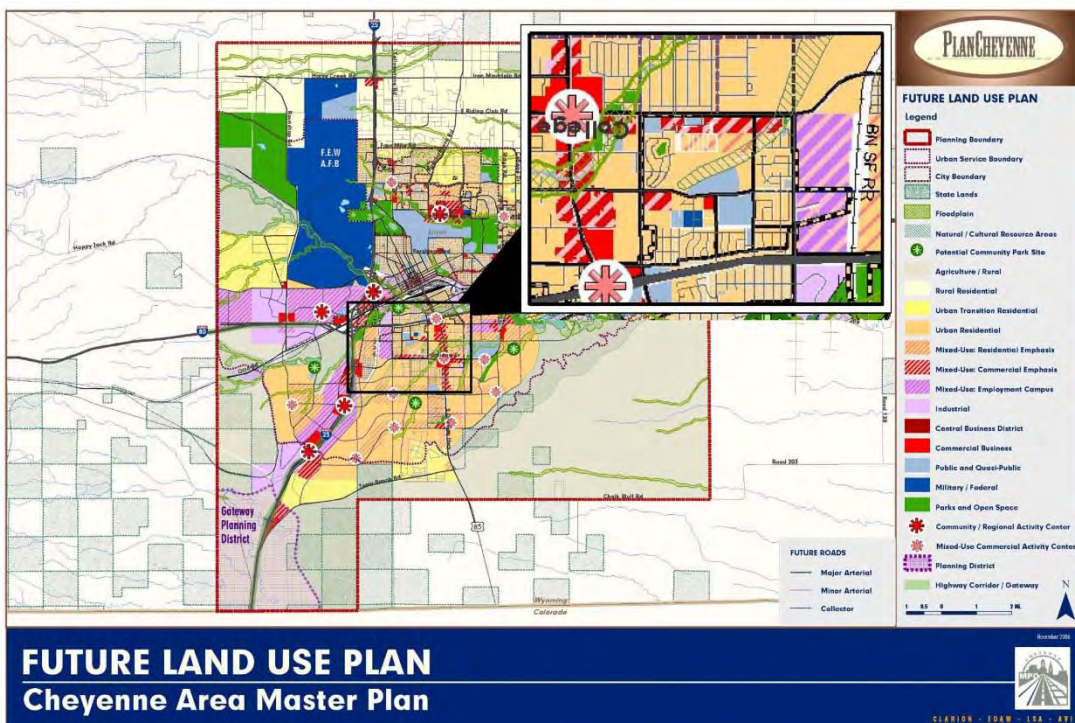
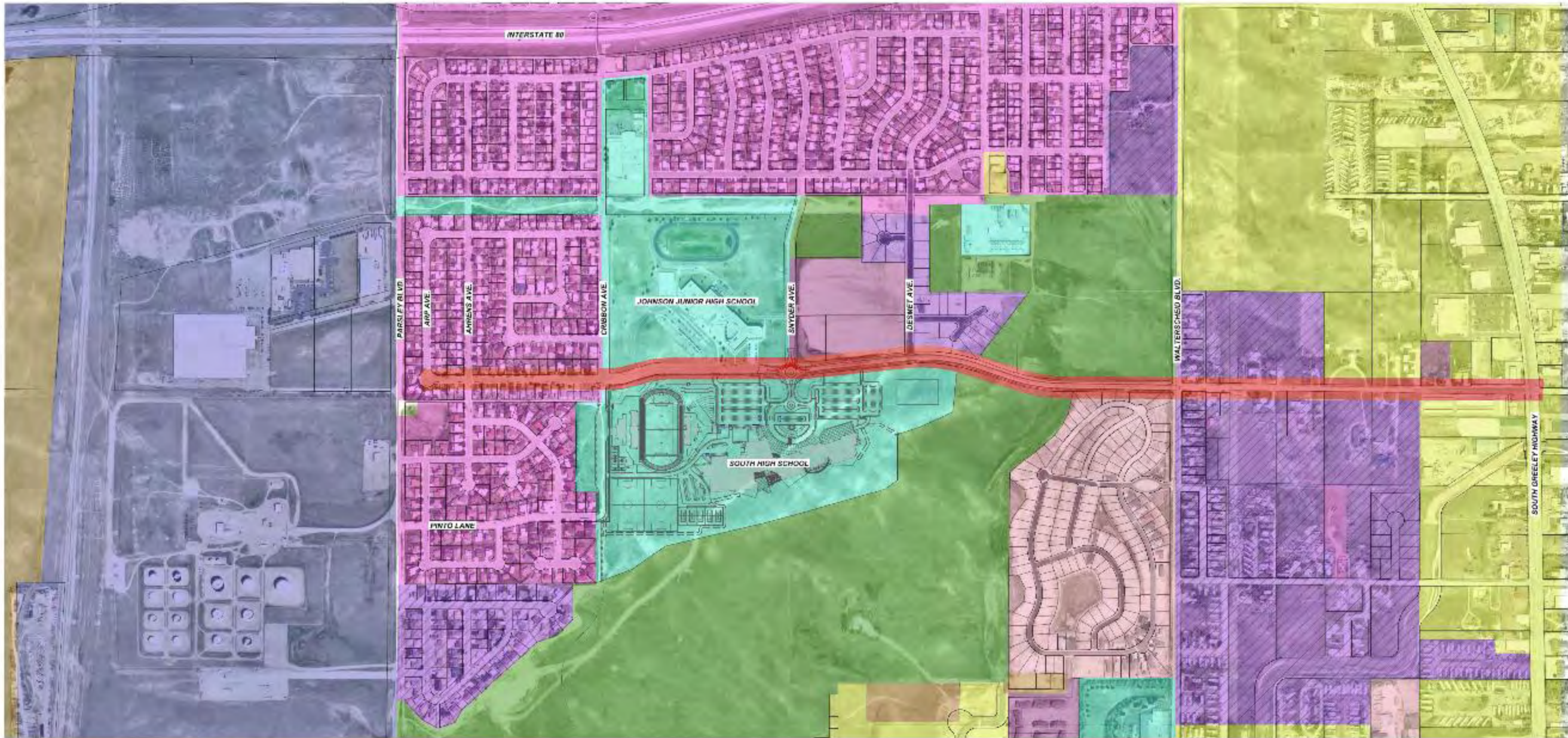


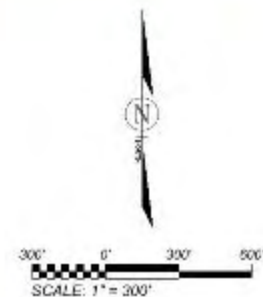
Figure 7. Cheyenne Area Master Plan – Future Land Use Map





ZONING LEGEND

- MEDIUM DENSITY RESIDENTIAL - DEVELOPING (MR-2)
- MEDIUM DENSITY RESIDENTIAL - ESTABLISHED (MR-1)
- COMMUNITY BUSINESS (CB)
- MIXED USE BUSINESS (MUB)
- HIGH DENSITY RESIDENTIAL - DEVELOPING (HR-2)
- PLANNED UNIT DEVELOPMENT (PUD)
- PUBLIC
- AGRICULTURAL AND RURAL RESIDENTIAL (A-2)
- LIGHT INDUSTRIAL
- ALLISON ROAD CORRIDOR




**ALLISON ROAD
EXISTING ZONING CONDITIONS**

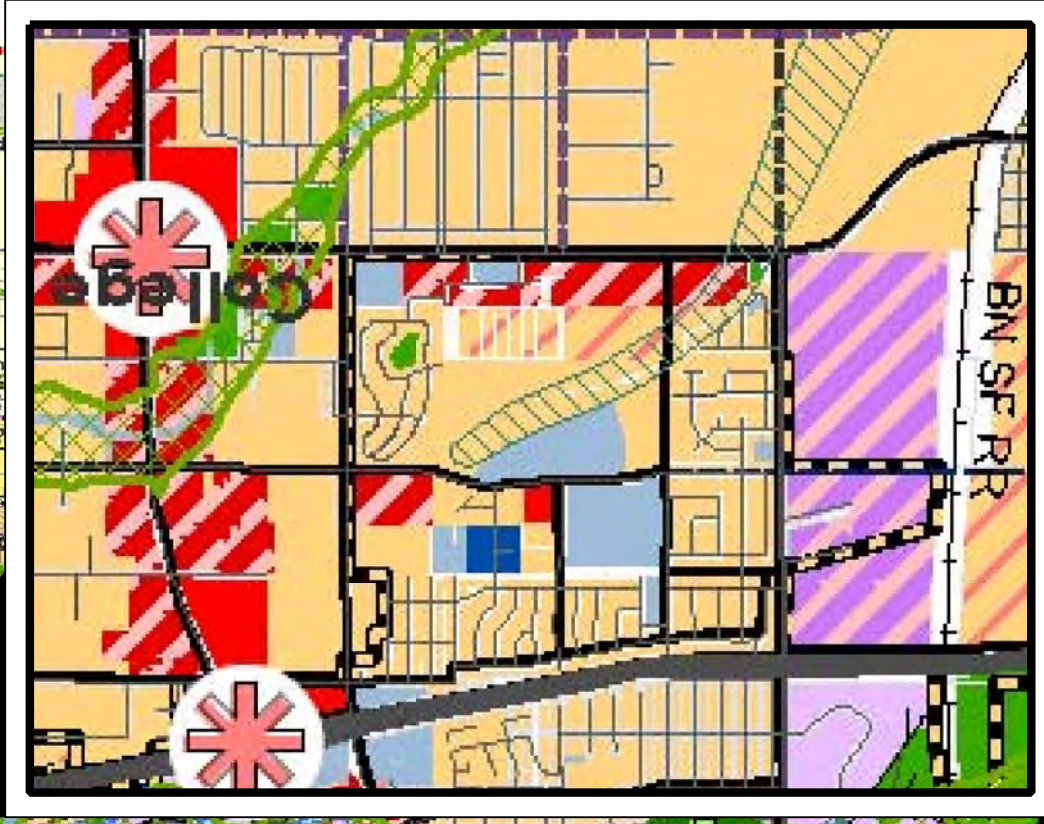
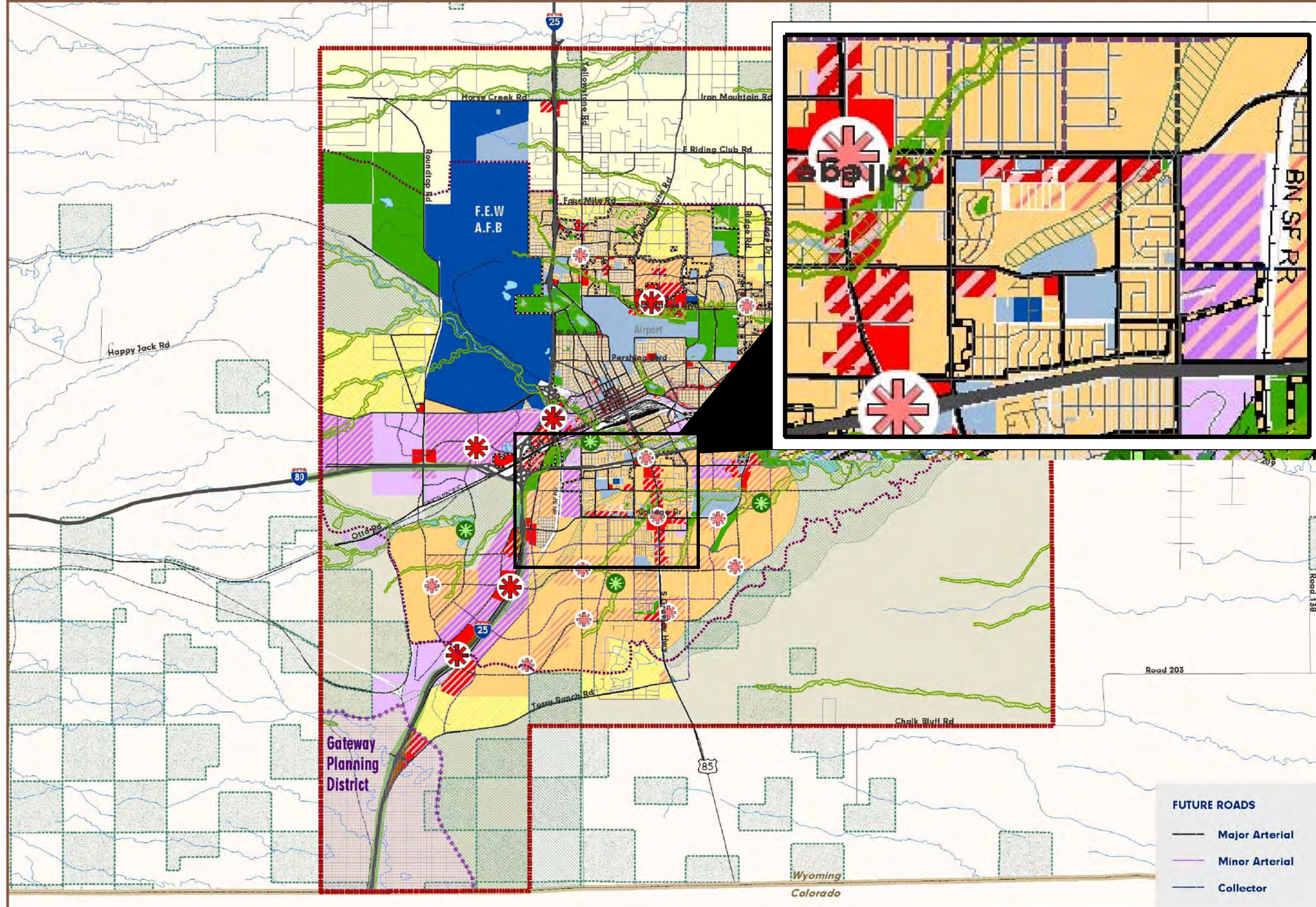
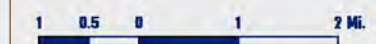
FUTURE LAND USE PLAN

Legend

-  Planning Boundary
-  Urban Service Boundary
-  City Boundary
-  State Lands
-  Floodplain
-  Natural / Cultural Resource Areas
-  Potential Community Park Site
-  Agriculture / Rural
-  Rural Residential
-  Urban Transition Residential
-  Urban Residential
-  Mixed-Use: Residential Emphasis
-  Mixed-Use: Commercial Emphasis
-  Mixed-Use: Employment Campus
-  Industrial
-  Central Business District
-  Commercial Business
-  Public and Quasi-Public
-  Military / Federal
-  Parks and Open Space
-  Community / Regional Activity Center
-  Mixed-Use Commercial Activity Center
-  Planning District
-  Highway Corridor / Gateway

FUTURE ROADS

-  Major Arterial
-  Minor Arterial
-  Collector



FUTURE LAND USE PLAN

Cheyenne Area Master Plan

November 2006



CLARION - EDAW - LSA - AVI

Current Conditions

The study area for West Allison Road is approximately 1.7 miles in length from South Greeley Highway to Parsley Boulevard. West Allison Road serves as a collector street and is also the primary route used by the local residents to gain access to and from their homes. West Allison Road is also the main route to the Laramie County School District #1 school campus which includes Goins Elementary School, Johnson Junior High, and the new South High School.

The school campus has a significant impact on the corridor. Contributing factors include: 1) a large segment of young people walking to school and 2) young drivers going to and from South High School. The new South High School will add approximately three quarters of a mile of a ten foot wide sidewalk, some of which is designated as a Greenway Connector, along West Allison Road from Walterscheid Boulevard to Pinto Lane via Cribbon Avenue.

Retail Uses – Along South Greeley Highway

Retail use takes place on the east end of the corridor at the intersection of South Greeley Highway and West Allison Road. Two entrances are located on West Allison Road from the Safeway grocery store shopping center. This section of right of way has been widened from 50 feet to 65 feet for approximately 400 feet to accommodate road improvements including the addition of curb, gutter and sidewalk on the north side. The pavement in this section of West Allison Road has been upgraded and is in relatively good condition. However, it is still limited to two twelve foot travel lanes. Widening this section of the roadway may entail moving the power lines on the south side of the highway. There are existing storage units on the south side of West Allison Road at this location. A retaining wall will be necessary along north property line of the storage units due to the large grade difference between the street and the units. As you progress west along West Allison Road from South Greeley Highway, the grade drops down to a drainage basin crossing or low point running south across West Allison Road. The grade change also presents a problem with site distance for ingress and egress from the adjacent residences and the retail area driveways.

Residential Area – Between South Greeley Highway and Walterscheid Boulevard

The residential area depicted in the following pictures shows the relationship of the homes to the location of the existing road. Right of way width is very narrow in this section, approximately 50 feet. The road surface is approximately 22 feet wide with a rough edge of pavement and a gravel shoulder that is not maintained. Direct driveways access onto West Allison Road and misaligned driveways are potential causes for vehicle accidents. Lack of site distance and speeding vehicles compound the issues with the driveways. Pedestrian facilities along the road are nonexistent. Pedestrian and bicycle access is only on the roadway itself. There is no curb and gutter or sidewalks in this section of roadway.

Figure 8, Photos of Existing Residences



Residential Area – Between Walterscheid Boulevard and Snyder Avenue

There is uncontrolled access onto West Allison Road between Walterscheid Boulevard and Snyder Avenue at this time. The existing roadway includes one travel lane in each direction.

School Campus Area – Snyder Avenue west to Cribbon Avenue

This section of roadway consists of four twelve foot lanes plus parking lanes in an eighty foot right of way. Parking is allowed on both sides of the street. This section is directly between the new South High School and the existing Johnson Junior High. A new roundabout has been installed at the intersection of Snyder Avenue and West Allison Road.

Residential Area – Cribbon Avenue west to Arp Avenue

This section of the corridor has a medium density residential zoning. An apartment complex and single family residential homes line the street on both sides. The neighborhood is fully built out and is not conducive to widening of the road or right-of-way. Parking is primarily on-street. Many garages have been converted into living space. The approximate average distance from the front door to the edge of pavement is 36 feet, but would be reduced to less than 20 feet if the right-of-way was increased to 80 feet.. This section of roadway is currently classified as a local street with sixty (60) feet of right-of-way. The City standard for a collector street is eighty (80) feet of right-of-way. The speed limit is currently posted at twenty-five (25) miles per hour.

West Allison Road does not connect to Parsley Road on the west end. Two developed residential lots block the connection. If this connection were to be made, it would significantly increase traffic volumes through the residential portion of West Allison Road, a street heavily congested by on-street parking on each side. The street width meets Current City standards.

IDENTIFICATION AND EVALUATION OF ISSUES

ROAD ALIGNMENTS

Four horizontal alignment options were evaluated for the connection of the West Allison Road corridor to Parsley Boulevard

These options consisted of:

1. Pushing West Allison Road through the residential area for a direct connection to Parsley Boulevard
2. Using the existing West Jefferson Road via Cribbon Avenue
3. Using the existing Pinto Lane via Cribbon Avenue
4. Using the existing Ahrens Avenue north to West Jefferson Road and south to Sundance Lane via West Allison Road

The concerns with a direct connection through the residential area are the large impact to existing residences (which may require the purchase of multiple residential lots), and concern over the significant amount of traffic that would use the local residential road to travel east from Parsley Boulevard towards Walterscheid Boulevard if the street were opened up (connected to Parsley Boulevard as shown on Figure 9A). For these reasons, this direct connection was not recommended. It is recommended that the existing routes shown on Figure 9B be maintained until one or more of the following changes take place within the project area: the connection of West Allison Road to Southwest Boulevard is made, Parsley Boulevard is upgraded to an urban arterial section, and the area west of Parsley Boulevard develops.

Figure 9A, Road Alignment from Cribbon Avenue to Parsley Boulevard with West Allison Road extension to Parsley Boulevard

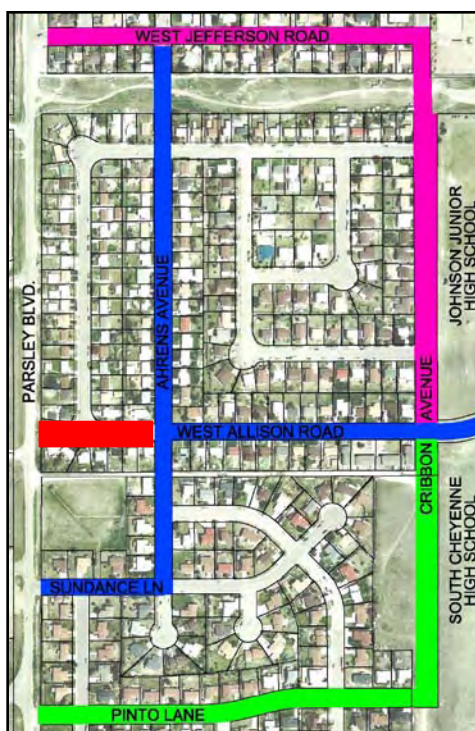
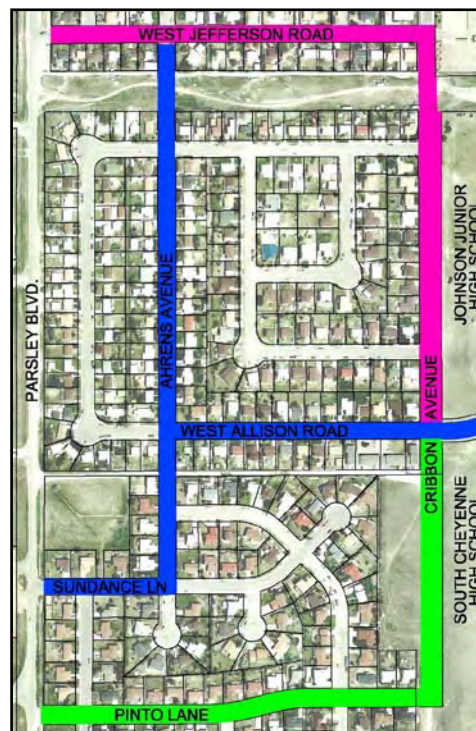


Figure 9B, Road Alignment from Cribbon Avenue to Parsley Boulevard



In addition to the connection at Parsley Boulevard, the alignment of a north-south connector road was also evaluated. This connector road would be located from Prosser Road on the south across West Allison Road near the midpoint between Walterscheid Boulevard and South Greeley Highway to Jefferson Road on the north. The exact location will be determined as development occurs. This connection was evaluated in accordance with the future road network as described in the Cheyenne Transportation Master Plan. The termination points, as well as the alignment will be finalized as development occurs. Figure 10 represents a possible location and alignment for the road. This road is approximately 2,600 feet long and would be classified as a local road with 36 feet of pavement and sidewalks in a 60 foot right of way.

Figure 10, North/South Connector (conceptual alignment)



A vertical alignment modification was also evaluated along West Allison Road to improve the stopping sight distance at crest vertical curves, especially where residential driveways exist. The crest condition just west of South Greeley Highway currently creates an unsafe condition for a number of residential drives. For this reason it is recommended that the grade at this crest condition be lowered and the slope on either side of the crest be reduced.

See appendix B, Sheets C-275 – C-278 for the plan and profiles for the corridor.

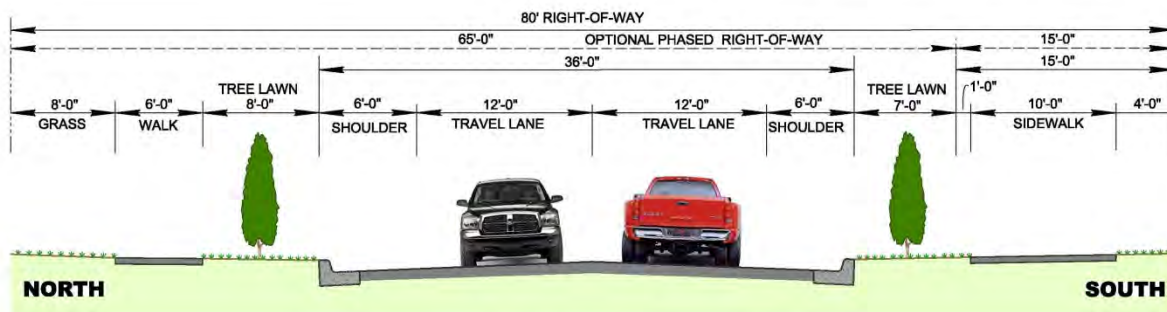
RIGHT OF WAY

The right-of-way for the West Allison Road corridor varies from 50 feet wide between South Greeley Highway and Walterscheid Boulevard, to 80 feet wide between Walterscheid Boulevard and Cribbon Avenue, to 60 - 70 feet wide within the residential areas on the west end of the corridor. Since West Allison Road is classified as a collector road, which requires an 80 foot right-of-way, an option to obtain additional right-of-way for the portions less than 80 feet was evaluated.

ROAD SECTIONS

A number of typical road sections were evaluated in choosing the best sections for the West Allison Road corridor. These sections ranged from rural sections with minimal pavement and drainage swales to full width City road sections for a collector including bike lanes and detached sidewalks. The road section recommended shows 36 feet of pavement with a six foot wide detached sidewalk. An additional 15 feet of right-of-way will be dedicated as development occurs along the south side of the corridor. A ten foot wide greenway connector will be constructed with the southern 15 feet of right-of-way west of the north/south connector street and an eight foot wide multi-use path east of the connector. See Appendix B for road sections used.

Figure 11. Proposed Typical Road Section



INTERSECTIONS

West Allison Road & South Greeley Highway

This is a signalized intersection of a County road and a State Highway. This intersection currently contains a high volume of traffic which will continue to grow as South High School opens and new developments build along the corridor and within the area. In order to anticipate this and maintain an acceptable level of service, improvements are recommended at this intersection. These include adding a dedicated left turn lane (northbound) with a sensor controlled signal, retiming the signals, and providing bicycle lanes and sidewalks.

West Allison Road & Walterscheid Boulevard

This is a signalized intersection (part of South High improvements). The corridor east of this intersection is controlled by Laramie County, while the area to the west is under City of Cheyenne control. With the South High School construction, the west side of the intersection will be improved to include turn lanes, drainage and signalization. According to the Baseline Corridor Study, prepared by Western Research and Development, this intersection will see a decrease in the level of service in the next four years as a result of increased traffic volumes. A traffic signal is currently being constructed to accommodate the anticipated traffic increase from South High School and new developments in the area. The north and west legs of the intersection have also been improved. The full 80-feet of right-of-way will be needed to complete the intersection improvements. (Further improvements to the west leg of the intersection and possible relocation of the signal poles may be necessary for the proposed improvements to the east leg.)

West Allison Road & Desmet Avenue

This intersection is stop sign controlled on Desmet Avenue. West Allison Road at Desmet Avenue has been improved with the South High School improvements. No additional improvements to this intersection are recommended as part of this study.

West Allison Road & Snyder Avenue

This intersection is a roundabout (part of South High improvements). The roundabout was built as part of the South High School improvements, and will provide a higher level of service than a signalized intersection. No additional improvements are recommended at this intersection as part of this study.

West Allison Road & Johnson Jr. High School exit

This T-intersection is stop controlled on the north leg. Due to the amount of vehicles turning from westbound West Allison Road onto Cribbon Avenue and the short distance between the two intersections, there is some concern about the left turn exit onto West Allison Road. A second exit onto Cribbon Avenue would reduce the traffic turning onto and crossing West Allison Road at this point. If the number of vehicles exiting Johnson Jr. High stack up too long, it may be necessary to restrict this exit to right out only and use the second exit onto Cribbon Avenue and/or provide a secondary exit onto Cribbon Avenue for all travel eastbound on West Allison Road. See Sheet C-279 in Appendix B that shows the proposed improvements.

West Allison Road & Cribbon Avenue

This is a four way stop sign controlled intersection (the south leg part of South High School improvements). The collector road corridor turns south here and connects to Parsley Boulevard via Pinto Lane. This intersection will see additional vehicular trips with the connection to Pinto Lane and with the addition of South High School. As a result, the level of service will decrease if the four way stop control is kept in place. A roundabout would be recommended at this location to improve the level of service and safety of this intersection. In addition, the use of intersection narrowing or curb extensions would provide traffic calming and a shorter pedestrian path across the travel lanes of the intersection.

Cribbon Avenue & Pinto Lane

There will be continuous flow traffic through this 90 degree bend. The connection between West Allison Road and Pinto Lane was made as part of the South High School improvements. This intersection did not exist prior to the South High School improvements, and will generate additional traffic down Pinto Lane through the residential neighborhood and connecting to Parsley Boulevard. With the additional traffic volumes on Pinto Lane, it is recommended that the three cross streets with Pinto Lane, Trail Way Road, Red Rock Road, and Elkhorn Drive have stop signs placed on the north and south legs.

Pinto Lane & Parsley Boulevard

This T-intersection is stop sign controlled on Pinto Lane only. The number of vehicle trips at this intersection will increase as a result of the addition of South High School as with the Cribbon Avenue connection being made, however, since it is one of three connections to Parsley Boulevard, additional improvements are not justified at this time. This should be evaluated when Parsley Boulevard is improved.

Cribbon Avenue & Jefferson Road

This T-intersection is stop sign controlled on Jefferson Road eastbound and Cribbon Avenue southbound. With the proposed improvements to Goins Elementary School, which will provide an off street drop off lane for the school buses, this intersection's level of service should be improved without additional improvements to the intersection itself.

Jefferson Road & Parsley Boulevard

This T-intersection is stop sign controlled on Jefferson Road only. The number of vehicle trips at this intersection will increase as a result of the addition of South High School, however, since it is only one of three connections to Parsley Boulevard, additional improvements are not recommended at this time. A southbound left turn lane from Parsley Boulevard southbound to Jefferson Road eastbound is being constructed with the South High improvements. The type of intersection should be evaluated when further improvements are made to Parsley Boulevard.

TRAFFIC

A Synchro Traffic Analysis was performed for the existing signal at the West Allison Road/South Greeley Highway intersection and the proposed signal at the West Allison Road/Walterscheid Boulevard intersection to determine if a delay would be caused by the close proximity of the two intersections. Analyses were prepared for the Years 2014, 2019, and 2024. The Level of Service for these intersections remained acceptable for all conditions. Levels A-C have been designated as acceptable in the Highway Capacity Manual.

Table 2
Synchro Traffic Analysis

Intersection	Peak Time	Year	Average Delay (s)	Intersection LOS
Allison/ Walterscheid	AM	2014	5.5	A
Allison/S. Greeley Hwy	AM	2014	5.7	A
Allison/ Walterscheid	PM	2014	5.4	A
Allison/S. Greeley Hwy	PM	2014	7.7	B
Allison/ Walterscheid	AM	2019	5.6	A
Allison/S. Greeley Hwy	AM	2019	5.8	A
Allison/ Walterscheid	PM	2019	5.6	A
Allison/S. Greeley Hwy	PM	2019	7.9	B
Allison/ Walterscheid	AM	2024	5.7	A
Allison/S. Greeley Hwy	AM	2024	6.0	A
Allison/ Walterscheid	PM	2024	5.7	B
Allison/S. Greeley Hwy	PM	2024	8.4	B

Speed tests were done for West Allison Road west and east of Walterscheid Boulevard, Cribbon Avenue north of West Allison Road, and Pinto Lane east of Parsley Boulevard. Since this was a concern of the local residents the test were done to have a base speed to compare to future speed tests. These tests were done in the spring of 2009 for the three western segments and the beginning of 2010 for the eastern segment. The average speeds are shown below in Table 3. The speed tests are included in Appendix D.

Table 3
Average Speeds

Major Roadway	Direction	Minor Roadway	Average Speed (mph)	% of vehicles exceeding 30 mph speed limit
Allison	west of	Walterscheid	33	99.7
Allison	east of	Walterscheid	33	96
Cribbon	north of	Allison	32	96
Pinto	east of	Parsley	26	12

TRAFFIC CALMING

With the feedback from City and County officials and from the public during the three public meetings, a number of traffic calming devices were discussed for use on the West Allison Road corridor.

They are as follows:

- roundabout intersections
- center island narrowing with landscaping (choker islands)
- lane width narrowing (striping)
- intersection narrowing (curb extensions or bump outs)

These measures have been evaluated and implemented into the recommended road sections and roadway improvements as applicable. Landscape islands and parking lanes reduce the roadway width. An offset crosswalk with curb extensions is proposed east of the main entrance to Johnson Junior High School. This will provide pedestrians a safe haven for crossing the street along with requiring drivers only one twelve foot lane instead of 30 feet to cross. The landscape island and parking lane are shown below in Figure 12. The offset crosswalk and parking curb extensions are shown on Figure 8.

Figure 12, Median Island and Parking Lane Section

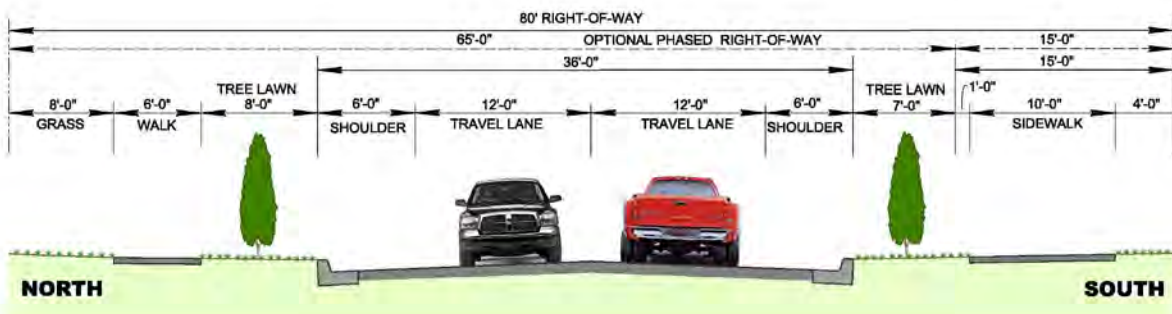
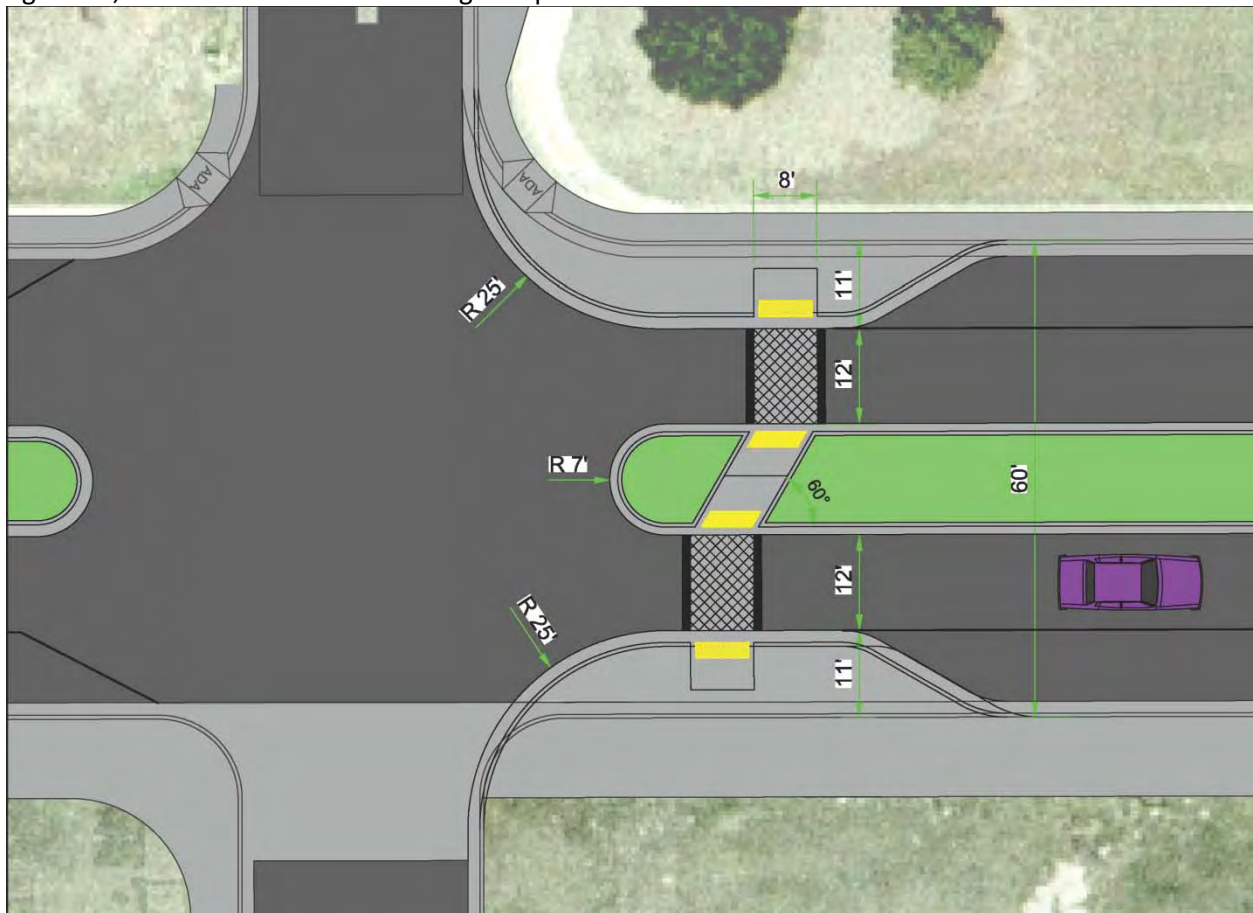


Figure 13, Offset Crosswalk and Parking Bump Outs



Although the use of landscaping in both the raised center islands and within the tree lawns between back of curb and sidewalk would enhance traffic calming, it can also provide aesthetic value for the corridor. The use of landscaping also has other benefits with regard to reduction of green house gases and urban heat island effect. For these reasons, the use of landscaping is highly recommended along this corridor.

DRAINAGE

The portion of the West Allison Road Corridor that this study covers for drainage is from South Greeley Highway to the east and Walterscheid Boulevard to the west. The remaining section of the West Allison Road Corridor has been improved as part of the development in the area. The corridor is located within the Allison Draw and Crow Creek Draw Drainage Basins. The division between the draws is Snyder Avenue.

A sub-basin between the new South High School and the existing Harmony Meadows subdivision drains north to West Allison Road and combines with a sub-basin north of West Allison Road and west of Walterscheid Boulevard. This flow combines at the intersection of West Allison Road and Walterscheid Boulevard and travels south on the west side of Walterscheid Boulevard.

When this corridor study was started, the area west of Walterscheid Boulevard and north of the sub-basin mentioned above, drained across Walterscheid Boulevard, through the proposed Gateway South project and south to West Allison Road. This area has been graded for a power sub-station with no

retention. The City of Cheyenne is requiring that the sub-station install some retention and it is assumed that the drainage flows from the sub-station will be brought back to the existing flow condition. This design has not yet been installed. For the analysis of the drainage report for the West Allison Road Corridor, the flow determined in the Gateway South study was considered to be the developed condition.

A sub-basin northeast of the intersection of West Allison Road and Walterscheid Boulevard drains south across West Allison Road and eastward to an existing low point in the street. A sub-basin north of West Allison Road will drain south across West Allison Road at a low point in the street west of South Greeley Highway. A portion of this sub-basin has recently been graded to drain into a storm drain facility that crosses under West Allison Road constructed with the Gateway South development to the north. A small developed sub-basin located northwest of the intersection of West Allison Road and South Greeley Highway drains east in West Allison Road to South Greeley Highway.

The Gateway South development has constructed a 48" RCP pipe crossing West Allison Road and an open channel to the south which connects to the Allison Draw.

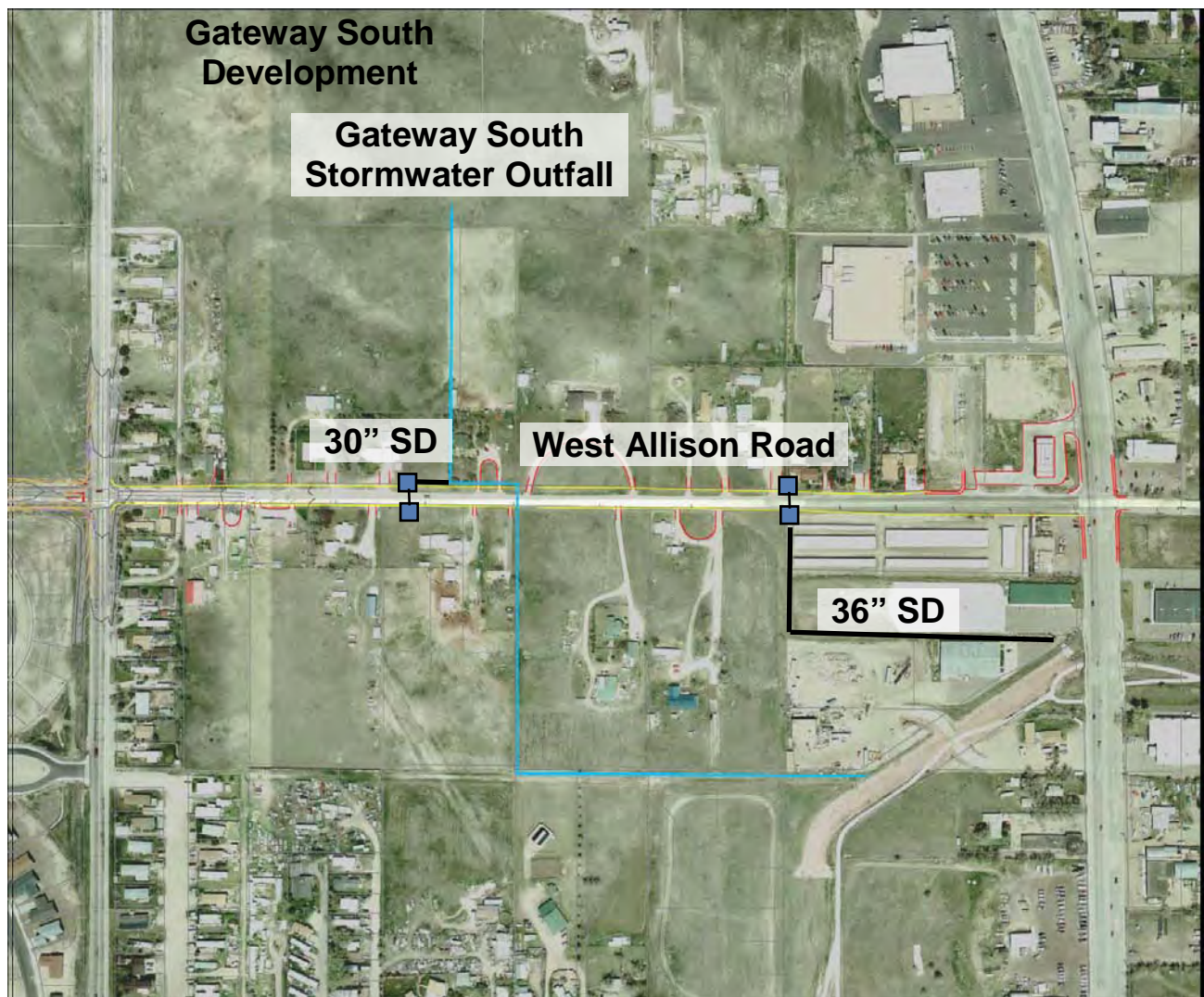
There are two options that have been analyzed for the discharge from the West Allison Road storm collection system. Option 1, as shown on Figure 14, will consist of roadway improvements with curb openings to allow flow to enter and exit the road in a manner consistent with the existing condition. This option does not improve the drainage problems in this area and is considered the last option.

Figure 14, Drainage Option 1



Option 2, as shown on Figure 15, will consist of roadway improvements with drop inlets at the two low points in West Allison Road. The flow picked up by the west drop inlets will be directed into a storm drain system that connects to the drainage facility constructed with the Gateway South project. The flow in the existing facility will increase by 3 cfs for the 100-year storm event. A second set of drop inlets will pick up flow at the low point in West Allison Road west of South Greeley Highway and direct the flow south in an existing South Cheyenne Water and Sewer District utility easement and east in an existing drainage easement to the Allison Draw. Permission to construct this facility within the utility easement is required from the District. Concerns regarding utility maintenance and infiltration into the sewer will need to be addressed for the District prior to their acceptance.

Figure 15, Drainage Option 2



Detention ponds should be required with future development at the areas west of Harmony Meadows and northwest of the intersection of West Allison Road and Walterscheid Boulevard. Also, the WAPA power sub-station should be required to retain flows in the pre-development 5-year storm. These proposed detention areas are shown on Figure 16.

Figure 16, Recommended Detention Areas



UTILITIES

Potable Water

The potable water along the eastern portion of the West Allison Road corridor is served by South Cheyenne Water and Sewer District. Their system extends as far west as Walterscheid Boulevard. Between South Greeley Highway and Walterscheid Boulevard there is a six (6) inch water line and three (3) fire hydrants. Along Walterscheid Boulevard there is a six (6) inch and a fourteen (14) inch water line. The western end of West Allison Road is serviced by the City of Cheyenne Board of Public Utilities and currently does not have any water lines along West Allison Road from just east of Desmet Avenue to Walterscheid Boulevard. Water lines should be installed and or upgraded throughout this corridor to accommodate future development including stub outs for extensions along the north-south road connector that will be between Walterscheid Boulevard and South Greeley Highway.

Sanitary Sewer

The sanitary sewer system along the eastern portion of the West Allison Road corridor is served by South Cheyenne Water and Sewer District. An eight (8) inch sanitary line exists along West Allison Road between South Greeley Highway and Walterscheid Boulevard and flows east towards South Greeley Highway. The western end of West Allison Road is serviced by the City of Cheyenne Board of Public Utilities and currently does not have any sewer lines along West Allison Road from Cribbon Avenue east.

Reuse

The City of Cheyenne Board of Public Utilities (BOPU) also has a reuse system and is expanding it across the City, however, does not service the southwest portion of Cheyenne at this time.

Natural Gas

The natural gas needs of the corridor are served by the Cheyenne Light, Fuel and Power Company. There is a 2 inch line running from Greeley Highway to Cribbon Avenue along West Allison Road. This line is of “medium” pressure designed to serve all parcels along this corridor.

Electric

The electric needs of the corridor are supplied by Western Area Power Administration (WAPA) and served by High West Energy and the Cheyenne Light, Fuel and Power Company. A preference would be for all of these lines to be underground including service to the adjacent lots. If undergrounding these lines is not feasible due to cost, the relocation of the poles may also be a viable option. A request to the electric company to move their poles to the back of right of way would need to be made. Either option will allow the construction of a new road section through this portion of the corridor.

Telephone

Phone services are currently provided by Qwest with both buried and aerial locations along the corridor. Fiber optic lines are also in place along West Allison Road from Walterscheid Boulevard to Cribbon Avenue. There are currently no plans to run fiber along the remainder of the corridor to South Greeley Highway.

Cable

Cable services are currently provided by Bresnan Communications and are also located above ground. The preference would be for these lines and services to also be undergrounded. If the electric lines are buried, then the communications lines would also be buried.

GREENWAY TRAIL / PEDESTRIAN / BICYCLE FACILITIES

Pedestrian facilities in the study corridor include sidewalks, striped crosswalks at signalized intersections, and shared use paths. West Allison Road contains sidewalks on both sides of the street along the section of road from Cribbon Avenue to Desmet Avenue a portion of which will be built as part of the South High School project. Also part of the South High School construction is a 10 foot wide walk on the south side of West Allison Road from Desmet Avenue to Walterscheid Boulevard. Sidewalk on the north side of West Allison Road between Desmet Avenue and Walterscheid Boulevard should be required when that adjacent property is developed. There are currently no sidewalks on either side of the road along West Allison Road east of Walterscheid Boulevard

According to the City of Cheyenne Greenway map, West Allison Road west of Walterscheid is a designated bike route. However, West Allison Road east of Walterscheid Boulevard is currently not on the Greenway map since that section is in the County. Due to the narrow pavement and lack of bike lanes, cyclists are discouraged from using this section. There are no existing and viable bike routes in this area.

As part of the intent to create a contiguous safe corridor for all modes of transportation a continuation of the Greater Cheyenne Greenway trail from Walterscheid Boulevard to the Gateway South drainage facility that crosses West Allison Road is recommended. In the future, this Greenway trail will continue from this point, south and east adjacent to the drainage facility to the Allison Draw Greenway Trail. From the Gateway South drainage facility under West Allison Road to South Greeley Highway an eight foot wide multi-use path is recommended.

Figure 17, Greenway Trail



Since South High school is not yet open, and a safe continuous sidewalk or bike lane does not yet exist throughout this corridor, a level of service analysis for pedestrians or bicycles was not performed. It is believed that once the high school is open and the road improvements are completed, including sidewalks, bike lanes and street lighting, the use of these facilities including the Cheyenne Greenway trail will increase significantly for the length of this corridor.

TRANSIT SERVICES

The current transit system does not service the West Allison Road corridor between South Greeley Highway and Parsley Boulevard, Johnson Jr. High, or the future South High School. The Cheyenne Transit Service is currently pursuing the possibility of adding an additional bus route (#7) to serve the SW portion of Cheyenne including South High, Triumph High and the West Allison Road corridor. Bus stops and turnouts will need to be incorporated into the final design drawings for this corridor.

WEST ALLISON ROAD – PUBLIC PARTICIPATION PROCESS

Three public meetings were held to inform and request comments from the neighborhood resident's. These meetings were held at critical points throughout the study and preliminary design process to allow ample public input that was used to evaluate the alternative road sections and alignments. Each meeting was advertised publicly and invitations were sent to attendees of prior meetings.

The first meeting was held on March 10, 2009 with the intent of informing the public of the project, projected timeline and overall process. During this meeting, valuable information was obtained from the local residents regarding the corridor. General corridor location maps and South High School information were provided. This meeting occurred during the existing conditions evaluation phase of the study and primarily asked the question, "What are your concerns with this corridor?"

The second meeting was held on August 5, 2009 with the intent of presenting roadway alternatives to the public and requesting comments on the desirability for each. A formal presentation was provided that included the different design options. An assortment of design elements, maps, street sections, streetscapes and additional materials were provided. The road sections, traffic calming options and alignment alternatives displayed were based on the input received at the first public meeting. This meeting occurred during the preliminary design phase of the study after the existing conditions were evaluated and the Baseline Report was complete.

The third meeting was held on January 26, 2010 with the intent of reviewing the final recommendations with the local residents, answering any questions they may have, and gaining their support for the project. The final recommendations included the roadway sections, alignment alternatives, pedestrian access, and drainage recommended for the corridor. This meeting occurred at the end of the preliminary design phase of the study and presented data and drawings created as part of the 35% design of the corridor.

A summary of the comments from each of these public meetings can be found in Appendix A. In addition to the public participation meetings, additional meetings were held with a Steering Committee consisting of the following:

Tom Mason - Cheyenne Metropolitan Planning Organization
Nancy Olson - Cheyenne Metropolitan Planning Organization
Doug Vetter - City of Cheyenne Engineering
Sam Berta – City of Cheyenne
Bob Nelson – City of Cheyenne
Tom Bonds – FHWA
Don Beard – Laramie County Public Works Director
Gary Kranse - Laramie County Planning Director
Matt Ashby - City of Cheyenne Urban Planning
James Sims - Cheyenne Metropolitan Planning Organization
Dennis Auker – Laramie County School District #1

The input of these mentioned steering committee members and other ensured that their concerns were addressed and that our recommendations ultimately reflected, not only the current local standards, but also the best solution to accommodate growth of the community.

CONSTRUCTION COSTS

A preliminary estimate of probable construction costs has been included in appendix E. The costs included right-of-way acquisition, roadway improvements, utilities, drainage, and landscaping. The preliminary probable costs totaled approximately \$2,974,000. The probable costs will need to be refined with further development of the civil improvement plans.

EXECUTIVE SUMMARY AND RECOMMENDATIONS

The corridor study not only involved a traffic study, drainage, report, and alignment study, but also the evaluation of the corridor surroundings containing residential use, some commercial use and the Laramie County School District # 1 Campus with Goins Elementary School, Johnson Jr. High School, and the new South High School which opens in 2010.

Recommendations

Listed below are the project recommendations:

1. West Allison Road will be constructed within a 65-foot right-of-way which will include a 36-foot wide roadway section, back of curb to back of curb. This right-of-way will be modified to 80-feet as development occurs. The additional 15-feet will be on the south side of the roadway.
2. An intersection will be constructed on West Allison Road, midway between South Greeley Highway and Walterscheid Boulevard. This will be an intersection with West Allison Road and a north/south connector street. The connector street will connect West Jefferson Road to the north and West Prosser Road to the south. The final location of this intersection should be determined at the time of final design and by development along the corridor.
3. A six foot sidewalk should be constructed on the north side of West Allison Road between South Greeley Highway and Walterscheid Boulevard.
4. A ten foot greenway should be constructed on the south side of West Allison Road between Walterscheid Boulevard and the north/south connector street. The greenway should eventually continue south and east and connect to the existing Greenway along the Allison Draw. This facility cannot be constructed until the south 15-feet of right-of-way has been dedicated.

5. An eight foot multi-use path should be constructed on the south side of West Allison Road between the north/south connector street and South Greeley Highway. This facility cannot be constructed until the south 15-feet of right-of-way has been dedicated.
6. The existing water and sewer utilities in West Allison Road between South Greeley Highway and Walterscheid Boulevard will need to be upgraded where necessary prior to roadway construction.
7. Regrade high point on West Allison Road approximately 700 feet west of South Greeley Highway to improve sight distance.
8. Install drop inlets in West Allison Road approximately 1000 feet east of Walterscheid Boulevard. Connect drop inlets into existing 42-inch RCP in West Allison Road to the east with a 30-inch RCP
9. Install drop inlets in West Allison Road at the low point approximately 1000 feet west of South Greeley Highway. These drop inlets will tie into the Allison Draw via a 36-inch RCP within an existing South Cheyenne Water and Sewer utility easement and a drainage easement.
10. It is recommended that detention ponds be installed with future development of these properties:
 - a. Northwest corner of the West Allison Road and Walterscheid Boulevard intersection.
 - b. Northeast corner of the property between South High School and Harmony Meadows.
 - c. Southeast corner of WAPA sub-station along Walterscheid Boulevard.
11. Add a right turn lane on the west leg of the West Allison Road and South Greeley Highway intersection. WYDOT will need to be coordinated with on the signal timing.
12. Construct landscaped median on West Allison Road between Snyder Avenue and Cribbon Avenue.
13. Construct bump-outs on West Allison Road on the east side of the main entrance to Johnson Junior High School. Construct offset sidewalk between the north and south bump-outs.
14. Stripe parking lanes on the north and south side of West Allison Road between Snyder Avenue and Cribbon Avenue.
15. Construct second exit from Johnson Junior High School onto Cribbon Avenue.
16. Install landscaped median on Cribbon Avenue north of Allison Road.
17. No changes will be made to West Allison Road between Cribbon Avenue and Parsley Boulevard. Modifications to this section should be evaluated at any of the following milestones: the connection of West Allison Road to Southwest Boulevard is made, Parsley Boulevard is upgraded to an urban arterial section, and the area west of Parsley Boulevard develops.
18. Install stop signs on the north and south legs of the intersections of Pinto Lane with Trail Way Road, Red Rock Road, and Elkhorn Drive.

A long term recommendation would be to evaluate the need for a roundabout at the intersection of West Allison Road and Cribbon Avenue. This evaluation should be done when a West Allison Road connection is made to Parsley Boulevard.

Execution of Recommendations

Since not all of the above recommendations are required at this time or have funds available for the improvements, it is recommended that these improvements be phased to address the primary concerns now and subsequent issues as they arise and funds become available. The timeframes for these phases of improvements should ultimately be determined by the City of Cheyenne, Laramie County, WDOT, and based on needs.

APPENDIX A

Public Participation Summary

West Allison Road Corridor Study

March 10, 2009

Public Open House Workshop # 1 Meeting Summary

On March 10, 2009 the West Allison Road Corridor Study held the first public workshop. The objectives of the meeting were to introduce the project and the process and to identify public issues and concerns. The attendees included residents and community organization representatives.

The attendees were asked to review several display boards showing the location of the study, future development, zoning, etc. and then respond to a questionnaire. The comments, questions and feedback received from the public will prove valuable in determining the issues and needs of the West Allison Road Corridor Study. The project team will review these issues and will present options and alternatives addressing them to the MPO and to the public in future public open houses.

QUESTIONNAIRE RESULTS

TOP THREE CONCERNS REGARDING WEST ALLISON ROAD

- Overall safety (pedestrian, bicycle, other)
- Speeding
- Traffic volume increase

Statistics:

1. Speeding is the single most common traffic rule violation and contributes to one third of all road traffic accidents. (W.H.O.)
2. Pedestrians account for about 30% of all traffic fatalities involving children under the age of 15 years. (NHTSA)
3. Road traffic crashes are the leading cause of death among children in the United States. (US Center for Disease Prevention)

TOP THREE TRAFFIC CONTROL DEVICES SELECTED

1. Radar Speed Sign
2. Roundabout Intersection
3. Speed Hump

Statistics:

- Most pedestrian fatalities occur in urban areas (73%) at non intersection locations (77%) in normal weather conditions (90%) and at night (67%). (NHTSA, 2007)
- Road traffic crashes are the leading cause of death among young people (ages 10-24) in the world. (WHO) They are also the leading cause of death among children in the United States. (United States Center for Disease Prevention)
- Speeding is the single most common traffic rule violation and contributes to one third of all road traffic crashes. (WHO)
- Traffic calming measures are a key intervention to road traffic crashes and deaths. (World Report on Road Traffic Injury Protection)
- If current trends continue, the number of people killed and injured on the world's roads

- will rise by more than 60% between 2000 and 2020. (WHO)
- In 2005, traffic accidents killed an average of 4 children under the age of 14 each day and injured 556 daily. In total, 203,000 children were injured and 1,451 were killed. (National Center for Health Statistics 2006 Report)
 - 53% of fatal head injuries in an eight year study were to children who were playing in the street when injured (American Journal of Public Health)
 - A study of 43 international traffic calming programs found that traffic calming solutions decreased traffic accidents by 8-100% (ITE Traffic Calming: State of the Practice)
 - Two thirds of children who are hurt or killed in traffic accidents are struck and injured within several blocks (.25 miles) of their homes. (American Journal of Public health)
 - Traffic calming has proven far more effective in preventing child pedestrian injuries than road safety education, which has been “unable to exert meaningful changes in the behavior of children”. (American Journal of Public Health)
 - Residential areas within close proximity of speed control devices have 50% less pedestrian related vehicular collisions. (American Journal of Public Health)
 - Speed humps were associated with a 53-60% reduction in injuries and fatalities among children struck by an automobile in their neighborhoods. (AJPB)
 - Crash rates for roundabouts are 30-60% lower than signalized intersections, and are significantly less serious.
 - Pedestrian and bicycle accidents are also significantly reduced for roundabouts compared to signalized intersections.

The public has issues with traffic volume and speed. They stated that speed on West Allison Road is a major issue, particularly near the schools. They felt that implemented traffic management solutions could improve the area and pedestrian safety while protecting neighborhood streets from excessive traffic.

Again, pedestrian and bicyclist safety was an issue. The public felt that the area along West Allison Road is not “walk-able” or “bike-able” because of the amount of vehicle traffic on West Allison Road and the lack of bicycle lanes in the street and lack of sidewalks.

West Allison Road – Notes

1. Easterly Portion - South Greeley Highway to Walterscheid
 - a. 50' R/W (80' Required for Collector)
 - b. Numerous residences with multiple driveways onto West Allison Road
 - c. Overhead Power Lines on both sides of street
 - d. Drainage is a problem along West Allison Road (somewhat being addressed as part of the Gateway South Project) – Gene McDonald included additional flow for West Allison Road Improvements)
 - e. Looking at proposed location for north-south connector
 - f. Light at West Allison Road and Walterscheid Boulevard being done under South High School

2. Westerly Portion - Cribbon Ave to Parsley Blvd
 - a. Narrow Street Section (50' R/W)
 - b. Number of Houses that back onto street (including apartment building)
 - c. Houses on end of block

Pinto cut through

West Allison Road Corridor Study – Public Feedback Summary

Public Meeting was held on March 10, 2009

23 Questionnaires were completed

The below information summarizes the resident's responses.

Existing Conditions

1. Do you believe Allison Road adequately accommodates:
- | | | |
|-----------------------|--------------------|--------------------|
| a. Traffic flow | Yes <u>8</u> (35%) | No <u>15</u> (65%) |
| b. Pedestrian traffic | Yes <u>3</u> (13%) | No <u>20</u> (87%) |
| c. Bicycles | Yes <u>3</u> (13%) | No <u>20</u> (87%) |

Comments:

- *Not wide enough, poor sidewalks for having (3) schools*
- *All of the above were not planned for resulting in today's inadequacies*
- *Pedestrians and cyclists need a dedicated path*
- *It does now, but I'm not so sure it will when South High opens*
- *At the present time it is ok, however, after the school opens I don't know.*
- *Traffic is too fast and not controlled*

2. Do you feel speeding is an issue along the Allison corridor between South Greeley Highway and Walterscheid Boulevard? Yes 13 (57%) No 7 (30%) Not Sure 3 (13%)

Comments:

- *People try to drive too fast for current conditions.*
- *If the road is re-engineered, higher speeds would be safer (35 mph)*
- *Yes, coming down the hill too fast*
- *Yes, speed signs are too small*

3. Do you feel speeding is an issue along the Allison corridor between Walterscheid Boulevard and Cribbon Avenue? Yes 10 (43%) No 8 (35%) Not Sure 5 (22%)

Comments:

- *Not yet, but speeding will be an issue when the high school opens*
- *Yes, a roundabout will help slow the speed*
- *Speeding is an issue from Cribbon to Andrews*
- *If emphasis is placed on bicycle and pedestrian safety, traffic speeds could be safely raised.*
- *No, but needs road repair*
- *Yes, it is a problem on Allison and elsewhere*

In your opinion, will traffic speed reduction measures be necessary along Allison Road to help keep speeds down? Yes 18 (78%) No 1 (4%) Not Sure 4 (17%)

*If yes, then what type? Speed Hump 3 (10%) Speed Table 1 (3%)

Raised Crosswalk <u>2</u> (7%)	Raised Intersection <u>0</u>
Textured Pavement <u>2</u> (7%)	Roundabout Intersection <u>4</u> (15%)
Chicanes <u>1</u> (3%)	Neckdown <u>0</u>
Center Island Narrowing <u>3</u> (10%)	Choker <u>0</u>
Radar Speed Sign <u>11</u> (38%)	Speed Cushion <u>2</u> (7%)

Comments:

- *Center Island Narrowing makes plowing difficult*
- *Concerned about Parsley/College intersection and bottle neck at Ames and Parsley/Deming now has a park there too. Need sidewalks all the way down Parsley.*
- *Cannot answer question without traffic data and planning goals.*
- *More pedestrians are moving between Cribbon and S. Greeley Hwy.*
- *Trash is being thrown from car windows*
- *Add radar speed sign with police patrols*
- *Road needs repair in front of Concord Village*
- *I don't like the idea of calming islands like on Vonderhor and 12th St.*
- *Needs greenway from Walterscheid to school (South and Johnson)*
- *Sight distance is too short coming from South Greeley Hwy towards Walterscheid*
- *Not sure the traffic calming will work with younger drivers, can we use enforcement?*

South High School Addition

4. In what way do you think South High will impact Allison Road the most?
 Speeding 13 (33%) Traffic Volume 22 (57%) Other 4 (10%)

Comments:

- *Vehicle vs. pedestrian in emergency response*
- *Accidents*
- *Reckless drivers*
- *Student drivers*
- *I wonder about off campus smoking affecting my adjacent property*

5. Are pedestrian facilities, bicycle facilities and crossings adequate on Allison Road?
 Yes 2 (9%) No 21 (91%)

Comments:

- *Area was poorly planned and South High just added to the problem. I'm not against the high school, just the lack of planning.*
- *No, with the exception of the Snyder intersection and Walterscheid intersection*
- *No, particularly going down the hill*
- *They are ok now, but after school opens I don't know.*
- *No, Greenway upgrade will help*

- *No, there are no sidewalks*
- *No, bikes and pedestrians need sidewalks or paths*

Future Growth

6. What issues do you see with the Pinto and West Jefferson connections from Allison Road to Parsley Boulevard?

Comments:

- *It avoids the steep hill on Allison which is a good thing*
- *Will all streets be designed for present or future traffic?*
- *Traveling through residential areas*
- *Traffic and turning movements*
- *Traffic routed through residential street*
- *Pinto will have to deal with much higher vehicle traffic volumes, West Jefferson not so much*
- *Traffic volume*
- *Ok at present time*
- *Glad to see the Pinto connection*
- *More traffic*
- *More traffic than before schools open*

7. Do you feel additional traffic from future growth in the area will impact your neighborhood?

Yes 17 (74%)

No 4 (17%)

Don't Know 2 (9%)

Comments:

- *Yes, lower property values*
- *Yes, more traffic*
- *Yes, safety and noise*
- *Yes, traffic volume and speeding in a quiet neighborhood*
- *Yes, somewhat more cars*
- *Yes, there will be a distinct "honeymoon" period with South high school opening; our neighborhood is not used to the same problems as Education Boulevard and East Pershing Avenue*
- *Yes, just more cars on Allison and Cribbon*
- *Yes, there will be a lot more traffic*
- *Yes, more noise*
- *Yes, less peace and comfort*
- *Yes, more traffic and crime*
- *Yes, more people*
- *Yes, speeding*

8. Does the intersection of West Jefferson and Cribbon (Goins Elementary) concern you for any of the following reasons:

a. Pedestrian / Child safety	Yes <u>15</u> (65%)	No <u>1</u> (4%)	Don't know <u>7</u> (31%)
b. Traffic congestion	Yes <u>14</u> (61%)	No <u>1</u> (4%)	Don't know <u>8</u> (35%)
c. Visibility	Yes <u>12</u> (52%)	No <u>2</u> (8%)	Don't know <u>9</u> (40%)

Comments:

- *There is a park there also.*
- *Constant speeding in school zone*
- *The connection going East to West at Jefferson could be improved.*

Additional Public Comments:

Comments:

- *Street lights need to be added to all surrounding residential streets due to increased traffic volume.*
- *I am concerned for tanker truck traffic on Parsley, need increased radius from Pinto; demand light during peak school hours or something needed.*
- *We live right behind Little Caesars and we have a rough time getting out of our driveway to get onto the road now. People don't appear to know what the stop sign says. They are barreling around the corner without a care whether we are half way out of our driveway or not. We have to pull back into our drive because they feel that they have the right to keep coming even with us half way into the street. They are always racing past our place well over the speed limit which is posted right in front of our place. There is a dip in the road to the West of us, which makes it so that we cannot always see the traffic coming up the hill. The speed is a problem.*
- *I don't understand how this concern is raised for input "after the high school is built" and why the planning dept. was late in doing so.*
- *I hope future meetings will provide info to me other than six boards that only show me the problems that I've lived with for 25 years.*
- *I want change because of poor past planning and maintenance of existing infrastructure.*
- *I hope this works out better than the roundabout. The snow removal is poor. The lane is not wide enough and busses are always climbing the curb to make the corner. It appears to be becoming a joke when the new school opens.*
- *The maximum speed limit should be no more than 30 mph between Sough Greeley Hwy and Walterscheid. There should be yellow flashing lights on Walterscheid to warn of a stop sign at the intersection of Allison Road and Walterscheid and to help slow traffic.*
- *Routing traffic through Pinto helps to decrease traffic in front of Goins School.*
- *How many feet of ROW do you plan to take?*
- *I hope this new high school does not affect me adversely, particularly from a littering standpoint.*
- *Allison Road needs to be replaced. The repair that has been done makes the street extremely rough.*
- *I would like to see some sort of natural walk between Johnson Jr. High and the New South High for safety reasons.*
- *Speed limit on Allison should be 30 mph.*
- *Some sort of school zone speed limit should be installed between Snyder and Cribbon (20 mph)*

- *If the roundabout fails (too many accidents when South High opens) a traffic light should be installed for safety reasons.*
- *Allison Road West, from Parsley to Southwest Drive? Bridge or tunnel over/under Burlington Northern Tracks for future growth.*
- *I would like to see more greenway linking Allison Road to Southwest Drive and linking to Central Cheyenne from Johnson / South High area.*
- *Respect and protect homes in Allison Road area and reroute Allison so as to not take homes from owners.*
- *Calming Islands do not work on the north, why not narrow the roadway and lower the speed limit instead.*
- *Right now, the speed limit signs are too small, too old, and drivers cannot read what is printed on them.*

Review Notes:

1. If questions were left blank with no comments, their response was assumed to be “Don’t know.”
2. If a response was marked “no” but the comment indicated “yes,” a Yes was tabulated.
3. If a response was marked “yes” but the comment indicated “no,” a No was tabulated.
4. For question ‘4’, the correct response was to check one of the three available options, however, many responses checked multiple boxes. For this reason, a percentage was calculated from the total number of responses rather than on the number of questionnaires submitted.

West Allison Road Corridor Study

August 5, 2009

Public Open House Workshop # 2 Meeting Summary

On August 5, 2009 the West Allison Road Corridor Study held the second public workshop. The objectives of the meeting were to provide proposed recommendations for the project and to receive public input. The attendees included residents and community organization representatives.

The attendees were given a presentation, showing the proposed road alignments and sections, drainage conditions, greenway trail continuation, Johnson Junior High Driveways, Project Schedule, and Traffic Calming. They were then asked to respond to a questionnaire. The comments, questions and feedback received from the public will prove valuable in determining residents concerns of the West Allison Road Corridor Study. The project team will review these issues and will present options and alternatives addressing them to the MPO and to the public in future public open houses.

QUESTIONNAIRE RESULTS

The public would rather have a bicycle path separated from traffic and would be more likely to use it if it was there. They would not be likely to use a new connection to Parsley Road but would like to see a continuous connection from West Allison Road to Parsley Boulevard. They are concerned with increased traffic. They would rather see a 65-foot right-of-way for West Allison Road from Walterscheid Boulevard to South Greeley Highway with street lights and underground power lines. Approximately half have drainage issues.

West Allison Road Corridor Study – Public Feedback Summary

Public Meeting was held on August 5, 2009

14 Questionnaires were completed

The below information summarizes the resident's responses.

1. If on-street bicycle lanes were provided along the West Allison Road corridor from Cribbon Ave to South Greeley Hwy, would you use them? If so, how frequently?

Yes 3 (22%) No 9 (64%) None Given 2 (14%)

Comments:

- *I'm not a biker*
- *Don't have a bicycle*
- *3/week*
- *Weekly*

2. Would you be more likely to use bike paths if they were separated from traffic?

Yes 6 (43%) No 7 (50%) None Given 1 (7%)

Comments:

- *Bike lanes are good. Shared walks may work.*
- *That mixes commuting bike traffic w/ walkers, joggers dog walkers etc.*

3. If sidewalks and /or the Greenway Paths were installed along the West Allison Road corridor from Cribbon Ave to Greeley Hwy, would you use them? If so, how frequently?

Yes 8 (57%) No 5 (36%) None Given 1 (7%)

Comments:

- *2 times a week*
- *Often*
- *Possible walk*
- *Everyday*
- *Weekly*
- *Whenever I walked*

4. A road connection is being built from West Allison Road at Cribbon Ave south to Pinto Lane. This will provide a new connection to Parsley Boulevard Do you plan to use this connection? If so, how frequently?

Yes 4 (29%) No 10 (71%) None Given 0 (0%)

Comments:

- *20 year*
- *4-5/week*
- *Occasionally. I don't often go that way*

5. In addition to the Pinto Lane and West Jefferson connection to Parsley Blvd, would you like to see a continuous connection from West Allison to Parsley Blvd? Of the three routes, which route would you most likely use?

Yes 8 (57%) No 4 (29%) None Given 2 (14%)

Comments:

- *if you put Allison through to Parsley you increase traffic*
- *I live on West Allison*
- *W. Allison to Parsley*
- *Definitely! Daily*
- *West Jefferson*
- *Connection from W. Allison to Parsley*
- *Allison*
- *Allison. Traffic will come no matter what. Most direct route makes most sense.*

6. Two different street sections are being considered for the South Greeley Hwy to Walterscheid Blvd portion of the project. Would you prefer to see: (See Proposed Corridor Road Sections Display Board)

Option 1 (80' Right-of-Way with a detached multi-use path and detached sidewalk with landscaped tree lawns on both sides)

Option 2 (65' Right-of-Way with an attached multi-use path on the south and detached sidewalk with a landscaped tree lawn on the north side only)

Option 1 4 (29%) Option 2 8 (57%) None Given 2 (14%)

Comments:

- *[Option 1] NO WAY!*
- *[Option 2] I'm O.K. with this, but it is NOT shown that way on Option 2 map.*
- *50' - better*

7. Would you like to see the entire West Allison Road corridor lit with street lights?

Yes 11 (79%) No 2 (14%) None Given 1 (7%)

Comments:

- *Certain sections, not entire stretch*

8. Would you like to see the overhead power lines along West Allison Road moved underground?

Yes 6 (43%) No 5 (36%) None Given 3 (21%)

Comments:

- *Not concerned*
- *Doesn't make much difference*
- *Doesn't matter/Either way is fine.*
- *No opinion*

9. Within the past year, have you experienced any rain water, snow melt, or flooding problems along the West Allison Road right-of-way? If so, please describe.

Yes 7 (50%) No 6 (43%) None Given 1 (7%)

Comments:

- *Corner of Ahrens & Allison*
- *The alley south of our property gets a lot of water in our yard*
- *N/A*
- *Ice-Slick*
- *Snow melt & plowing [our] drive way shut*

Additional Public Comments:

Comments:

- *What are you doing about mail boxes? I would be ok with a community mailbox system if it isn't too far from my home.*
- *I want to keep my horses and livestock without restrictions. I would also like to see a bridle or horse trail on the south side of W. Allison Rd between S. Greeley Hwy and Cribbon.*
- *I want you to consider ditches (depressed medians) in the center of W. Allison Rd instead of fancy landscaping. This will help with flooding and snow removal, and will also slow down traffic.*
- *Consider taking Cribbon to College*
- *Planting strips are very difficult to maintain – water, snow, etc.*
- *Why shoulders?*
- *Wider travel way makes for more speed – Allison is a raceway now.*
- *Calming islands are poor solutions to slowing traffic.*
- *Sidewalk on one side only.*
- *We have trouble getting in and out of our driveway. My concern is if you lower the road in front of us, what is our access going to be.*

West Allison Road Corridor Study

January 26, 2010

Public Open House Workshop # 3

Meeting Summary

On January 26, 2010 the West Allison Road Corridor Study held the third and last public workshop. The objectives of the meeting were to provide proposed recommendations for the project and to receive public input. The attendees included residents and community organization representatives.

The attendees were presented drawing boards, showing the overall project recommendations, recommended road alignments and sections, recommended improvements to West Allison Road between Snyder Avenue to Cribbon Avenue, and the recommended drainage improvements. The 35% plans were also available for review. MPO and Western Research and Development staff were available to answer questions regarding the boards and the project. The public was asked to fill out a comment card. The comments, questions and feedback received from the public will prove valuable in determining resident's opinions on the final project recommendations of the West Allison Road Corridor Study.

COMMENT CARD RESULTS

Mr. Ed Murray, III requested that the recommendation for the roundabout at the intersection of West Allison Road and Walterscheid Boulevard be removed. After conversation with City of Cheyenne staff this recommendation has been removed. A copy of the memorandum of the comments is included in this Appendix.

Other comments included concerns regarding the street lighting and snow accumulation at the existing roundabout on West Allison Road and Snyder Avenue and the construction of medians along Cribbon Avenue north of West Allison Road. There were also positive comments of satisfaction of the plan.

MURRAY PROPERTIES

Edward F. Murray, III - President
1616 Warren Ave., Ste. 21
Cheyenne, Wyoming 82001

TELEPHONE (307) 634-8364
CELL PHONE (307) 421-2741

E-MAIL: Murrayproperties@qwestoffice.net
FAX NUMBER (307) 634-2413

MEMORANDUM January 28, 2010

TO: Gary Grigsby
Western R & D, Ltd.
SENT VIA FAX (307)635-0410

FROM: Ed Murray, III
Murray Properties

RE: Allison Road Corridor Study

Dear Gary:

It was nice visiting with you a few minutes ago on the telephone. As we discussed, on January 26, 2010 I attended the open house at JJHS in regards to the Allison Road Corridor Master Plan and was surprised to see that one of your display boards indicated that a round-a-bout was being recommended for the intersection of Walterscheid and Allison Rd. This note shall confirm that when we spoke a few minutes ago, you assured me that no round-a-bout would be recommended for that intersection inasmuch as the matter has already been decided with the powers to be and it was determined to have that intersection (Walterscheid and Allison Rd.) remain a straight intersection with the control lights which are in the process of being installed. In any event you stated that you would make sure that any final reports regarding this study correctly describe the intent for that intersection.

On the other note regarding my receipt of a copy of the drainage plan, please go ahead and send it to me in digital format using my e-mail address as shown above on this letterhead.

Very Truly Yours,

MURRAY PROPERTIES

Edward F. Murray, III
President

EFM:via

APPENDIX B

Preliminary Design

PRELIMINARY DESIGN AND CONSTRUCTION PLANS FOR WEST ALLISON ROAD IMPROVEMENTS

CHEYENNE, WYOMING
MARCH 17, 2010

GENERAL NOTES:

1. ALL WORK SHOWN ON THESE CIVIL DRAWINGS WHETHER PUBLIC OR PRIVATE IMPROVEMENTS SHALL COMPLY AS A MINIMUM WITH THE CITY OF CHEYENNE CONSTRUCTION STANDARDS. THE LATEST VERSIONS, UNLESS MODIFIED IN THESE DRAWINGS AND/OR NOTES.
2. ALL STATIONING IS ALONG ROADWAY CENTERLINE OR BASELINE, UNLESS OTHERWISE NOTED.
3. IN THE PLAN AND PROFILE SHEETS, LT. IS LEFT AND RT. IS RIGHT OF CENTERLINE LOOKING "UP STATION" ALONG CENTERLINE.



VICINITY MAP
N.T.S.

CALL BEFORE YOU DIG
1-800-849-2476



PROJECT CONTACTS

PROJECT MANAGER
DAVID TRUSHAW
(307)632-5656
dtrushaw@wrld-ltd.com

LAND SURVEYOR
DAVID SWANSON
(307)632-5656
dswanson@wrld-ltd.com

ENGINEER'S CERTIFICATE

I, DAVID W. TRUSHAW, A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WYOMING, DO HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY DIRECT SUPERVISION AND ARE CORRECT AND ACCURATE TO MY BEST KNOWLEDGE AND BELIEF.

DAVID W. TRUSHAW, PE 12520

SHEET INDEX

C-001	COVER SHEET
C-010	TYPICAL SECTIONS
C-100	EXISTING CONDITIONS PLAN
C-120	RIGHT-OF-WAY PLAN
C-275 - C-278	WEST ALLISON ROAD PLAN & PROFILES
C-279	JOHNSON JR HIGH PEDESTRIAN CROSSING
C-290	ALTERNATE INTERSECTION (ROUNDBOUT)

Western
RESEARCH & DEVELOPMENT, LTD.
5908 YELLOWSTONE ROAD, SUITE B CHEYENNE, WY. 82009 (307) 632-5656

CLIENT INFORMATION
CHEYENNE METROPOLITAN
PLANNING ORGANIZATION
2101 O'NEIL AVENUE
CHEYENNE, WY. 82007

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COVER SHEET

WEST ALLISON ROAD CORRIDOR STUDY

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130-1388-00 ALLISON CORRIDOR

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17 MAR, 2010

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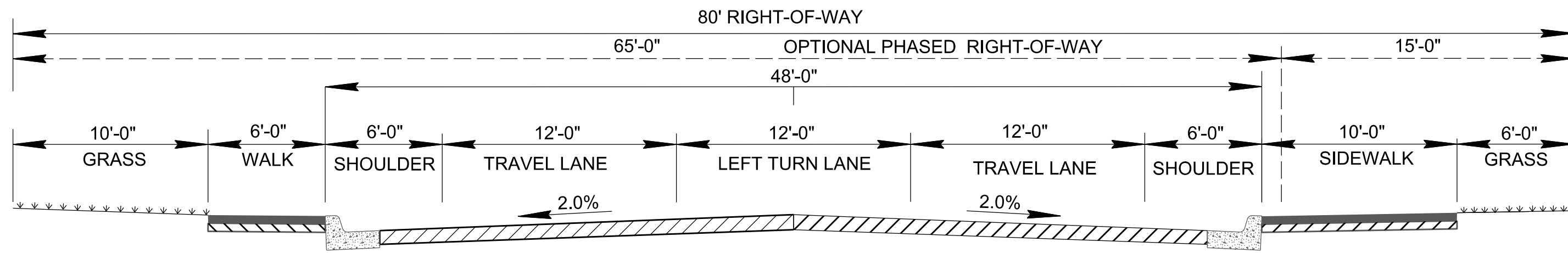
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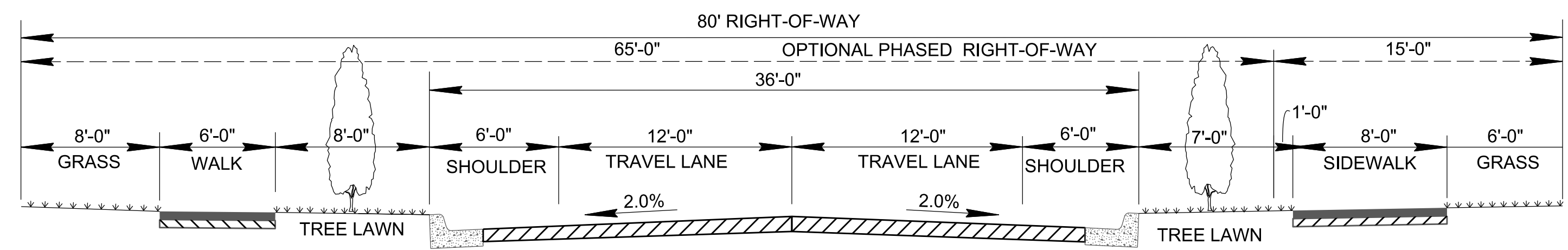
C-001

PROPOSED TYPICAL SECTIONS



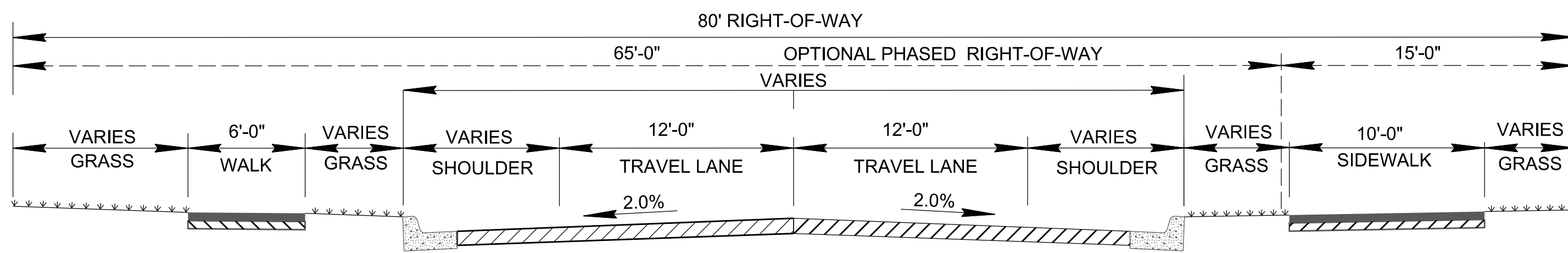
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(AT INTERSECTIONS)**

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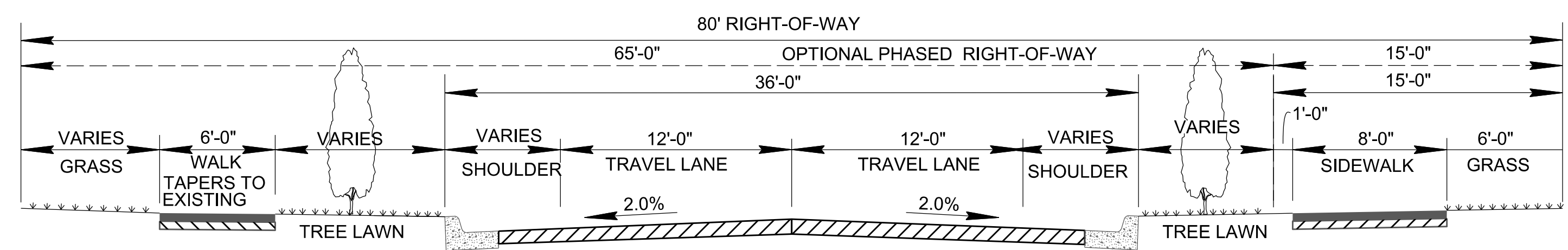
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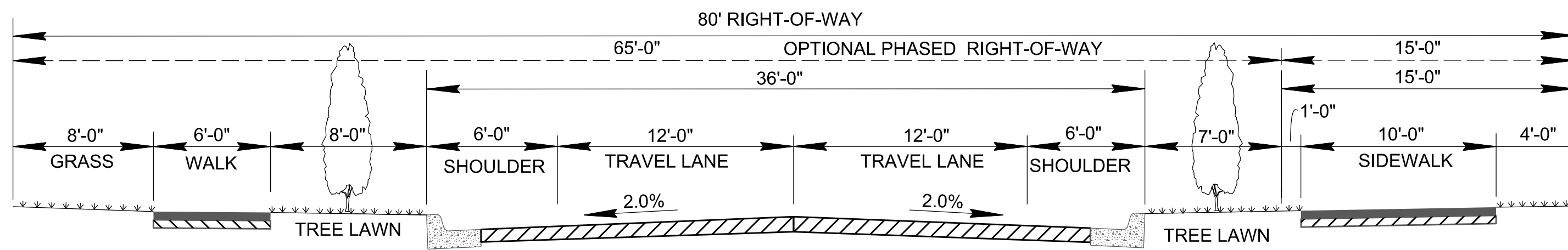
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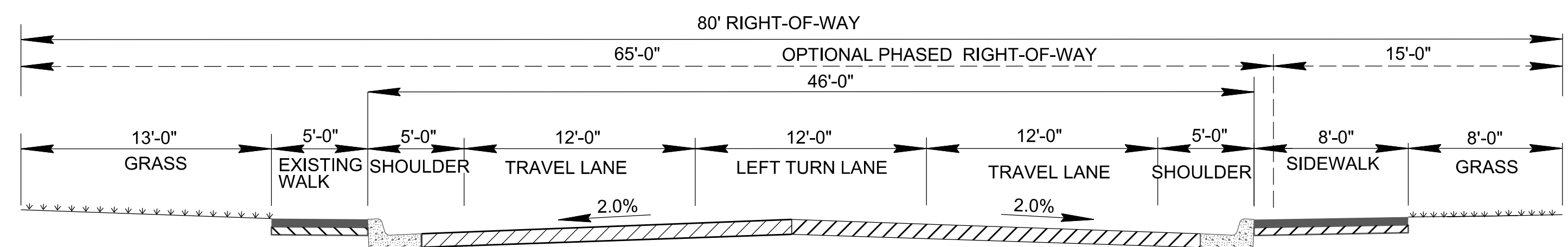
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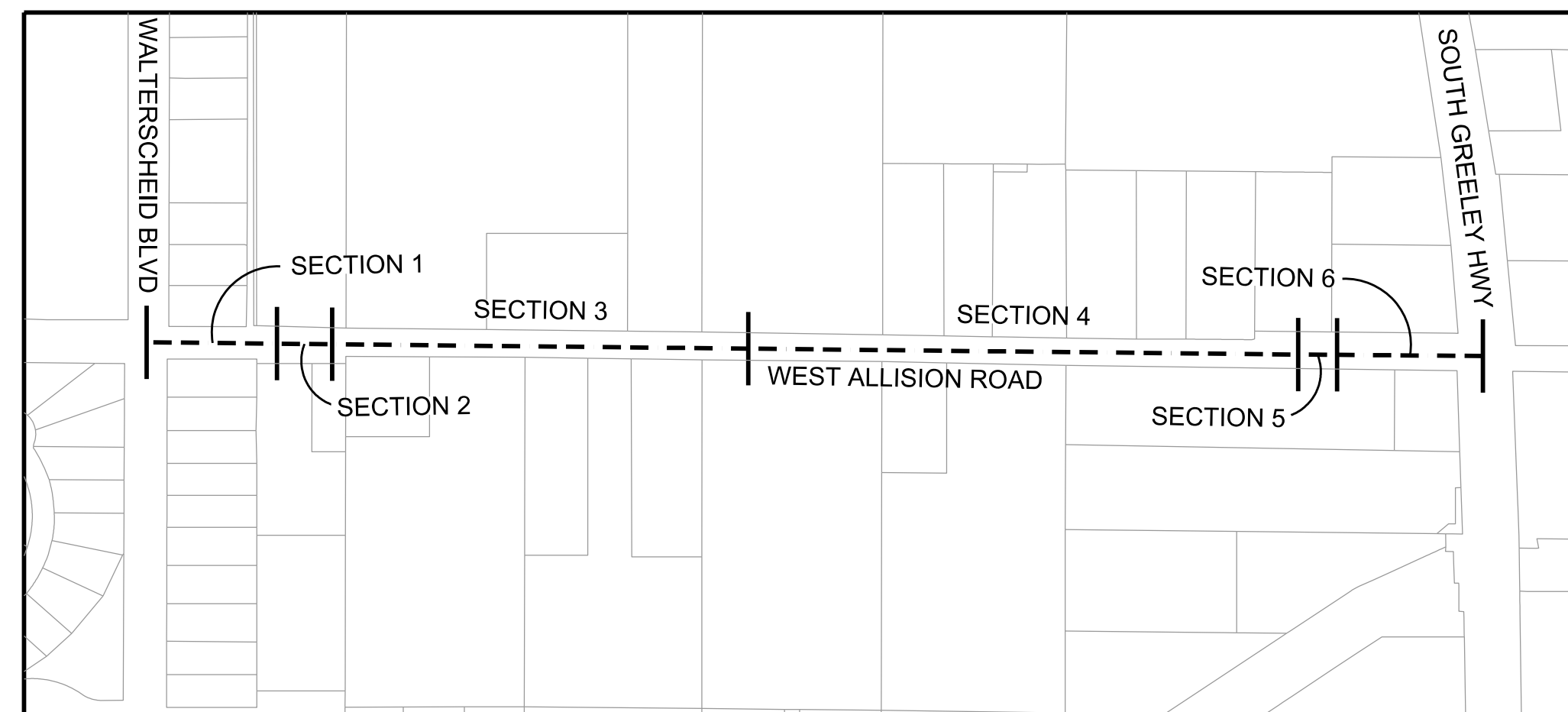
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(AT INTERSECTIONS)**

SECTION 3



**WEST ALLISION ROAD SECTION
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(AT INTERSECTIONS)**

SECTION 6



SECTION LOCATIONS



CLIENT INFORMATION
CHEYENNE METROPOLITAN
PLANNING ORGANIZATION
2101 O'NEIL AVENUE
CHEYENNE, WY. 82007

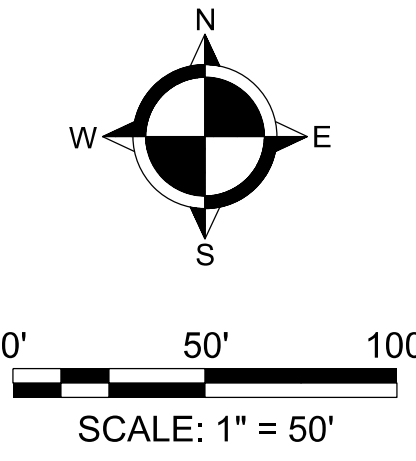
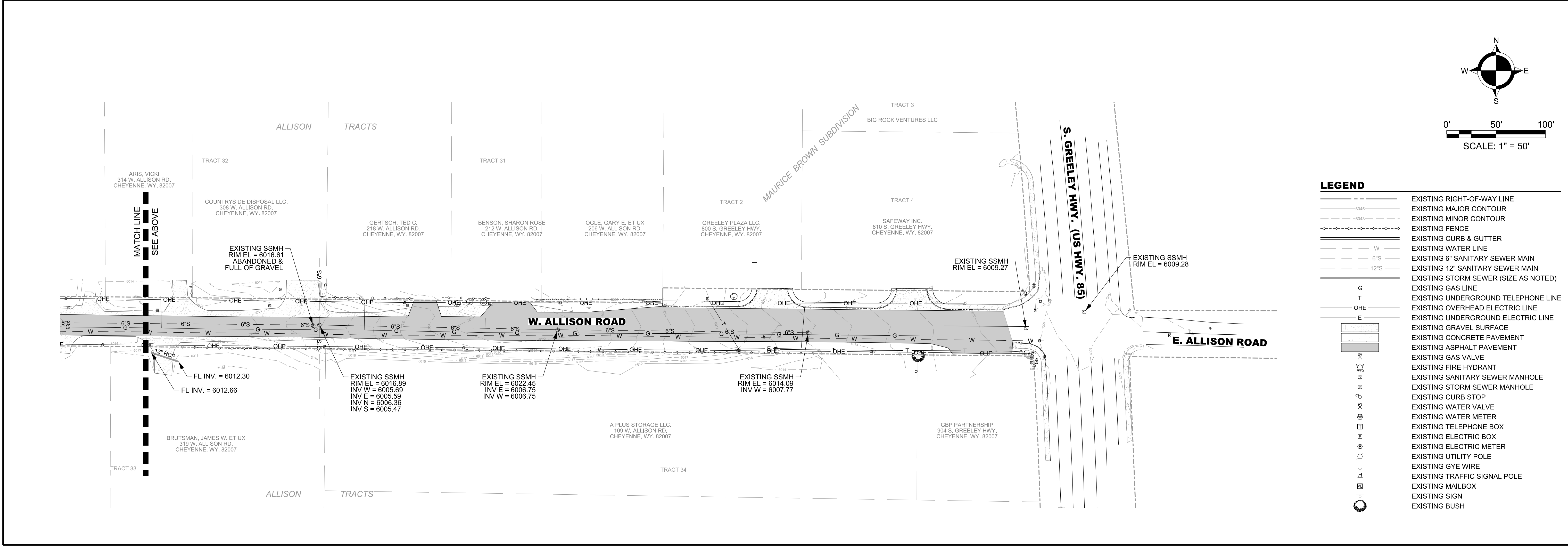
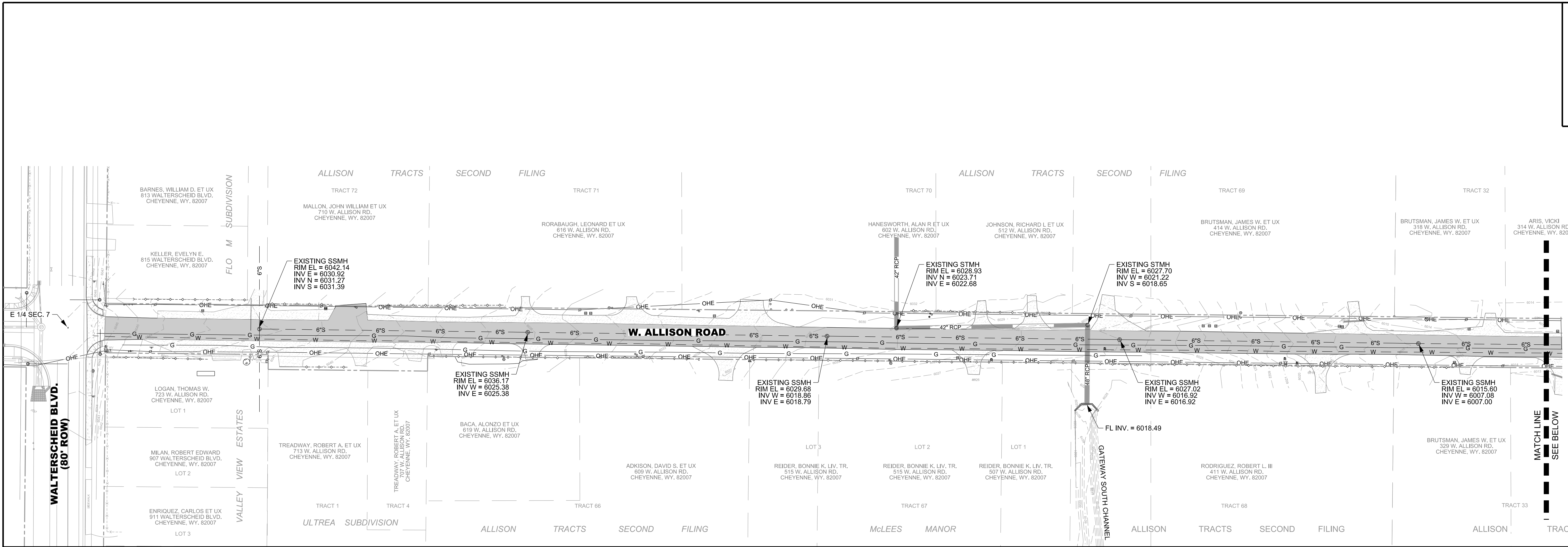
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C-010

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LEGEND

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	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FENCE
	EXISTING CURB & GUTTER
	EXISTING WATER LINE
	EXISTING 6" SANITARY SEWER MAIN
	EXISTING 12" SANITARY SEWER MAIN
	EXISTING STORM SEWER (SIZE AS NOTED)
	EXISTING GAS LINE
	EXISTING UNDERGROUND TELEPHONE LINE
	EXISTING OVERHEAD ELECTRIC LINE
	EXISTING UNDERGROUND ELECTRIC LINE
	EXISTING GRAVEL SURFACE
	EXISTING CONCRETE PAVEMENT
	EXISTING ASPHALT PAVEMENT
	EXISTING FIRE HYDRANT
	EXISTING FIRE HYDRANT
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM SEWER MANHOLE
	EXISTING CURB STOP
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING TELEPHONE BOX
	EXISTING ELECTRIC BOX
	EXISTING ELECTRIC METER
	EXISTING UTILITY POLE
	EXISTING GYE WIRE
	EXISTING TRAFFIC SIGNAL POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING BUSH



**WEST ALLISON ROAD
 EXISTING TOPOGRAPHY
 WEST ALLISON ROAD CORRIDOR STUDY**

CLIENT INFORMATION
 CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

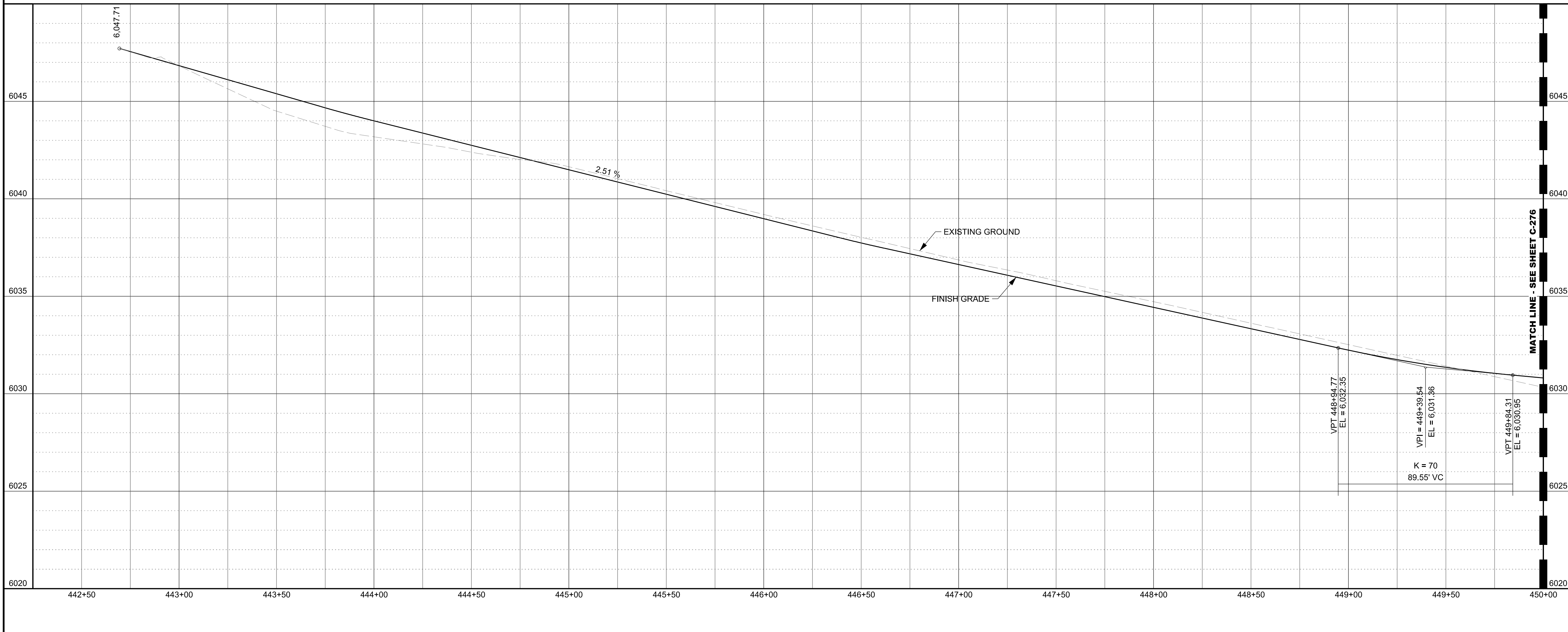
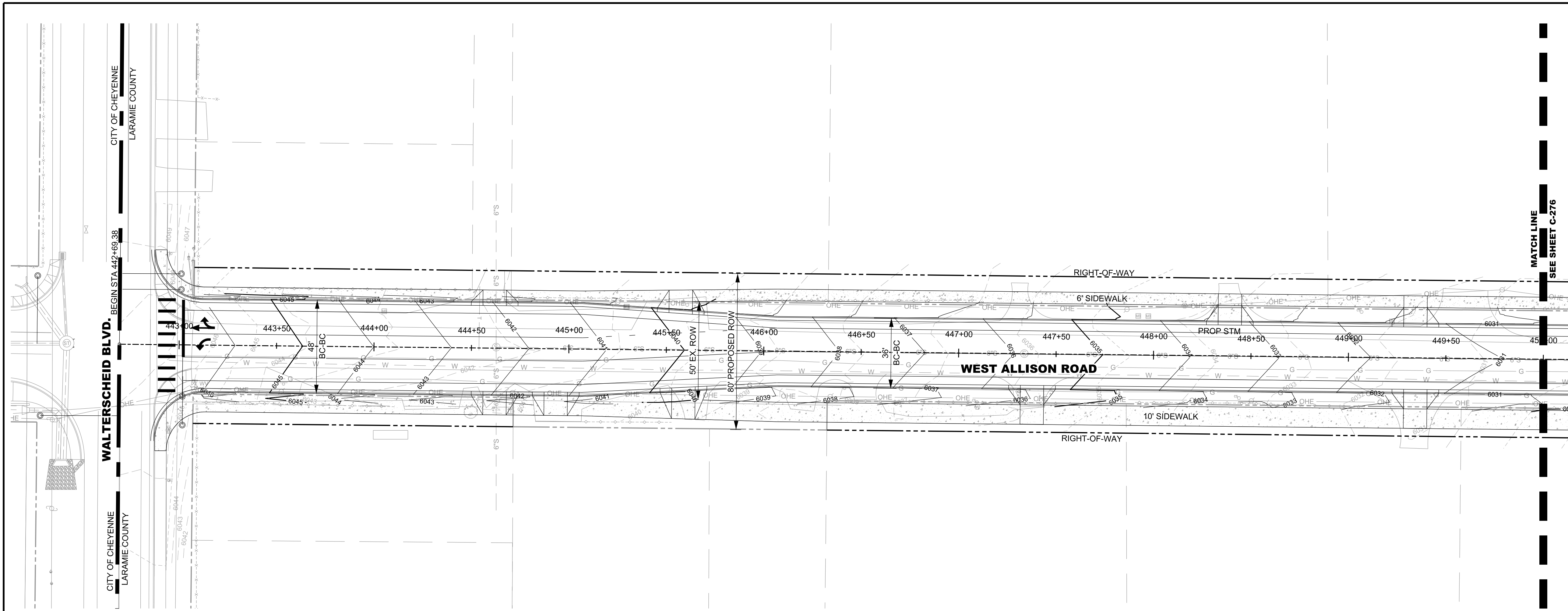
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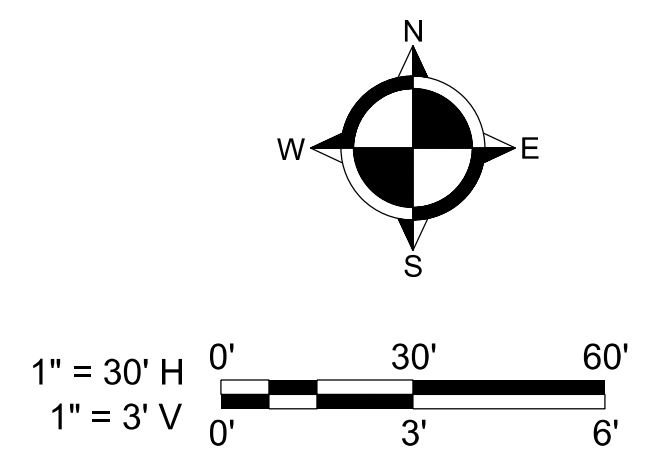
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WEST ALLISON ROAD PLAN VIEW
 STA 442+69.38 TO STA 450+25

WEST ALLISON ROAD PROFILE VIEW
 STA 442+69.38 TO STA 450+25



NOTES:
 1. STA 442+69.38 TO STA 467+00.00 IS CURRENTLY MAINTAINED BY LARAMIE COUNTY.

LEGEND:



CLIENT INFORMATION
**CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION**
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

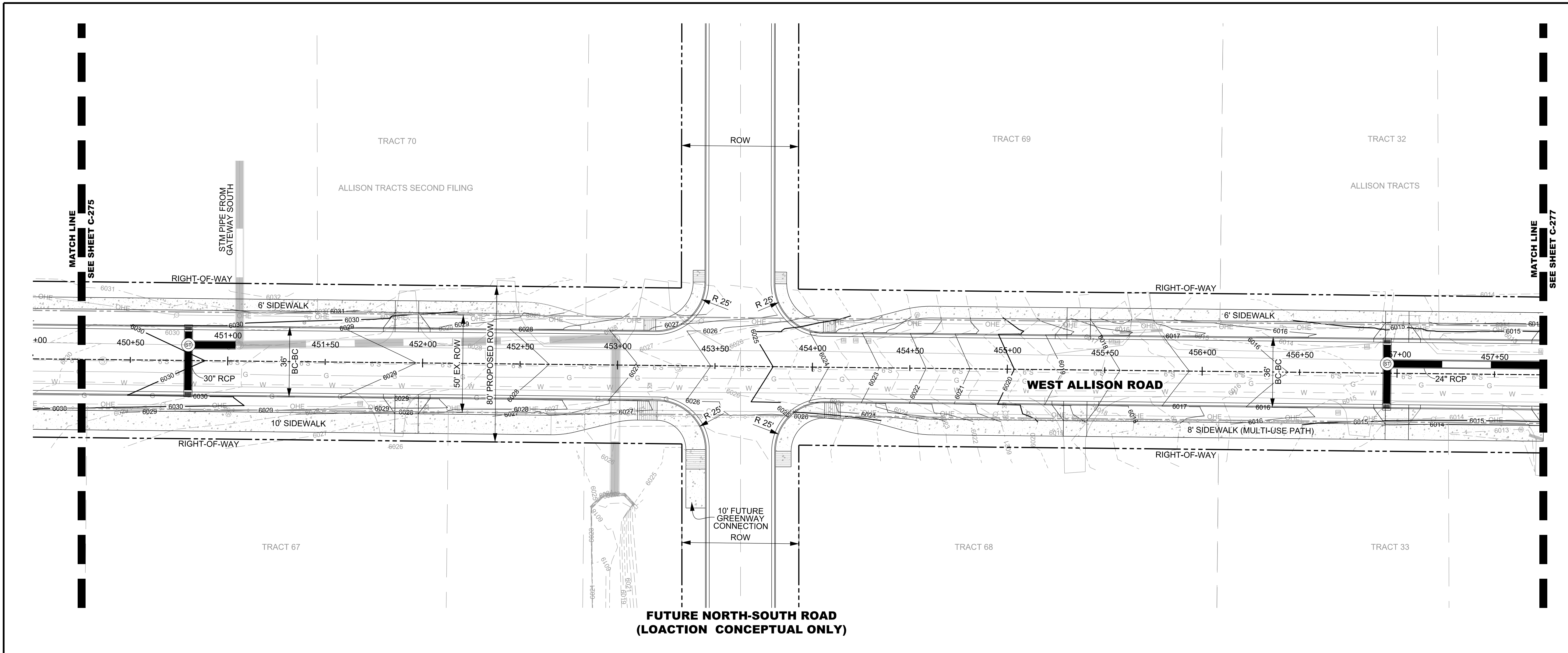
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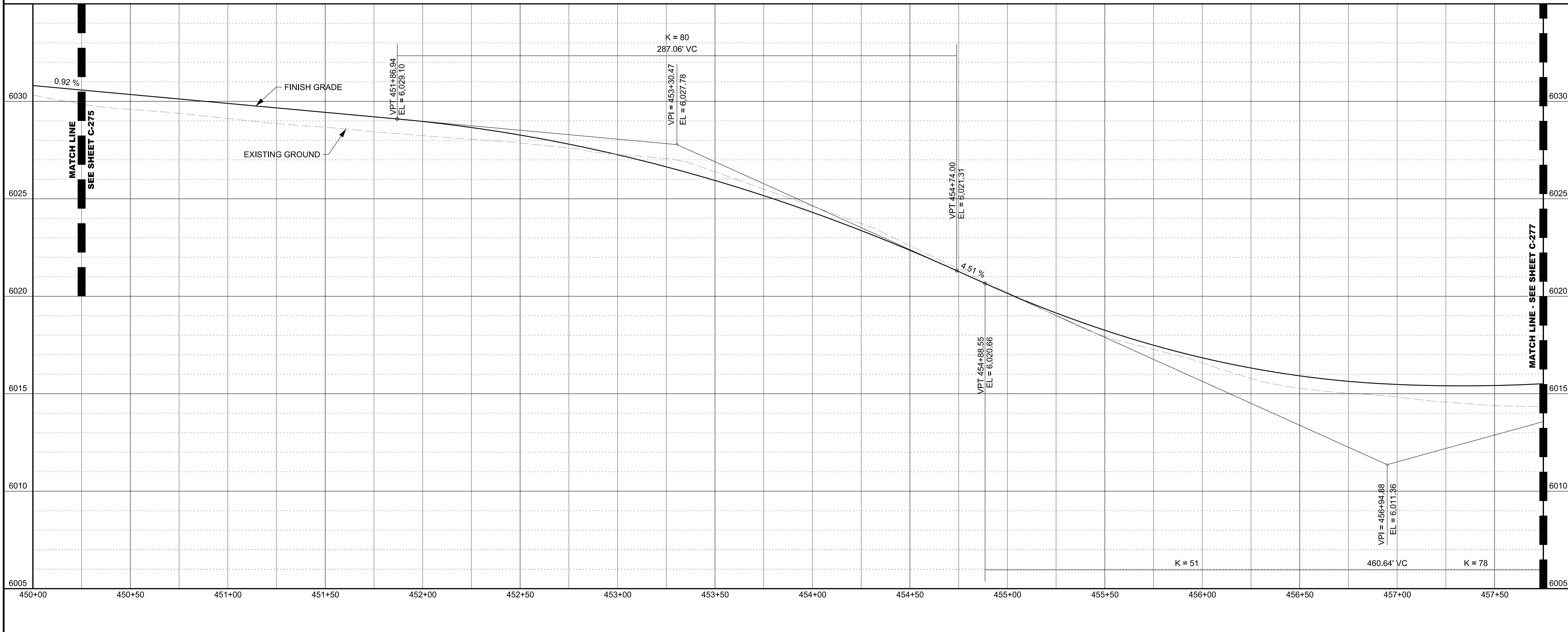
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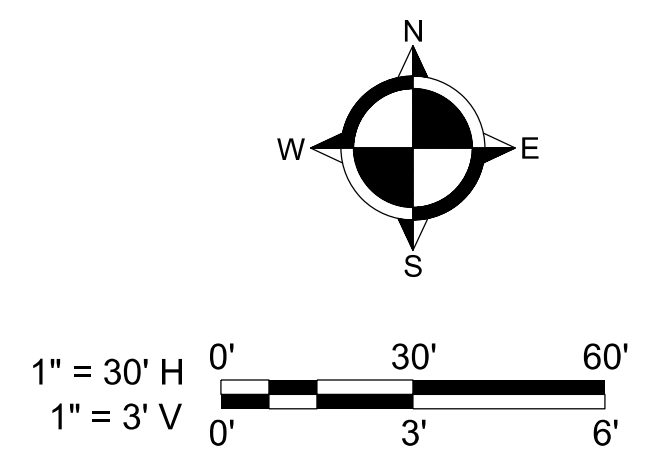
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**WEST ALLISON ROAD PLAN VIEW
 STA 450+00 TO STA 457+75**



**WEST ALLISON ROAD PROFILE VIEW
 STA 450+00 TO STA 457+75**



- NOTES:**
- INTERSECTION LOCATION IS CONCEPTUAL ONLY. THE FINAL LOCATION IS TO BE DETERMINED DURING THE DESIGN PHASE OF THE PROJECT.
 - SEE SHEET C-290 FOR ALTERNATE INTERSECTION CONFIGURATION.

LEGEND:



CLIENT INFORMATION
 CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

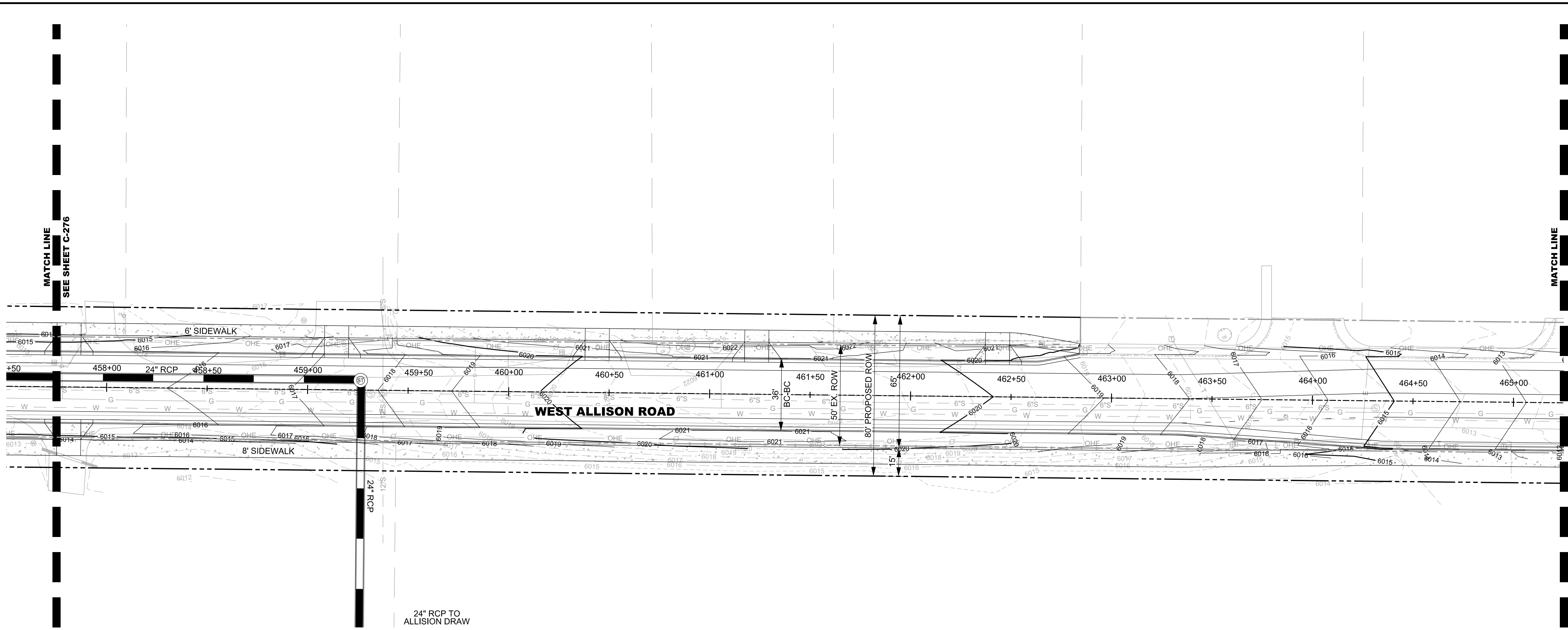
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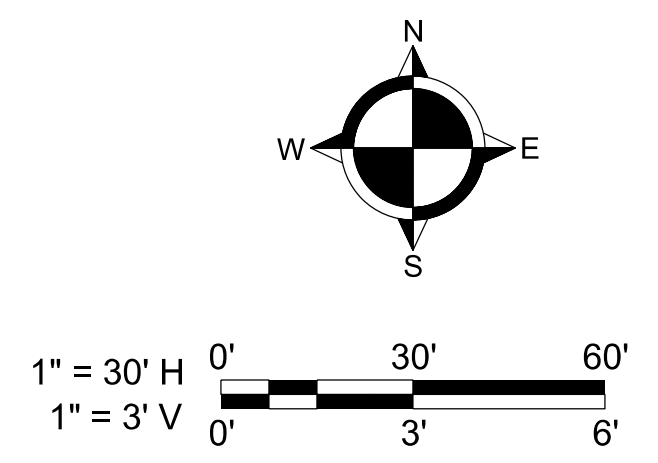
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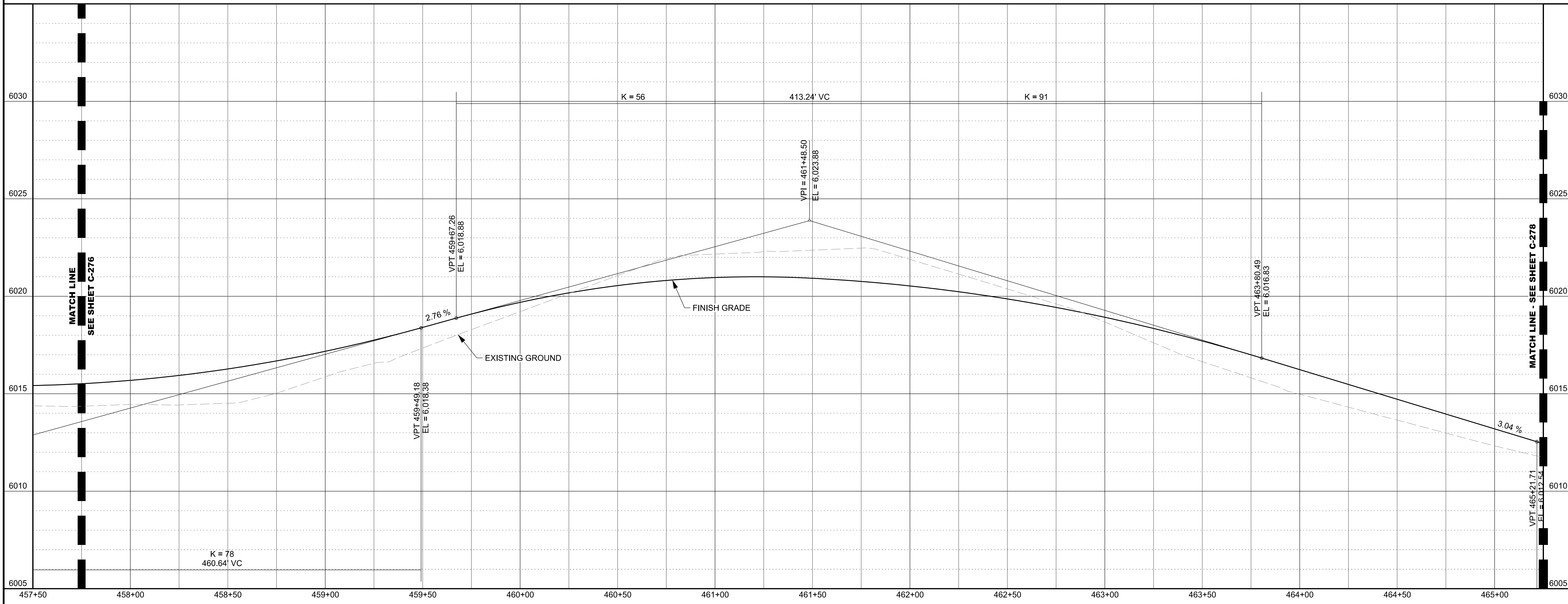


WEST ALLISON ROAD PLAN VIEW
 STA 457+50 TO STA 465+25



- NOTES:
- STORM SEWER TO BE LOCATED IN EXISTING SOUTH CHEYENNE WATER AND SEWER DISTRICT EASEMENT.

LEGEND:



WEST ALLISON ROAD PROFILE VIEW
 STA 457+50 TO STA 465+25



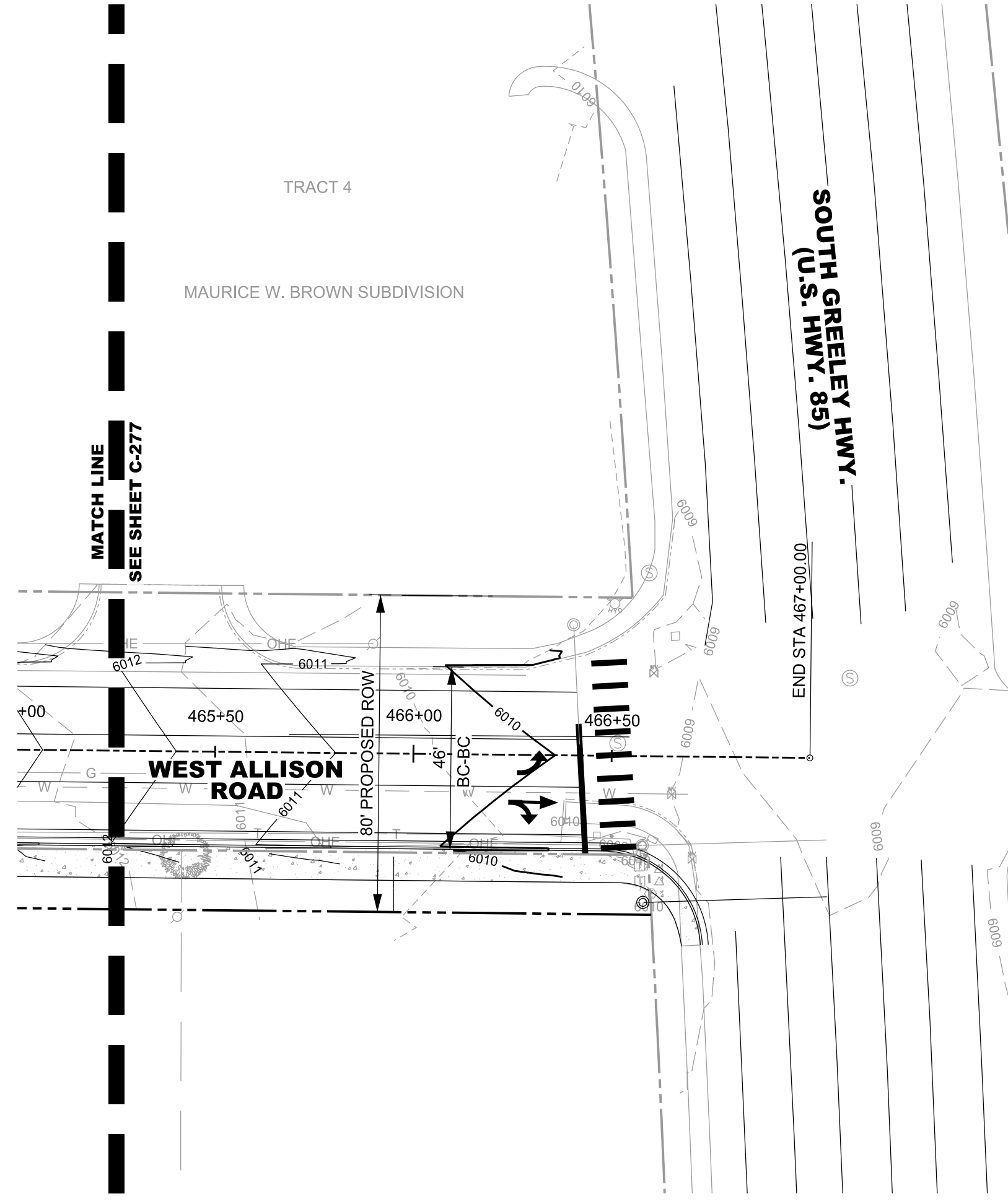
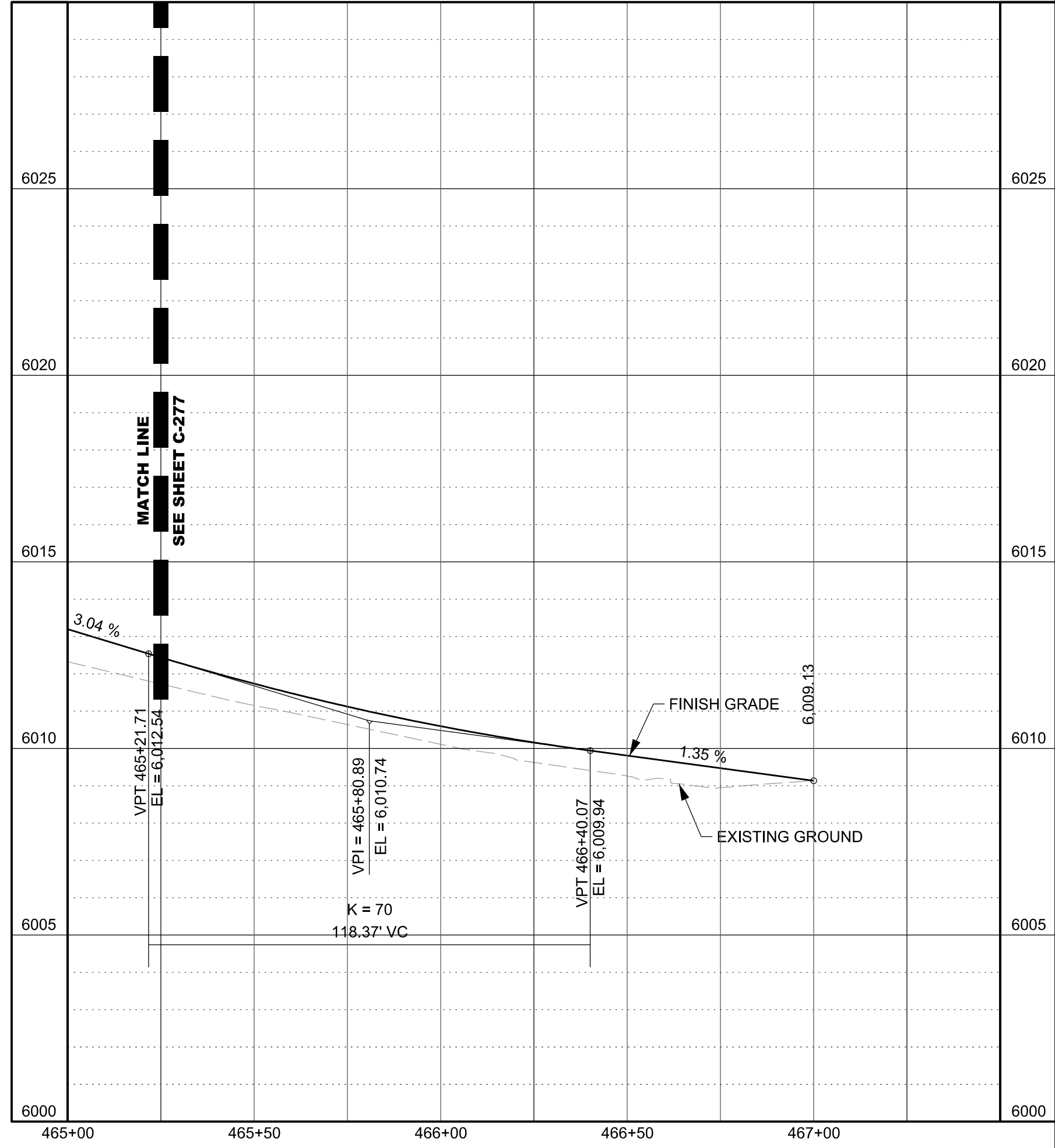
CLIENT INFORMATION
 CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

DRAWING TITLE
 WEST ALLISON ROAD
 PLAN AND PROFILE
 WEST ALLISON ROAD CORRIDOR STUDY

DATE: 17 MAR. 2010
 SCALE: 1"=30' HORIZONTAL
 1"=3' VERTICAL
 DRAWN/CHECKED BY:
 DJW / DWT
 DRAWING PATH
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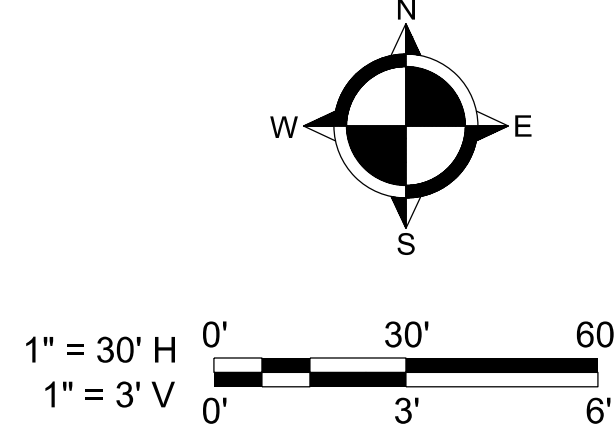
SHEET NUMBER
C-277

PROJECT NUMBER:
 1300-1388-00 ALLISON CORRIDOR



LEGEND:

- NOTES:
- INTERSECTION WITH SOUTH GREELEY HWY WILL REQUIRE COORDINATION WITH WYDOT. EXISTING SIGNAL CONFIGURATION WILL NEED TO BE MODIFIED.



**WEST ALLISON ROAD PLAN VIEW
 STA 465+00 TO STA 467+00**

**WEST ALLISON ROAD
 PLAN AND PROFILE**
 WEST ALLISON ROAD CORRIDOR STUDY

DATE: 17 MAR, 2010
 SCALE: 1"=30' HORIZONTAL
 1"=3' VERTICAL
 DRAWN/CHECKED BY:
 DJW / DWT

SHEET NUMBER
C-278

DRAWING TITLE
**WEST ALLISON ROAD
 PLAN AND PROFILE**
 WEST ALLISON ROAD CORRIDOR STUDY

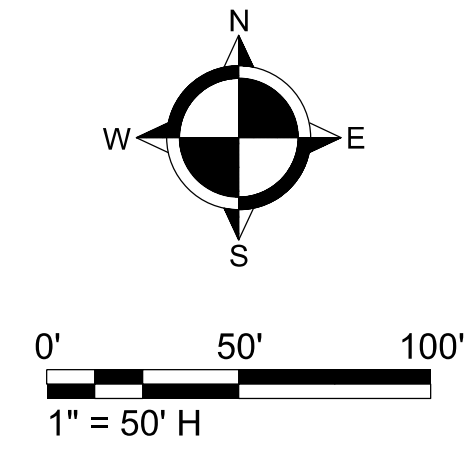
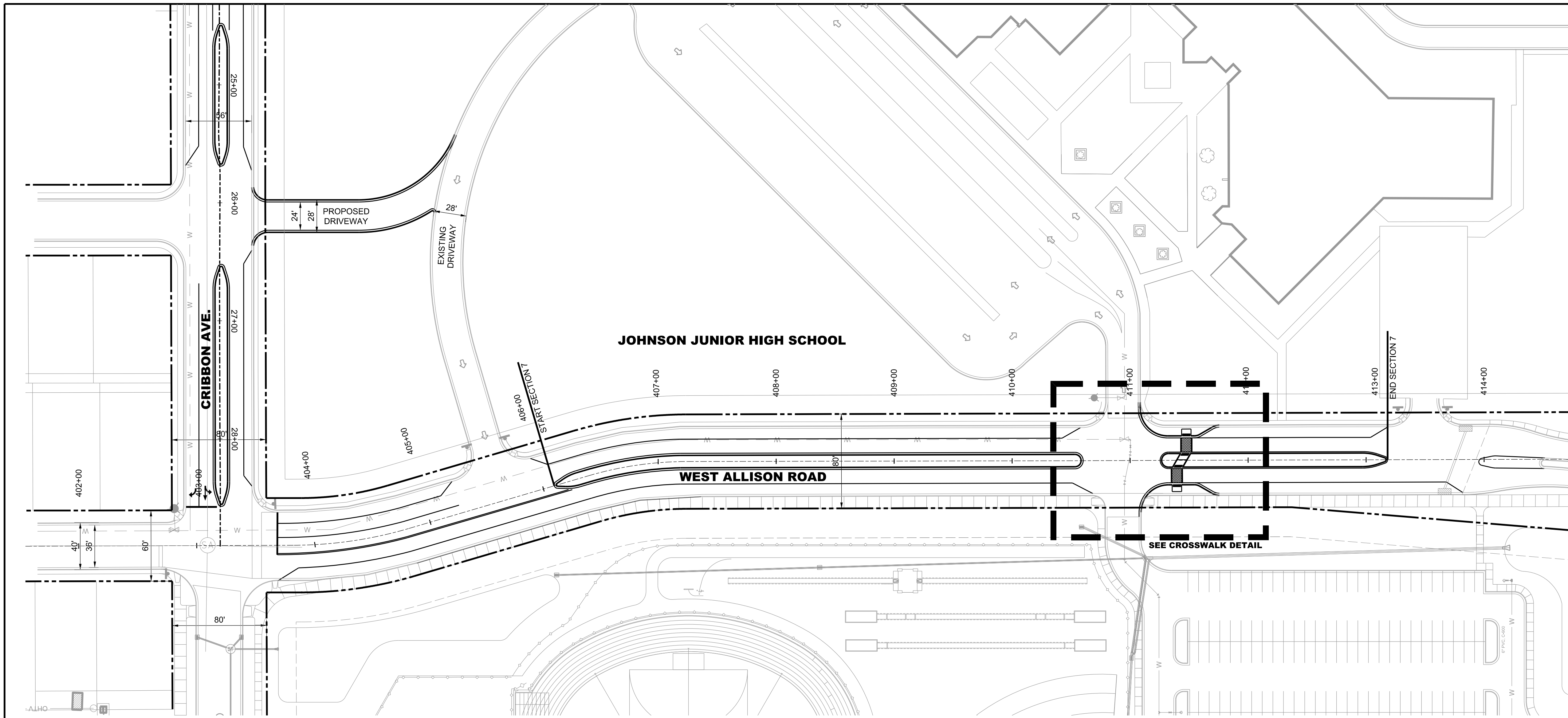
CLIENT INFORMATION
**CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION**
 2101 O'NEIL AVENUE
 CHEYENNE, WY . 82007

Western
 RESEARCH & DEVELOPMENT, LTD.
 5008 YELLOWSTONE ROAD, SUITE B CHEYENNE, WY. 82009 (307) 632-5565

PROJECT NUMBER:
 130-1388-00 ALLISON CORRIDOR

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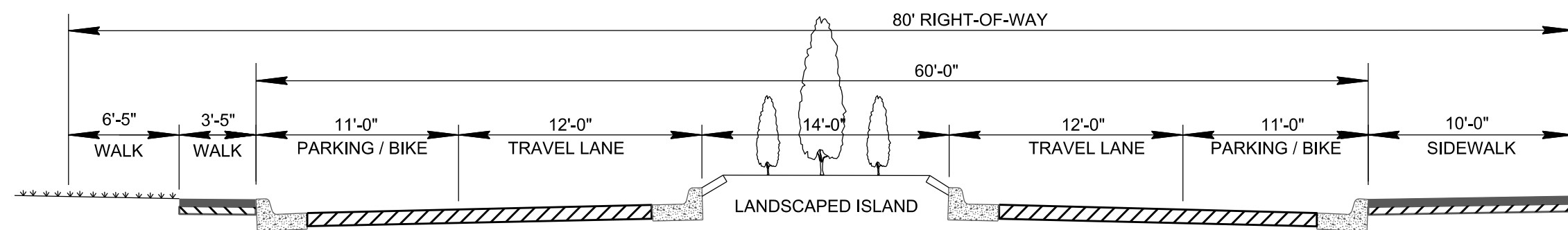
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 TIME PRINTED: 9:14:00 PM
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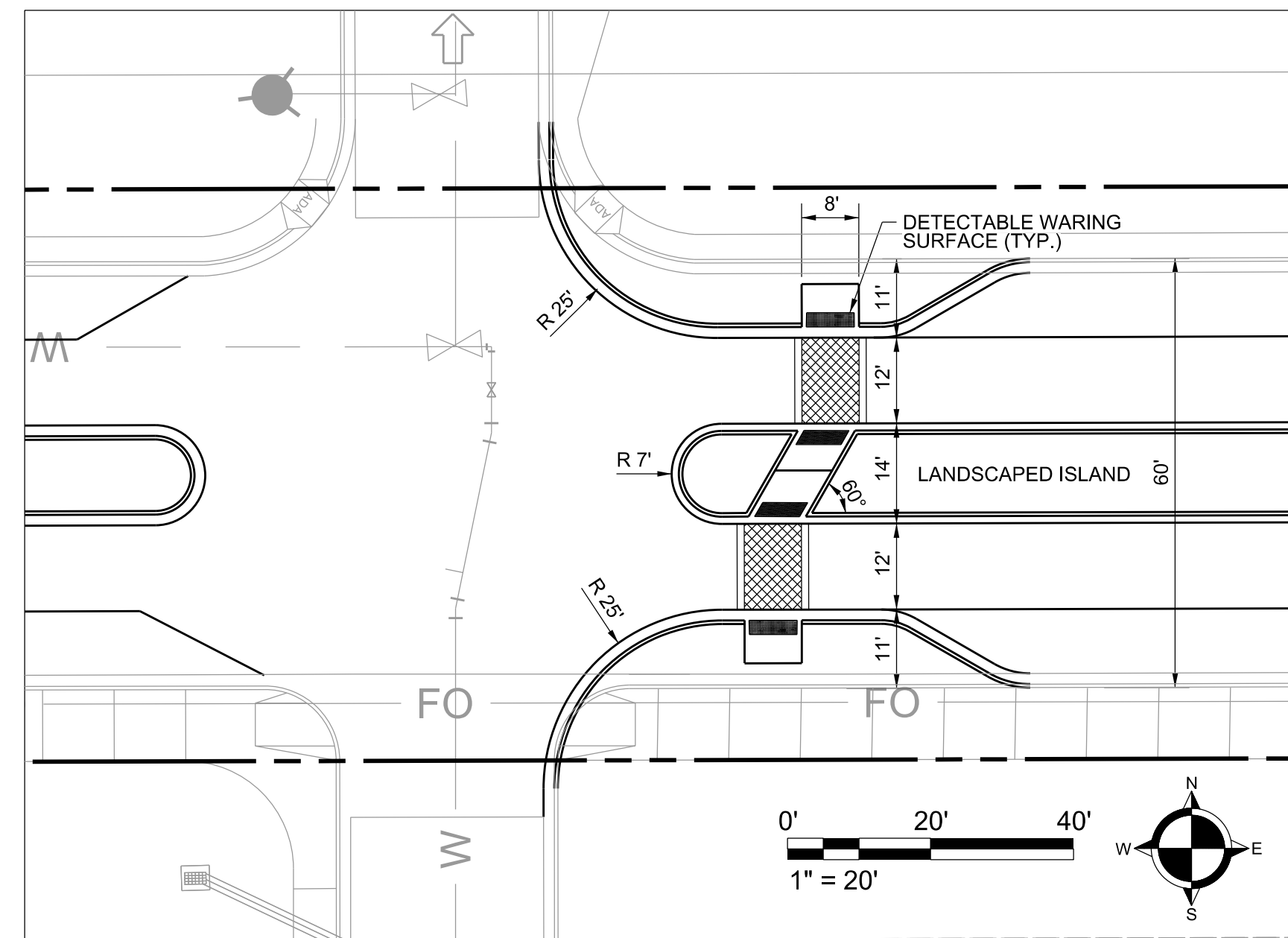
NOTES:

1. IMPROVEMENTS ON CRIBBON ARE SHOWN FOR CONCEPTUAL PURPOSES ONLY. THIS AREA IS OUTSIDE OF THE PROJECT SCOPE, BUT HAS BEEN PROVIDED FOR FUTURE COORDINATION.

LEGEND:



**WEST ALLISSON ROAD SECTION
 STA. 406+10 to STA. 413+18
 SECTION 7**



CROSSWALK DETAIL



**CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007**

CLIENT INFORMATION

**WEST ALLISSON ROAD
 SCHOOL CAMPUS CROSSING
 WEST ALLISSON ROAD CORRIDOR STUDY**

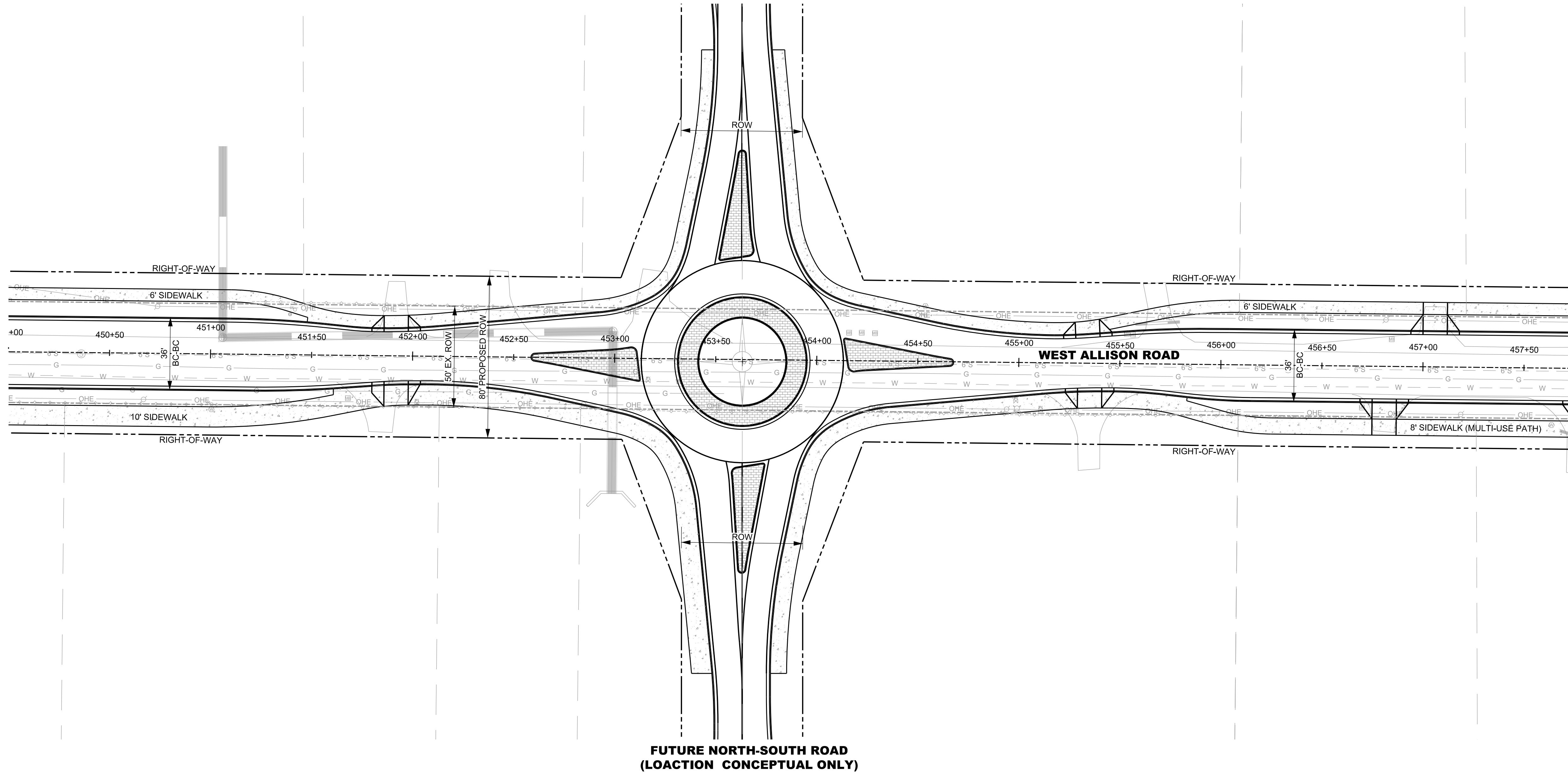
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 1"=5' VERTICAL
 DRAWING CHECKED BY:
 DJW / GNG
 DRAWING PATH

SHEET NUMBER

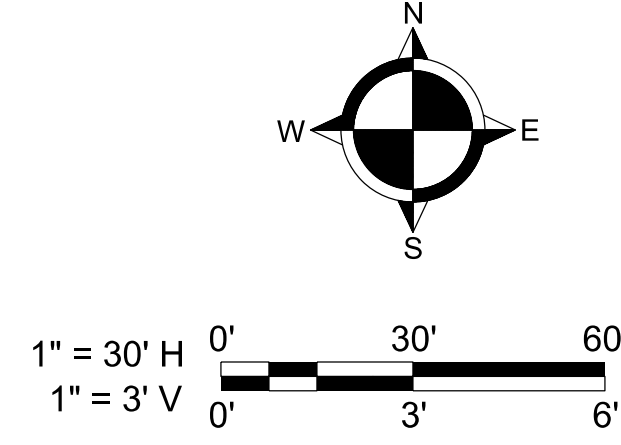
C-279

PROJECT NUMBER:
 130-1388-00 ALLISSON CORRIDOR

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**WEST ALLISON ROAD PLAN VIEW
 STA 450+00 TO STA 457+75**



NOTES:

1. ROUNDABOUT DESIGN IS CONCEPTUAL ONLY. THE GEOMETRY HAS NOT BEEN ANALYZED WITH RODEL. FASTEST PATHS HAVE NOT BEEN EVALUATED.

LEGEND:



CLIENT INFORMATION
 CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

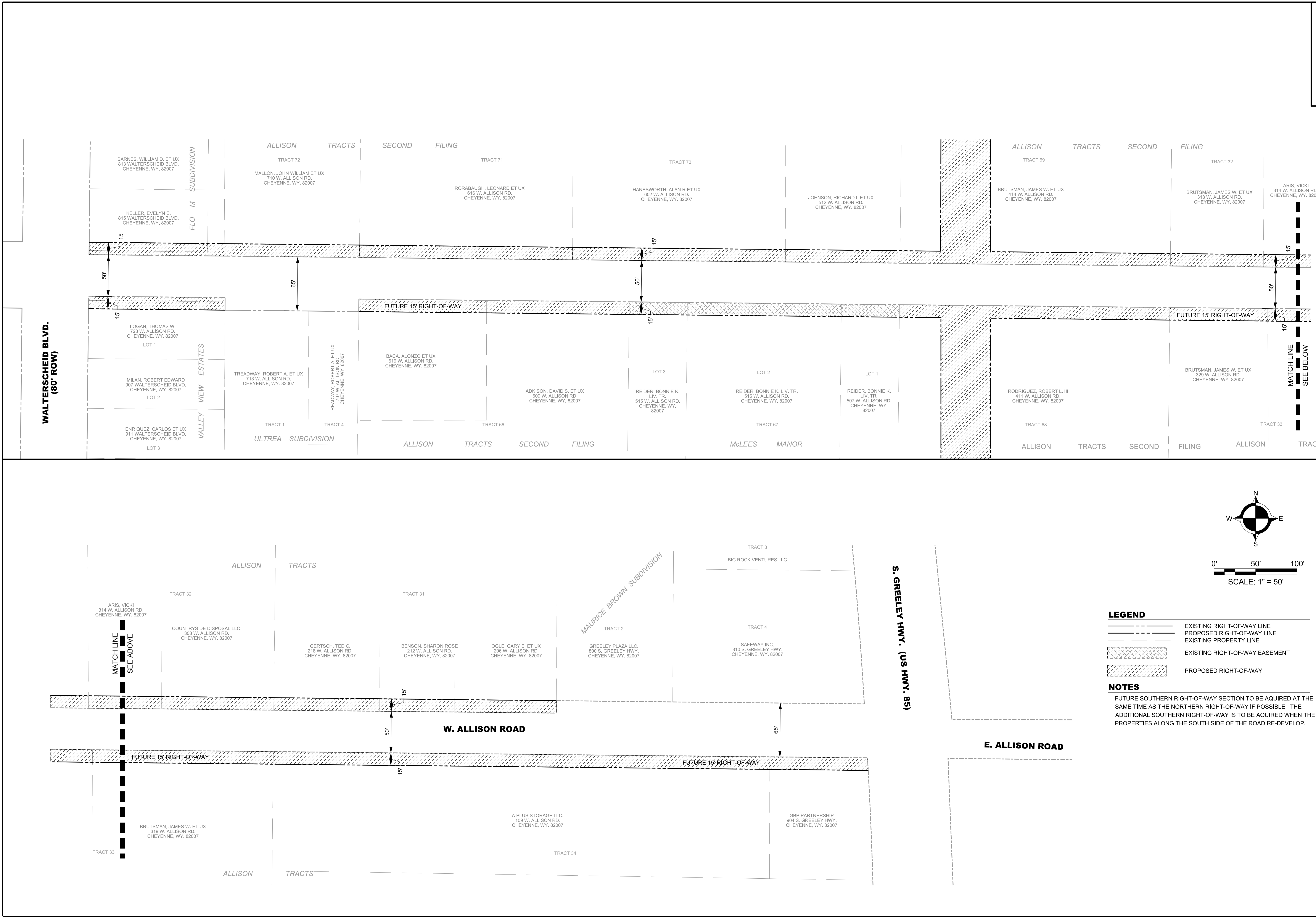
DRAWING TITLE
 INTERSECTION
 ALTERNATIVE
 WEST ALLISON ROAD CORRIDOR STUDY

DATE: 17 MAR, 2010
SCALE: 1"=30' HORIZONTAL
 1"=3' VERTICAL
DRAWN/CHECKED BY:
 DJW / DWT
DRAWING PATH
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PROJECT NUMBER:
 130-1388-00 ALLISON CORRIDOR
SHEET NUMBER
 C-290

APPENDIX C

Survey Summary (ROW Map)

DATE PRINTED: 3/16/2010
 TIME PRINTED: 8:15:51 PM
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CLIENT INFORMATION
**CHEYENNE METROPOLITAN
 PLANNING ORGANIZATION**
 2101 O'NEIL AVENUE
 CHEYENNE, WY. 82007

DRAWING TITLE
**WEST ALLISON ROAD
 RIGHT-OF-WAY PLAN**
 WEST ALLISON ROAD CORRIDOR STUDY

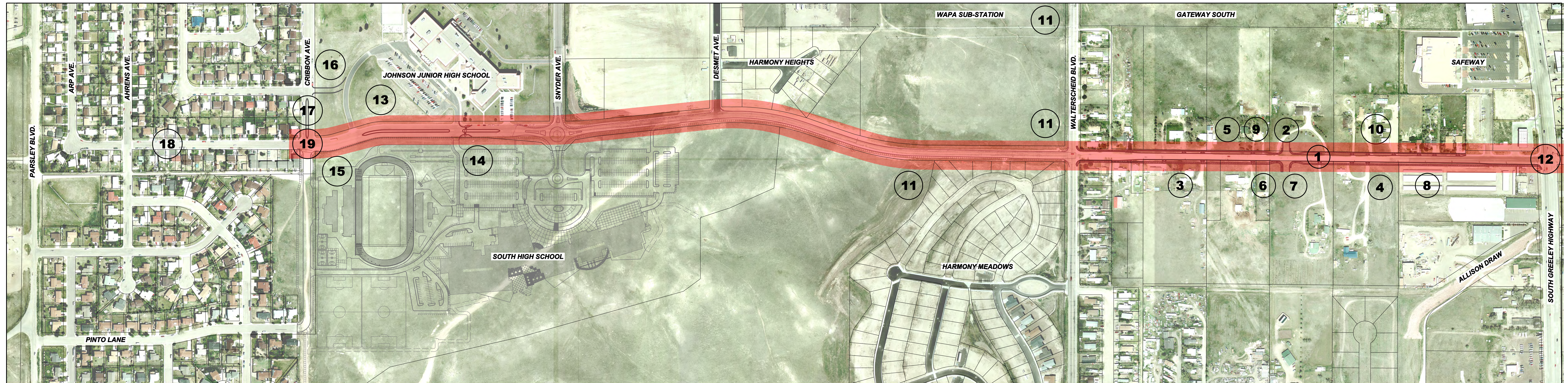
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 PROJECT NUMBER: 130-1388-00 ALLISON CORRIDOR
 SHEET NUMBER: **C-120**

APPENDIX D

Final Meeting Boards

WEST ALLISON ROAD

(SOUTH GREELEY HWY TO PARSLEY BLVD) PROJECT RECOMMENDATIONS



PROJECT RECOMMENDATIONS # RECOMMENDATION LOCATION

- 1 **65 FT RIGHT-OF-WAY MODIFIED TO 80 FT AS DEVELOPMENT OCCURS IN THE AREA**
- 2 **INTERSECTION FOR NORTH/SOUTH ROAD TO CONNECT WEST JEFFERSON ROAD AND WEST PROSSER ROAD**
-INTERSECTION SHOULD BE LOCATED AT APPROXIMATE MID-POINT BETWEEN SOUTH GREELEY HWY AND WALTERSCHEID BLVD
-THE FINAL LOCATION SHOULD BE DETERMINED AT FINAL DESIGN AND BY DEVELOPMENT ALONG THE CORRIDOR
-A ROUNDABOUT IS THE PREFERRED INTERSECTION CONTROL DEVICE
- 3 **10 FT GREENWAY CONNECTOR FROM WALTERSCHEID BLVD TO NEW INTERSECTION**
-FROM NEW INTERSECTION, GREENWAY CONNECTOR SHOULD RUN SOUTH AND CONNECT TO EXISTING GREENWAY ALONG ALLISON DRAW
-CANNOT BE CONSTRUCTED UNTIL SOUTHERN RIGHT-OF-WAY HAS BEEN DEDICATED
- 4 **8 FT MULTI-USE PATH FROM NEW INTERSECTION TO SOUTH GREELEY HIGHWAY**
-CANNOT BE CONSTRUCTED UNTIL SOUTHERN RIGHT-OF-WAY HAS BEEN DEDICATED
- 5 **6 FT SIDEWALK FROM WALTERSCHEID BLVD TO SOUTH GREELEY HWY**
- 6 **UPGRADE EXISTING WATER AND SEWER UTILITIES PRIOR TO REBUILDING ROAD BETWEEN SOUTH GREELEY HWY AND WALTERSCHEID BLVD**
- 7 **MOVE OVERHEAD UTILITES UNDERGROUND, IF POSSIBLE, OR FUTHER AWAY FROM THE ROAD**
- 8 **REGRADE HIGH POINT ON ALLISON ROAD APPROXIMATELY 700 FT WEST OF SOUTH GREELEY HWY TO IMPROVE SIGHT DISTANCE**
- 9 **INSTALL DROP INLETS APPROXIMATELY 1000 FT EAST OF WALTERSCHEID BLVD AND CONNECT TO EXISTING STORM SEWER FACILITIES**
- 10 **INSTALL DROP INLETS AT LOW POINT BETWEEN SOUTH GREELEY HWY AND WALTERSCHEID BLVD (APPROXIMATELY 1000 FT WEST OF SOUTH GREELEY HWY)**
-CONVEY RUN-OFF FROM INLETS SOUTH TO ALLISON DRAW VIA STORM SEWER AND OPEN CHANNEL FACILITIES
- 11 **DETENTION PONDS ARE RECOMMEND AT THE FOLLOWING LOCATIONS WITH THE FUTURE DEVELOPMENT OF THOSE PROPERTIES:**
-NORTHWEST CORNER OF WEST ALLISON ROAD/WALTERSCHEID BLVD INTERSECTION
-NORTHEAST CORNER OF PROPERTY BETWEEN SOUTH HIGH SCHOOL AND HARMONY MEADOWS
-SOUTHEAST CORNER OF WAPA SUB-STATION ALONG WALTERSCHEID BLVD
- 12 **ADD RIGHT-TURN LANE AT THE SOUTH GREELEY HWY INTERSECTION**
-COORDINATE WITH WYDOT TO TIME SIGNAL
- 13 **INSTALL LANDSCAPED MEDIAN BETWEEN SNYDER AVE AND CRIBBON AVE**
- 14 **INSTALL BUMP-OUTS ON EAST SIDE OF MAIN ENTRANCE TO JOHNSON JUNIOR HIGH**
-CONSTRUCT OFF-SET CROSSWALK BETWEEN NORTH AND SOUTH BUMP-OUTS
- 15 **STRIPE PARKING LANES ON NORTH AND SOUTH SIDES OF WEST ALLISON ROAD BETWEEN SNYDER AVE AND CRIBBON AVE**
- 16 **ADD SECOND EXIT FROM JOHNSON JUNIOR HIGH ONTO CRIBBON AVE**
- 17 **INSTALL LANDSCAPED MEDIAN IN CRIBBON AVE NORTH OF WEST ALLISON ROAD**
- 18 **MAKE NO CHANGES TO WEST ALLISON ROAD BETWEEN CRIBBON AVE AND PARSLEY BLVD**
-MODIFICATIONS TO THIS SECTION SHOULD BE EVALUATED AT ANY OF THE FOLLOWING MILESTONES:
+THE CONNECTION OF WEST ALLISON ROAD TO SOUTHWEST BLVD IS MADE
+PARSLEY BLVD IS UPGRADED TO AN URBAN ARTERIAL SECTION
+THE AREA WEST OF PARSLEY BLVD DEVELOPS
- 19 **EVALUATE ROUNDABOUT AT INTERSECTION OF WEST ALLISON ROAD AND CRIBBON AVE**
-ANALYSIS SHOULD TAKE PLACE WHEN WEST ALLISON ROAD CONNECTION IS MADE TO PARSLEY BLVD

LONGTERM RECOMMENDATIONS



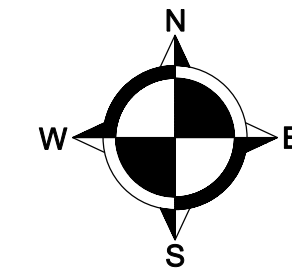


EXISTING STREETScape

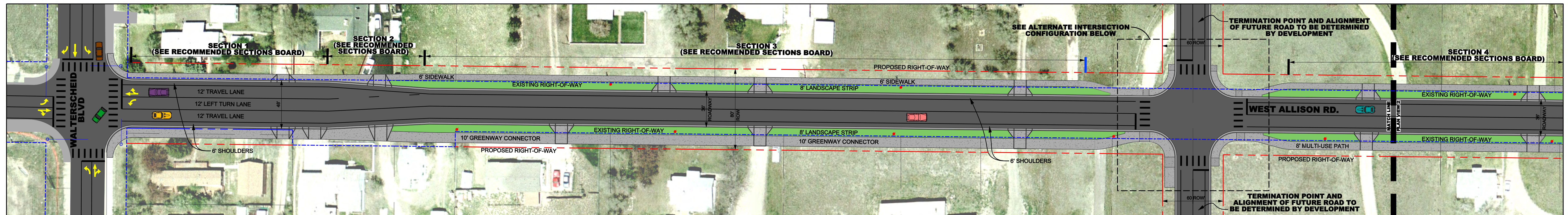
WEST ALLISON ROAD

(WALTERSCHEID BLVD. TO SOUTH GREELEY HIGHWAY)

RECOMMENDED ALIGNMENT



PROPOSED STREETScape

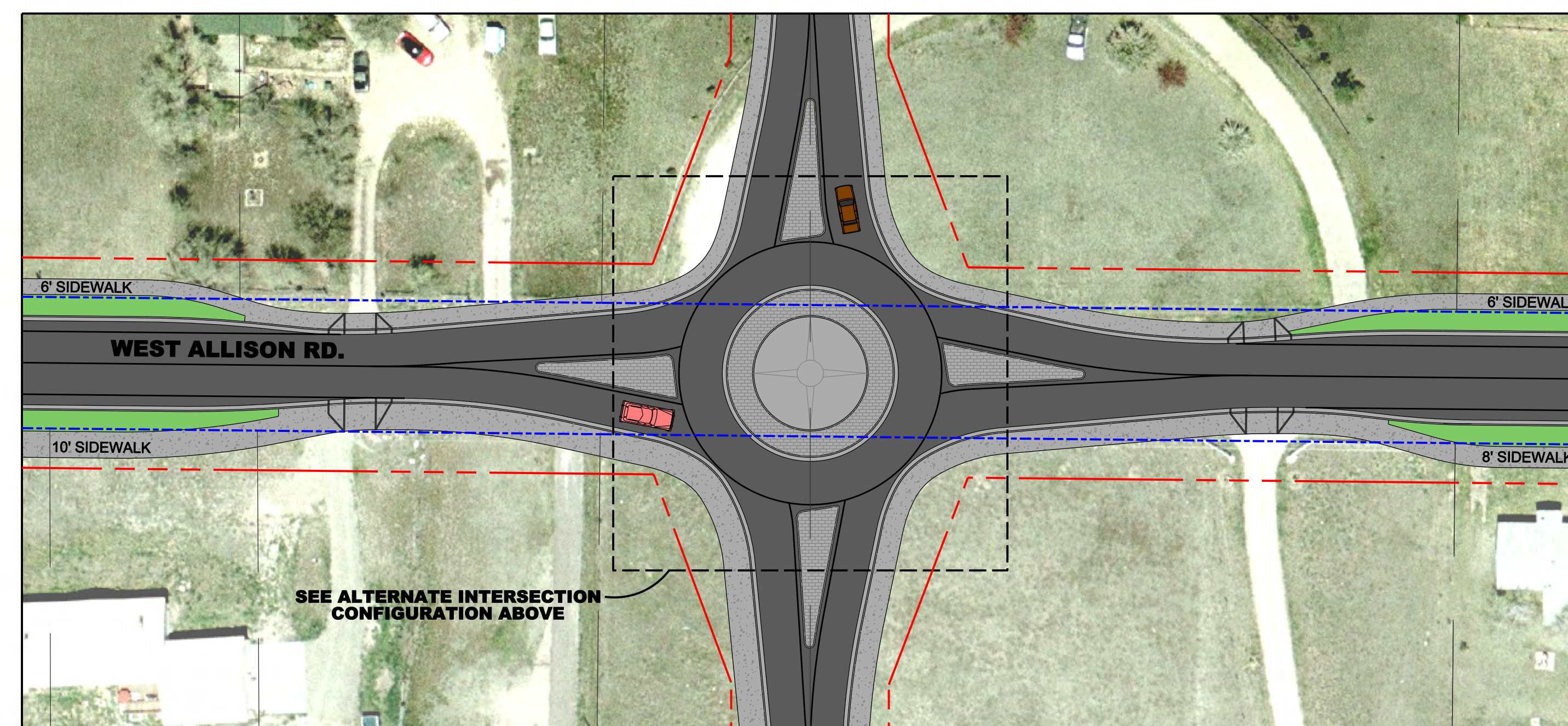


PLAN VIEW 1



PLAN VIEW 2

NOTE:
DRIVEWAY APPROACHES WILL BE EVALUATED ON AN
INDIVIDUAL BASIS DURING THE FINAL DESIGN OF THE
PROJECT

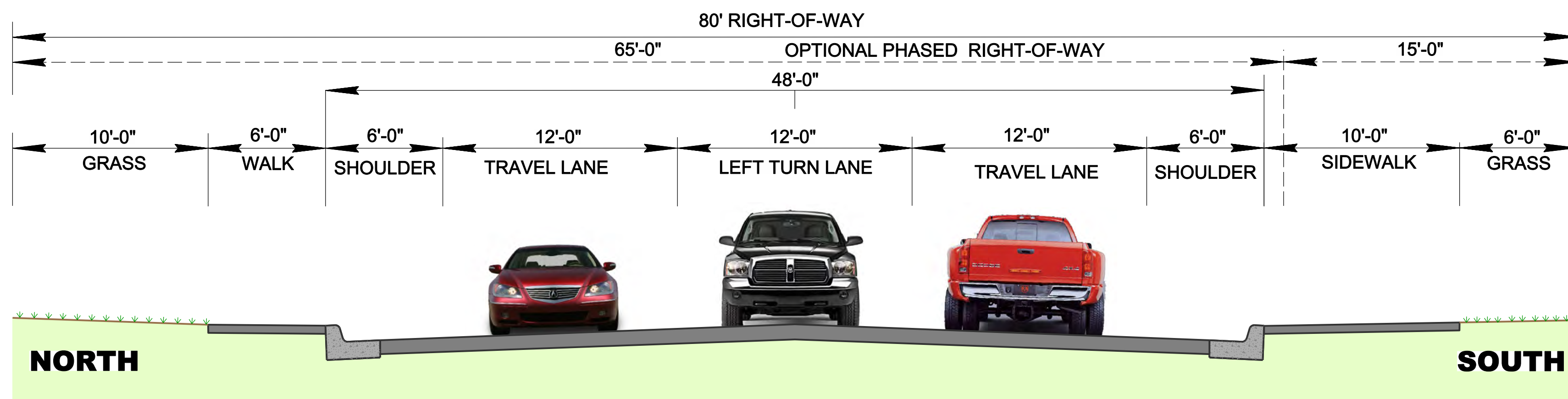


**ALTERNATE INTERSECTION DESIGN FOR NORTH/SOUTH ROAD CONNECTION
(EXACT LOCATION TO BE DETERMINED BY FUTURE DEVELOPMENT)**

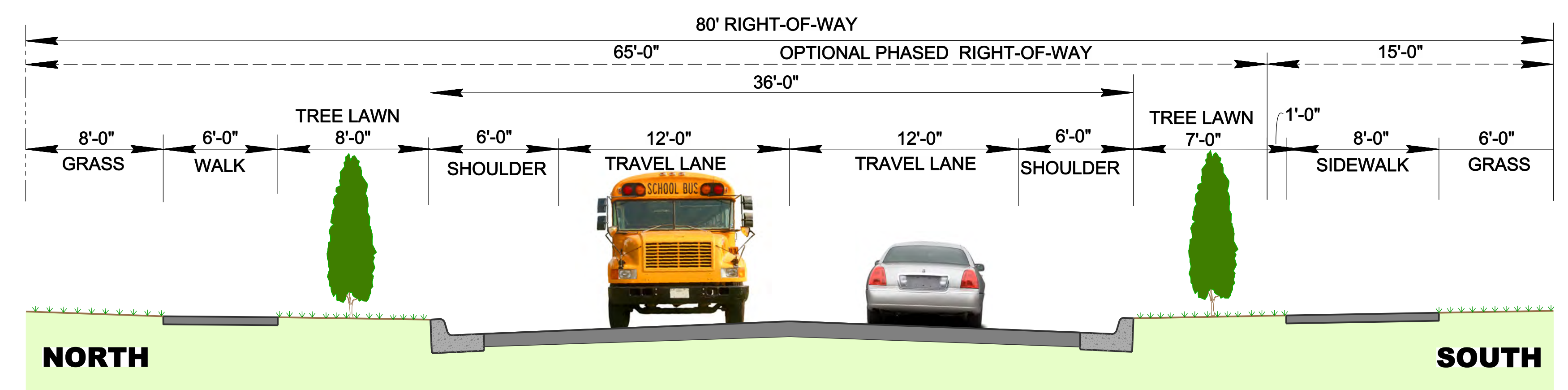


WEST ALLISON ROAD

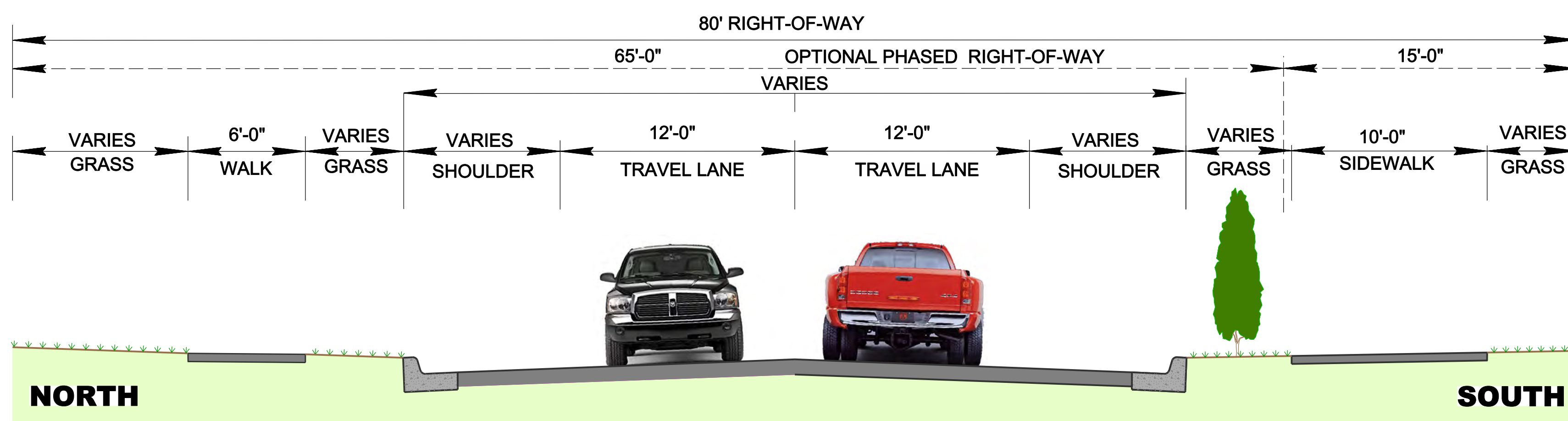
(WALTERSCHEID BLVD TO SOUTH GREELEY HWY)
RECOMMENDED STREET SECTIONS



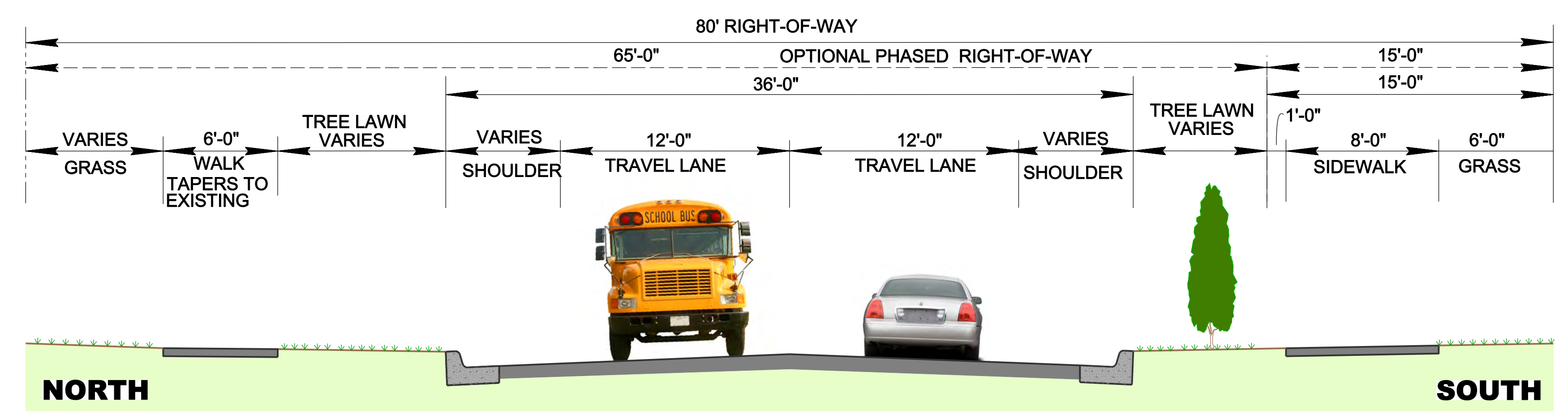
**WEST ALLISION ROAD SECTION
STA. 442+69.38 to STA. 445+06.99
(AT WALTERSCHEID INTERSECTION)
SECTION 1**



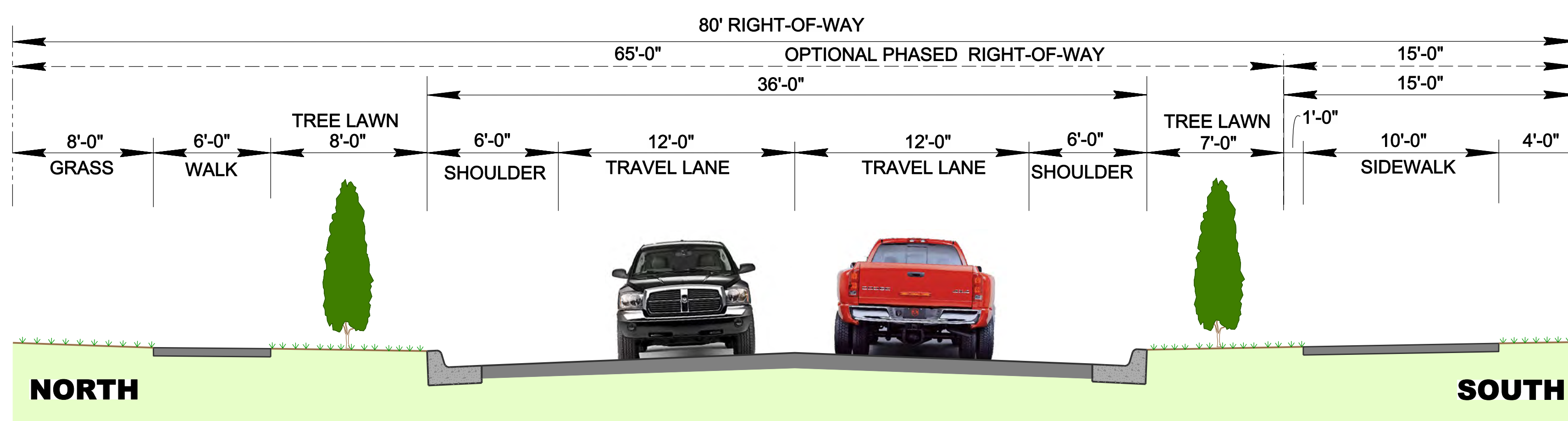
**WEST ALLISION ROAD SECTION
STA. 453+63.80 to STA. 462+63.91
(AT INTERSECTIONS)
SECTION 4**



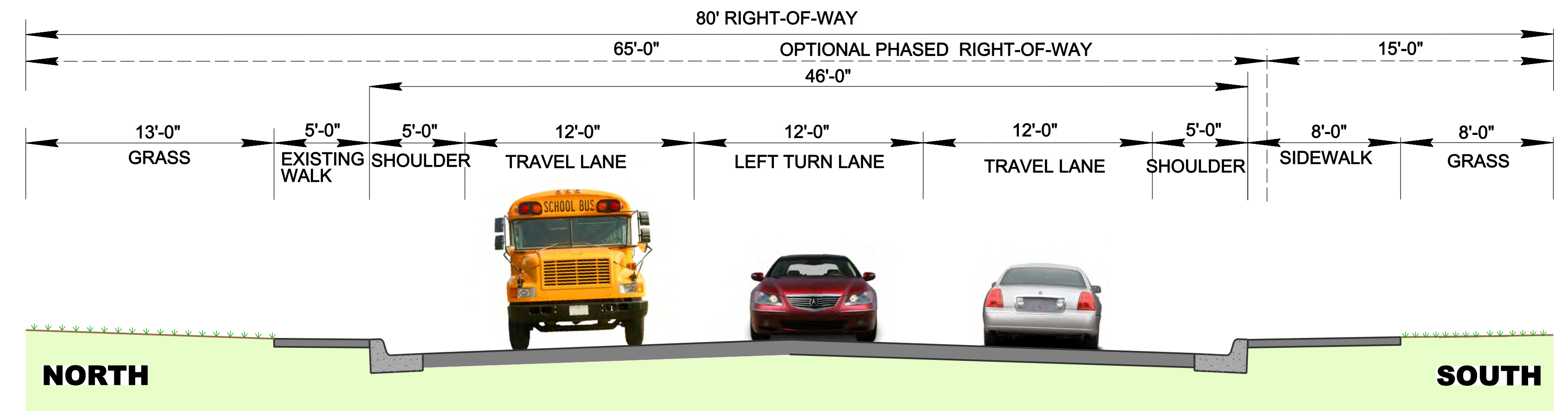
**WEST ALLISION ROAD SECTION
STA. 445+06.99 to STA. 446+06.99
SECTION 2**



**WEST ALLISION ROAD SECTION
STA. 462+63.91 to STA. 464+34.59
SECTION 5**



**WEST ALLISION ROAD SECTION
STA. 446+06.99 to STA. 453+63.80
(AT INTERSECTIONS)
SECTION 3**



**WEST ALLISION ROAD SECTION
STA. 464+34.59 to STA. 467+00.00
(AT SOUTH GREELEY INTERSECTION)
SECTION 6**



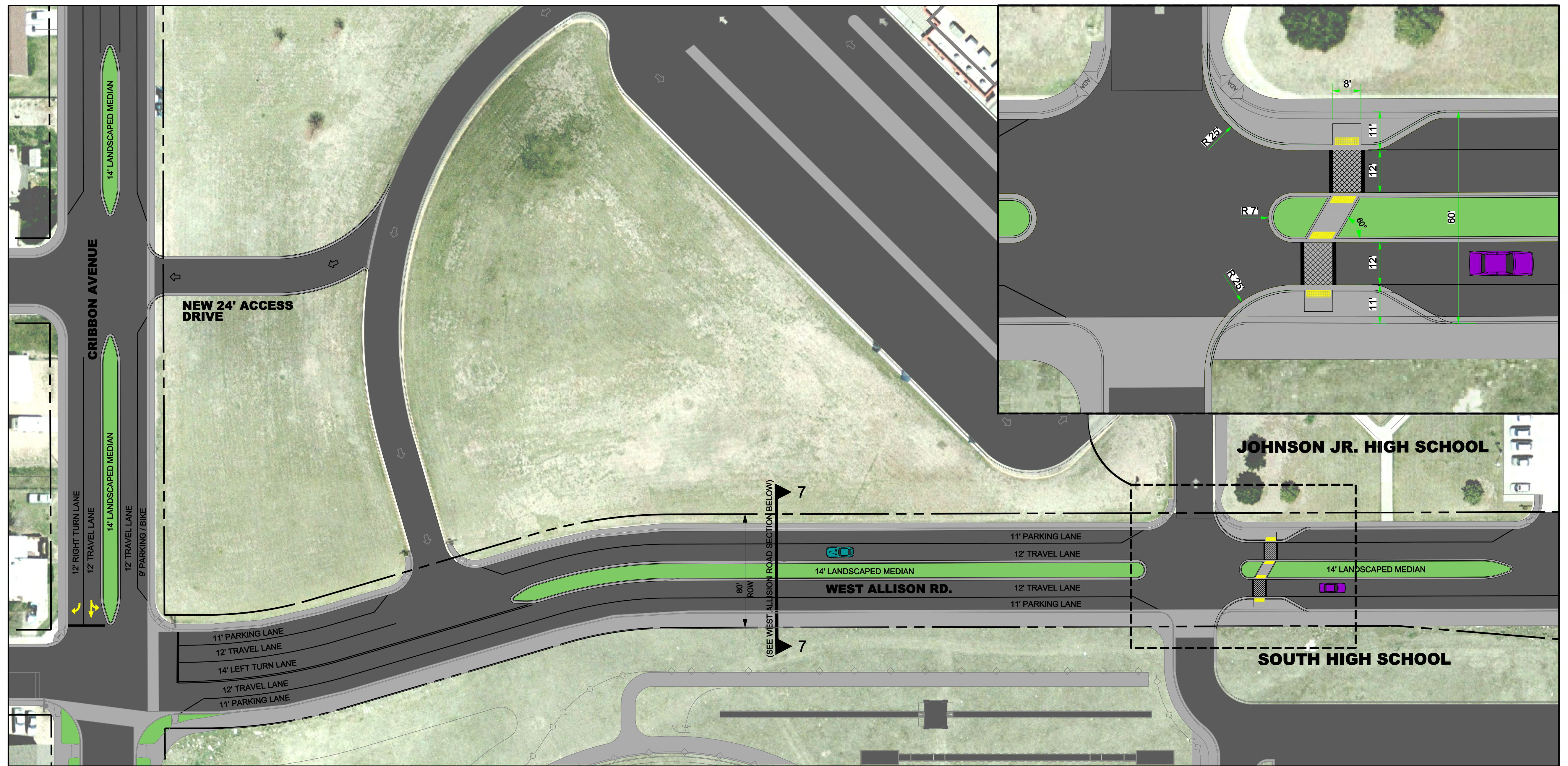
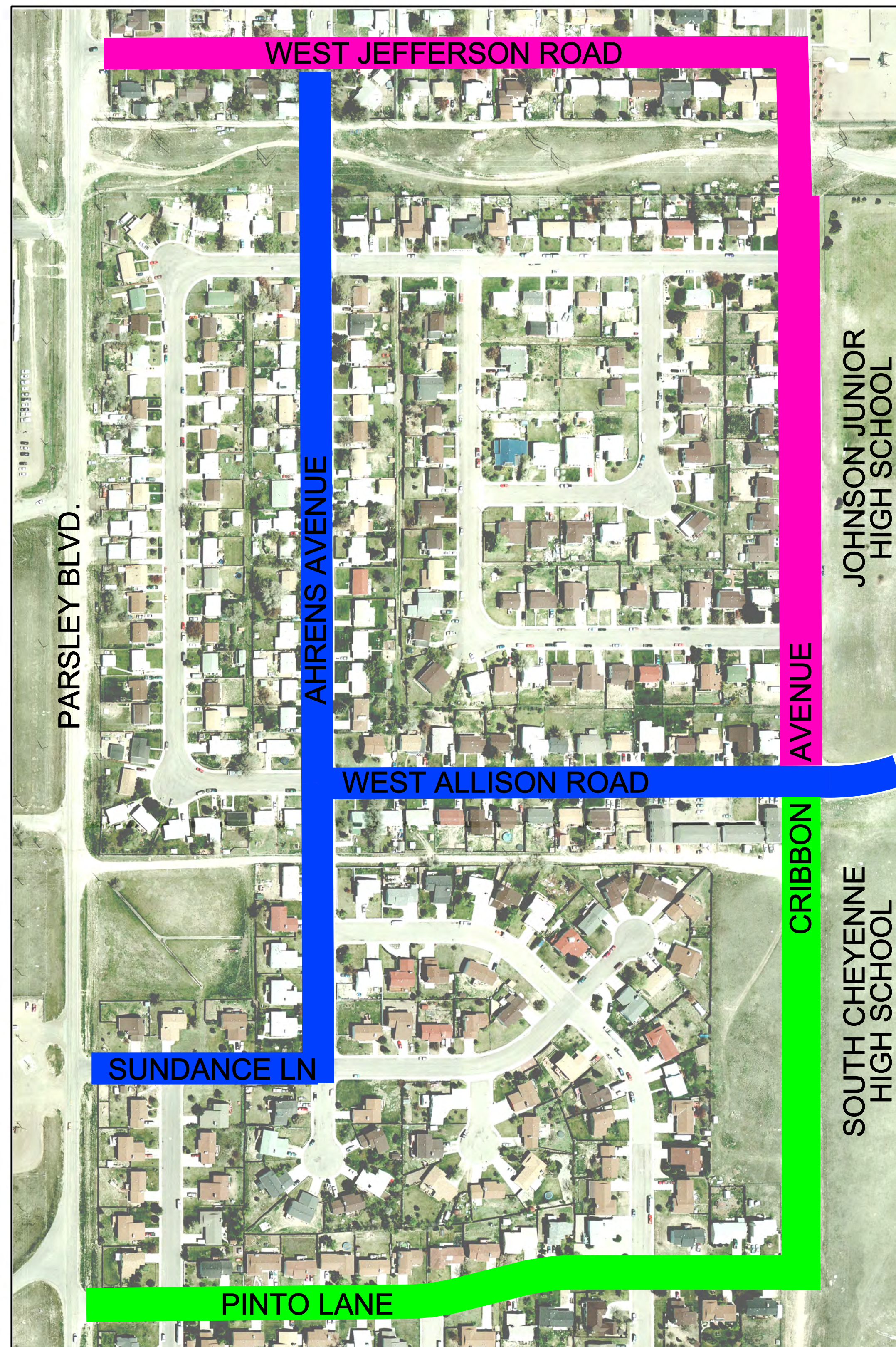
(SEE RECOMMENDED WALTERSCHEID BOULEVARD TO SOUTH GREELEY HIGHWAY IMPROVEMENTS BOARD FOR PLAN VIEW)



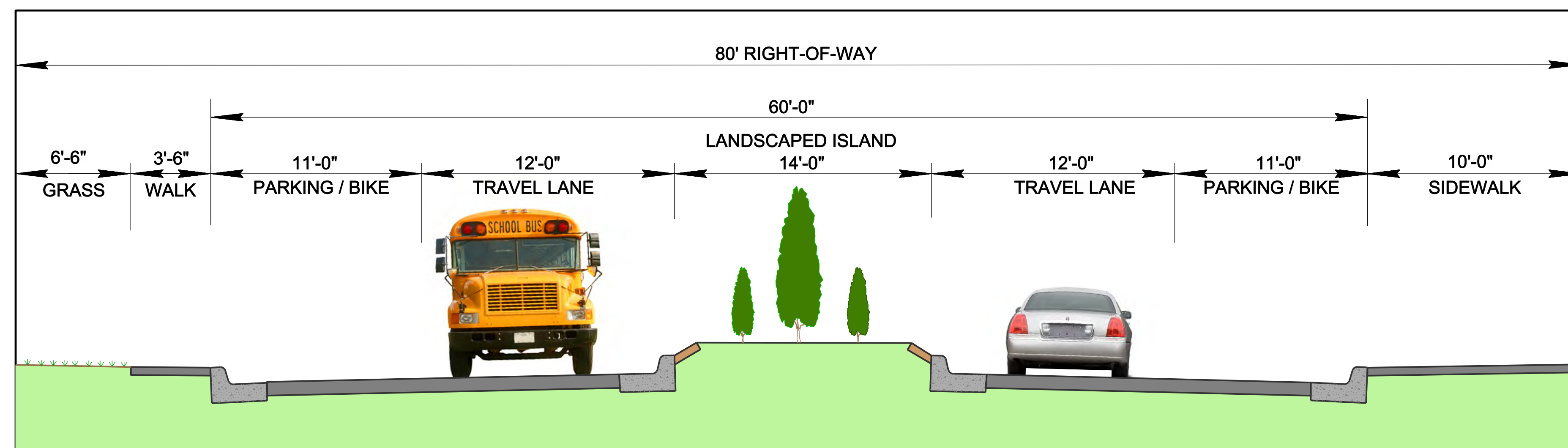
WEST ALLISON ROAD

(SNYDER AVENUE TO CRIBBON AVENUE)

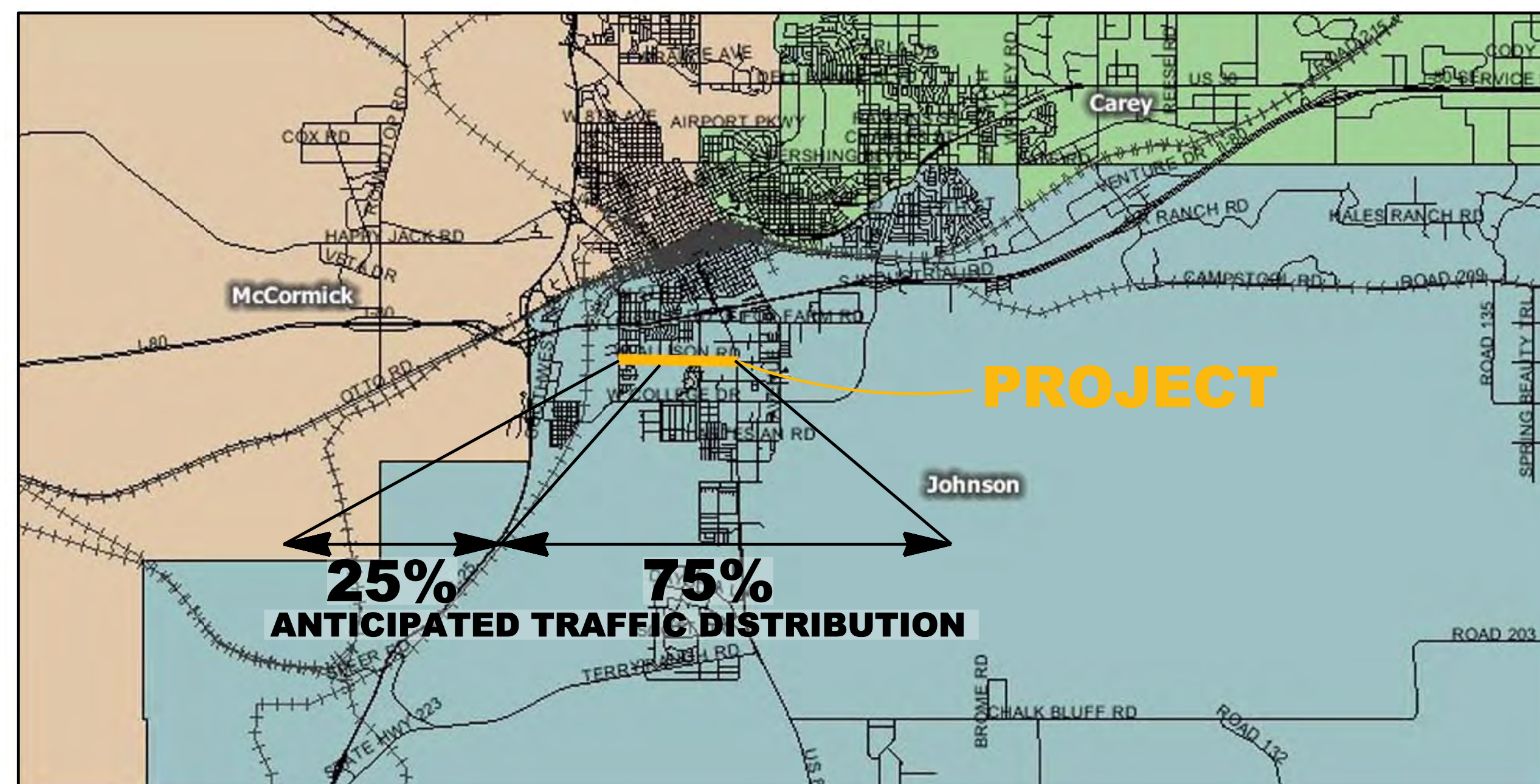
RECOMMENDED IMPROVEMENTS



ROUTE CONTINUATION OPTIONS
(CONNECTIONS FROM WEST ALLISON RD TO PARSLEY BLVD)



WEST ALLISON ROAD SECTION
STA. 406+10 to STA. 413+18
SECTION 7

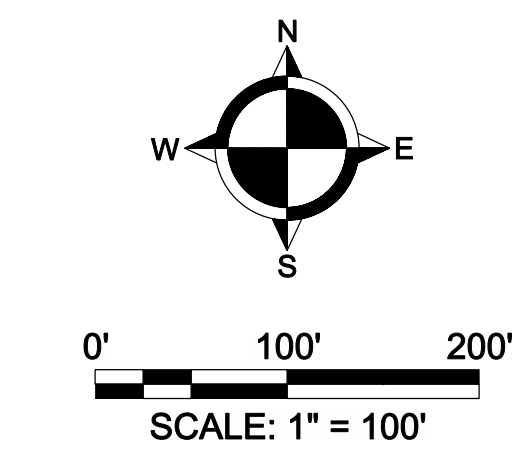


LCSD#1 SCHOOL BOUNDARIES



WEST ALLISON ROAD

(SOUTH GREELEY HWY TO SNYDER AVENUE)
RECOMMENDED DRAINAGE IMPROVEMENTS



APPENDIX E

Speed Counts

24 HOUR SPEED

Data For Site : Pinto East of Parsley
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 20
 Record Interval Length : 15 min

	count	speed		count	speed		count	speed		count	speed
0:00			6:00	11	21	12:00	7	28	18:00	23	27
15			15	7	29	15	9	24	15	25	29
30			30	12	27	30	16	25	30	19	30
45			45	9	30	45	12	24	45	16	31
1:00			7:00	14	31	13:00	5	30	19:00	11	26
15			15	19	32	15	7	26	15	7	24
30			30	18	34	30	14	25	30	6	25
45			45	23	33	45	6	30	45	4	22
2:00			8:00	19	27	14:00	5	27	20:00	2	21
15			15	26	24	15	6	28	15	1	27
30			30	17	26	30	5	29	30	3	25
45			45	22	25	45	7	25	45	1	26
3:00			9:00	27	25	15:00	7	26	21:00	1	24
15			15	21	26	15	9	26	15		
30			30	28	24	30	11	26	30	2	22
45			45	20	25	45	6	25	45	4	23
4:00	1	22	10:00	12	30	16:00	10	27	22:00		
15	1	27	15	10	24	15	11	26	15	1	26
30			30	15	26	30	16	25	30	2	29
45	2	33	45	12	27	45	18	24	45		
5:00			11:00	11	25	17:00	29	23	23:00		
15	3	21	15	13	26	15	26	27	15		
30	9	24	30	16	28	30	29	25	30		
45	8	37	45	21	26	45	30	24	45		
	24			403			301			128	

24 Hour Total 856
 Average Speed 26

24 HOUR SPEED

Data For Site : Allison west of Walterschied
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	count	speed		count	speed		count	speed		count	speed
0:00	1	35	6:00	28	33	12:00	63	33	18:00	48	31
15			15	33	32	15	62	32	15	44	32
30			30	39	33	30	51	34	30	41	33
45			45	47	34	45	55	33	45	39	33
1:00			7:00	52	33	13:00	49	32	19:00	44	31
15	1	40	15	55	34	15	54	33	15	42	32
30			30	59	35	30	44	34	30	38	32
45	2	32	45	53	34	45	51	32	45	35	33
2:00			8:00	44	33	14:00	55	34	20:00	35	31
15			15	45	34	15	56	33	15	29	33
30			30	42	33	30	53	32	30	26	32
45			45	39	31	45	49	33	45	22	35
3:00	1	34	9:00	28	32	15:00	49	34	21:00	12	33
15			15	31	33	15	48	35	15	14	35
30			30	27	31	30	51	33	30	9	36
45			45	25	31	45	55	32	45	10	32
4:00	2	33	10:00	32	32	16:00	48	33	22:00	11	33
15	7	32	15	31	33	15	46	34	15	7	34
30	9	31	30	38	32	30	45	35	30	4	33
45	8	30	45	33	32	45	49	33	45	9	32
5:00	16	34	11:00	35	33	17:00	56	34	23:00	3	31
15	14	35	15	33	35	15	57	32	15	1	30
30	15	34	30	31	35	30	59	31	30		
45	17	34	45	37	34	45	51	33	45	1	42
	93			917			1256			524	

24 Hour Total 2790
 Average Speed 33

24 Hour Speed and Volume

Data For Site : Allison between s Greely and Walterscheid
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	count	speed		count	speed		count	speed		count	speed
0:00			6:00	11	32	12:00	30	31	18:00	19	35
15			15	10	33	15	30	35	15	16	33
30			30	14	31	30	25	36	30	21	32
45	1	32	45	11	33	45	26	35	45	14	33
1:00			7:00	13	35	13:00	29	36	19:00	12	31
15			15	18	34	15	19	33	15	10	32
30	1	31	30	15	33	30	17	34	30	7	31
45			45	16	31	45	29	32	45	15	33
2:00			8:00	22	32	14:00	35	33	20:00	6	28
15			15	42	33	15	28	26	15	7	29
30	1	30	30	39	33	30	29	35	30	5	30
45			45	28	32	45	30	39	45	4	31
3:00			9:00	31	31	15:00	28	33	21:00	5	33
15	1	33	15	25	32	15	22	32	15	5	32
30			30	26	33	30	33	33	30	3	31
45	2	35	45	29	37	45	17	31	45	5	30
4:00			10:00	31	36	16:00	12	34	22:00	6	34
15			15	27	35	15	14	35	15	4	31
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15	5	35	15	25	33	15	19	33	15	1	33
30	2	36	30	26	34	30	20	32	30	1	34
45	6	38	45	28	31	45	21	38	45		
	32			571			555			171	

24 Hour Total 1329
 Average Speed 33

24 HOUR SPEED

Data For Site : Cribbbon North of Allison
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 25
 Record Interval Length : 15 min

	count	speed		count	speed		count	speed		count	speed
0:00	1	32	6:00	10	32	12:00	30	31	18:00	19	35
15			15	12	33	15	28	33	15	16	33
30	1	31	30	11	31	30	22	32	30	21	32
45			45	14	33	45	33	34	45	14	33
1:00			7:00	15	35	13:00	17	32	19:00	12	31
15			15	17	34	15	12	33	15	10	32
30			30	12	33	30	14	34	30	7	31
45			45	16	31	45	15	32	45	15	33
2:00			8:00	24	32	14:00	16	33	20:00	6	28
15	1	30	15	23	33	15	11	26	15	7	29
30			30	29	33	30	19	35	30	5	30
45			45	30	32	45	20	39	45	4	31
3:00			9:00	28	31	15:00	21	33	21:00	5	33
15			15	27	32	15	17	32	15	5	32
30			30	23	33	30	15	33	30	3	31
45	1	35	45	28	37	45	18	31	45	5	30
4:00			10:00	18	36	16:00	15	34	22:00	6	34
15			15	14	35	15	14	35	15	4	31
30	2	34	30	11	34	30	19	36	30	2	33
45	1	32	45	13	34	45	17	35	45	2	29
5:00	5	33	11:00	18	35	17:00	29	36	23:00	1	27
15	4	30	15	17	33	15	35	33	15	1	28
30	2	31	30	21	34	30	28	32	30	1	29
45	5	33	45	11	31	45	29	31	45		
	23			442			494			171	

24 Hour Total 1130
 Average Speed 32

APPENDIX F

Estimate of Probable Construction Costs

ESTIMATE OF PROBABLE CONSTRUCTION COST

Item	Description	Quantity	Units	Unit Cost	Sub-total
ROW Acquisition					
(residential)	2009 approx. market value land only	1.14	AC	\$40,000	\$45,455
(commercial)	2009 approx. market value land only	0.25	AC	\$95,000	\$23,390
					\$68,845
ROADWAY					
Asphalt Pavement	6" asphalt	3,053	TON	\$62	\$189,283
Road Base	8" thick compacted road base	2,262	CY	\$25	\$56,553
Earthwork	Cut and Fill	5,230	CY	\$5	\$26,150
Concrete Curbing (type A)	6" vert. curb with 18" pan	4,426	LF	\$25	\$110,650
Concrete Sidewalk (4" thick)	6' wide walk	1,326	SY	\$46	\$60,996
(4" thick)	10' wide walk	1,224	SY	\$46	\$56,304
(4" thick)	8' wide walk	1,162	SY	\$46	\$53,452
Driveways	6" concrete driveways	21	EA	\$8,000	\$168,000
	Improvements to existing driveways	21	EA	\$500	\$10,500
Road Striping	4" white and yellow painted lines	7,210	LF	\$0.40	\$2,884
	18" stop bars	6	EA	\$100	\$600
	symbols	6	EA	\$150	\$900
	Crosswalk	6	EA	\$150	\$900
Signage	school crossing etc.	2	EA	\$200	\$400
	Stop signs at north/south connector	2	EA	\$200	\$400
	speed limit	4	EA	\$200	\$800
					\$738,772
UTILITIES					
Utility Relocation					
(electric)	relocate signal poles	4	EA	\$5,000	\$20,000
(electric)	relocate electric poles	5	EA	\$5,000	\$25,000
Utility Improvements					
(water)	replace exist. 6" w/ new 8" water main	2,375	LF	\$70	\$166,250
(water)	8" water main in north/south connector	120	LF	\$70	\$8,400
(water services)	1" service lines	21	EA	\$1,000	\$21,000
(sewer)	replace exist. 6" w/ new 8" sewer main	1,475	LF	\$50	\$73,750
(sewer services)	4" service lines	21	EA	\$1,000	\$21,000
Street Lighting	30' tall fiberglass pole w/ 135 watt LPS light fixture	24	EA	\$2,500	\$60,000
					\$395,400
ROUNABOUT					
	Roundabout Construction	1	EA	\$250,000	\$250,000
	Roundabout Landscaping	1	EA	\$16,000	\$16,000
					\$266,000

ESTIMATE OF PROBABLE CONSTRUCTION COST

DRAINAGE IMPROVEMENTS

(new culverts)	18" HDPE corrugated pipe	60	LF	\$21.50	\$1,290
(new inlets)	area inlets, curb inlets, etc.	4	EA	\$3,000	\$12,000
(storm pipe)	30" RCP	100	LF	\$138	\$13,800
(storm pipe)	36" RCP	1,260	LF	\$120	\$151,200
(FES)	30" FES	1	EA	\$1,215	\$1,215
gasket	36"	17	EA	\$16	\$272
storm manholes	48" manhole	5	EA	\$2,500	\$12,500
(grading)	misc. grading	1	LS	\$20,000	\$20,000

\$212,277

IRRIGATION AND LANDSCAPING

Irrigation (SCW&S)	1" water tap	1	EA	\$1,295	\$1,295
	1" water tap service development fee	1	EA	\$7,830	\$7,830
	1" water meter for irrigation	1	EA	\$350	\$350
	Meter Pit	1	EA	\$2,900	\$2,900
	1" pvc lines for new landscaping	1,500	LF	\$1.5	\$2,250

Landscaping

(trees)	15 to 30 gal	10	EA	\$250	\$2,500
(shrubs)	3, 5 & 7 gal	100	EA	\$20	\$2,000
(mulch)	3"-4" thick	30	CY	\$40	\$1,200
	seeding	2,760	SY	\$0.35	\$966
	2" landscape rock	410	CY	\$100	\$41,000
	Irrigation clock/controller	1	EA	\$1,600	\$1,600

\$63,891

IMPROVEMENTS IN FRONT OF JOHNSON JUNIOR HIGH

Concrete Curbing	(type A) 6" vert. curb with 18" pan - infall for medians and bumpouts on Allison	1,130	LF	\$25	\$28,250
	6" vert. curb with 18" pan - infall for Cribbon Driveway	368	LF	\$25	\$9,200
	6" vert. curb with 18" pan - infall for Cribbon medians	644	LF	\$25	\$16,100
	splash guard	900	LF	\$25	\$22,500
	6" asphalt for Cribbon Driveway	466	TON	\$62	\$28,892
Asphalt Pavement					
Road Base	8" thick compacted road base for Cribbon Driveway	124	CY	\$25	\$3,100
Road Striping	18" stop bars	2	EA	\$100	\$200
	4" white and yellow painted lines on Allison	2,189	LF	\$0.40	\$876
	4" white and yellow painted lines on Cribbon	3,953	LF	\$0.40	\$1,581
	symbols	2	EA	\$150	\$300
	Crosswalk	2	EA	\$150	\$300
Signage	Stop Signs on side streets of Pinto Lane	5	EA	\$200	\$1,000
Landscape	Median landscape rock	120	CY	\$100	\$12,000
	Medain xeriscape landscaping on Allison	1	SF	\$6,000	\$6,000
	Medain xeriscape landscaping on Cribbon	1	SF	\$2,000	\$2,000

\$132,299

Subtotal **\$1,877,483**

Contingency 20 % \$375,497

Bond & Insurance 2 % \$37,550

General Conditions (Traffic Control, Mobilization, etc.) 10 % \$187,748

Total Construction Cost (Preliminary) **Total \$2,478,278**

Engineering Cost 8 % \$198,262.23

Survey Cost 2 % \$49,565.56

Construction Management Cost 10 % \$247,827.78

Total \$2,973,933

APPENDIX G

Additional Information

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James & Lynn
Weather: Clear
Other:

File Name : JEFFER~1
Site Code : 00000000
Start Date : 2/10/2009
Page No : 1

Groups Printed- Vehicles

Start Time	Cribbon From North					From East					Cribbon From South					W Jefferson From West					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	2	13	0	0	15	0	0	0	1	1	0	18	21	0	39	11	0	0	0	11	66
07:15 AM	2	11	0	0	13	0	0	0	0	0	0	19	12	0	31	6	0	4	0	10	54
07:30 AM	1	6	0	0	7	0	0	0	0	0	0	23	12	0	35	8	0	6	0	14	56
07:45 AM	1	10	0	0	11	0	0	0	0	0	0	17	9	0	26	2	0	9	0	11	48
Total	6	40	0	0	46	0	0	0	1	1	0	77	54	0	131	27	0	19	0	46	224
08:00 AM	1	5	0	0	6	0	0	0	0	0	0	16	7	0	23	4	0	10	0	14	43
08:15 AM	1	5	0	0	6	0	0	0	0	0	0	15	21	0	36	5	0	4	0	9	51
08:30 AM	1	5	0	0	6	0	0	0	0	0	0	4	9	0	13	7	0	4	0	11	30
08:45 AM	0	2	0	0	2	0	0	0	0	0	0	3	4	0	7	7	0	0	0	7	16
Total	3	17	0	0	20	0	0	0	0	0	0	38	41	0	79	23	0	18	0	41	140

BREAK

11:00 AM	0	5	0	0	5	0	0	0	0	0	0	1	4	0	5	8	0	2	0	10	20
11:15 AM	2	4	0	2	8	0	0	0	0	0	0	10	6	0	16	5	0	4	0	9	33
11:30 AM	0	4	0	1	5	0	0	0	0	0	0	6	5	0	11	2	0	0	0	2	18
11:45 AM	0	5	0	1	6	0	0	0	0	0	0	3	1	0	4	4	0	3	0	7	17
Total	2	18	0	4	24	0	0	0	0	0	0	20	16	0	36	19	0	9	0	28	88
12:00 PM	2	4	0	0	6	0	0	0	0	0	0	6	8	0	14	5	0	2	0	7	27
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	5	5	0	10	2	0	1	0	3	14
12:30 PM	2	4	0	0	6	0	0	0	0	0	0	6	6	0	12	7	0	1	0	8	26
12:45 PM	0	4	0	0	4	0	0	0	0	0	0	6	5	0	11	6	0	4	0	10	25
Total	4	13	0	0	17	0	0	0	0	0	0	23	24	0	47	20	0	8	0	28	92

BREAK

02:00 PM	2	6	0	0	8	0	0	0	0	0	0	10	4	0	14	9	0	1	0	10	32
02:15 PM	1	6	0	0	7	0	0	0	0	0	0	2	2	0	4	7	0	2	0	9	20
02:30 PM	1	7	0	0	8	0	0	0	5	5	0	26	13	0	39	9	0	1	2	12	64
02:45 PM	2	12	0	0	14	0	0	0	1	1	0	7	4	0	11	7	0	2	1	10	36
Total	6	31	0	0	37	0	0	0	6	6	0	45	23	0	68	32	0	6	3	41	152
03:00 PM	3	7	0	0	10	0	0	0	3	3	0	11	6	0	17	9	0	4	4	17	47
03:15 PM	4	11	0	0	15	0	0	0	30	30	0	16	15	0	31	14	0	3	2	19	95
03:30 PM	8	7	0	0	15	0	0	0	10	10	0	10	9	0	19	14	0	5	0	19	63
03:45 PM	3	12	0	0	15	0	0	0	11	11	0	8	7	0	15	15	0	4	5	24	65
Total	18	37	0	0	55	0	0	0	54	54	0	45	37	0	82	52	0	16	11	79	270
04:00 PM	6	16	0	1	23	0	0	0	4	4	0	12	17	1	30	6	0	2	0	8	65
04:15 PM	4	11	0	2	17	0	0	0	1	1	0	8	6	0	14	9	0	4	0	13	45
04:30 PM	4	9	0	0	13	0	0	0	0	0	0	8	9	0	17	10	0	7	0	17	47
04:45 PM	2	8	0	0	10	0	0	0	2	2	0	5	9	0	14	13	0	0	0	13	39
Total	16	44	0	3	63	0	0	0	7	7	0	33	41	1	75	38	0	13	0	51	196
05:00 PM	5	7	0	0	12	0	0	0	0	0	0	4	6	0	10	22	0	1	0	23	45
05:15 PM	5	7	0	0	12	0	0	0	0	0	0	12	6	0	18	12	0	3	4	19	49
05:30 PM	1	7	0	0	8	0	0	0	0	0	0	7	5	0	12	14	0	2	6	22	42
05:45 PM	3	6	0	0	9	0	0	0	0	0	0	5	5	0	10	11	0	2	3	16	35
Total	14	27	0	0	41	0	0	0	0	0	0	28	22	0	50	59	0	8	13	80	171
Grand Total	69	227	0	7	303	0	0	0	68	68	0	309	258	1	568	270	0	97	27	394	1333
Apprch %	22.8	74.9	0.0	2.3		0.0	0.0	0.0	100.0		0.0	54.4	45.4	0.2		68.5	0.0	24.6	6.9		
Total %	5.2	17.0	0.0	0.5	22.7	0.0	0.0	0.0	5.1	5.1	0.0	23.2	19.4	0.1	42.6	20.3	0.0	7.3	2.0	29.6	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James & Nancy
Weather: Clear
Other: Walterscheid N of 5th St Closed

File Name : WALTER~1
Site Code : 00021209
Start Date : 2/12/2009
Page No : 1

Groups Printed- Vehicles - Axles 2+

Start Time	Walterscheid Blvd From North					Allison Rd From East					Walterscheid Blvd From South					Allison Rd From West					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
11:00 AM	4	17	4	0	25	2	3	4	1	10	5	11	5	0	21	2	8	12	0	22	78
11:15 AM	2	16	5	0	23	4	6	2	1	13	4	15	5	0	24	3	5	4	0	12	72
11:30 AM	1	15	1	1	18	2	11	7	2	22	4	13	4	0	21	5	10	8	0	23	84
11:45 AM	4	17	7	0	28	0	10	3	0	13	5	14	4	0	23	4	11	4	0	19	83
Total	11	65	17	1	94	8	30	16	4	58	18	53	18	0	89	14	34	28	0	76	317
12:00 PM	9	30	1	0	40	6	10	6	1	23	7	31	7	0	45	6	17	6	2	31	139
12:15 PM	6	28	2	2	38	5	18	2	0	25	1	14	5	0	20	3	5	1	0	9	92
12:30 PM	4	21	3	0	28	3	13	8	0	24	5	20	2	0	27	5	8	2	0	15	94
12:45 PM	9	21	1	0	31	3	8	7	2	20	7	32	6	1	46	3	6	6	0	15	112
Total	28	100	7	2	137	17	49	23	3	92	20	97	20	1	138	17	36	15	2	70	437

BREAK

02:00 PM	12	13	3	0	28	1	9	1	0	11	2	11	6	0	19	3	11	8	0	22	80
02:15 PM	13	21	9	1	44	6	21	5	0	32	3	9	9	0	21	2	6	4	0	12	109
02:30 PM	10	20	4	1	35	3	16	7	0	26	4	10	11	0	25	17	26	25	2	70	156
02:45 PM	6	21	3	0	30	8	13	9	0	30	7	15	4	2	28	8	17	8	0	33	121
Total	41	75	19	2	137	18	59	22	0	99	16	45	30	2	93	30	60	45	2	137	466
03:00 PM	5	33	1	0	39	7	15	7	0	29	6	20	5	0	31	13	14	6	2	35	134
03:15 PM	10	18	2	0	30	4	22	7	0	33	13	30	16	0	59	12	17	4	0	33	155
03:30 PM	13	23	5	0	41	3	18	10	0	31	8	24	7	0	39	9	36	21	1	67	178
Grand Total	108	314	51	5	478	57	193	85	7	342	81	269	96	3	449	95	197	119	7	418	1687
Apprch %	22.6	65.7	10.7	1.0		16.7	56.4	24.9	2.0		18.0	59.9	21.4	0.7		22.7	47.1	28.5	1.7		
Total %	6.4	18.6	3.0	0.3	28.3	3.4	11.4	5.0	0.4	20.3	4.8	15.9	5.7	0.2	26.6	5.6	11.7	7.1	0.4	24.8	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter Board: 64
Counted By: carrol
Weather: clear
Other: cheyenne counts 2007

File Name : ALLISO~1
Site Code : 00000238
Start Date : 4/24/2007
Page No : 1

↓
Groups Printed- Unshifted - Bank 1 - Bank 2
↓

Start Time	U.S. Hwy 85 From North					Allison Rd From East					U.S. Hwy 85 From South					Allison Rd From West					Int. Total
	Rt	Thru	Left	Ped	App. Total	Rt	Thru	Left	Ped	App. Total	Rt	Thru	Left	Ped	App. Total	Rt	Thru	Left	Ped	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	7	49	4	0	60	2	5	1	0	8	1	109	8	0	118	3	1	15	0	19	205
07:15 AM	6	58	2	0	66	5	4	1	0	10	2	105	9	0	116	7	6	19	0	32	224
07:30 AM	4	60	2	0	66	4	6	0	0	10	3	158	4	0	165	9	8	13	0	30	271
07:45 AM	8	104	1	0	113	6	2	1	0	9	3	193	6	0	202	10	2	6	0	18	342
Total	25	271	9	0	305	17	17	3	0	37	9	565	27	0	601	29	17	53	0	99	1042
08:00 AM	5	89	5	0	99	3	3	3	0	9	4	116	3	0	123	1	3	10	0	14	245
08:15 AM	6	88	6	0	100	3	3	3	0	9	4	114	6	0	124	6	3	2	2	13	246
08:30 AM	0	78	4	0	82	5	7	1	0	13	5	121	2	0	128	5	4	2	0	11	234
08:45 AM	2	76	6	0	84	2	3	1	0	6	3	114	2	0	119	3	1	7	0	11	220
Total	13	331	21	0	365	13	16	8	0	37	16	465	13	0	494	15	11	21	2	49	945

BREAK

11:00 AM	6	117	0	0	123	3	3	2	1	9	2	141	8	0	151	9	8	22	0	39	322
11:15 AM	5	129	3	0	137	1	2	3	0	6	1	117	9	0	127	10	2	17	0	29	299
11:30 AM	8	117	6	0	131	2	3	5	0	10	0	128	3	0	131	8	6	15	0	29	301
11:45 AM	14	151	4	0	169	9	7	2	1	19	2	154	9	0	165	9	4	8	0	21	374
Total	33	514	13	0	560	15	15	12	2	44	5	540	29	0	574	36	20	62	0	118	1296
12:00 PM	13	166	8	0	187	9	5	2	0	16	6	145	22	0	173	13	8	14	3	38	414
12:15 PM	10	160	12	0	182	3	5	0	0	8	6	183	16	0	205	4	7	9	0	20	415
12:30 PM	13	117	5	0	135	9	6	2	0	17	3	148	12	0	163	7	3	17	0	27	342
12:45 PM	7	132	5	0	144	2	2	4	0	8	1	152	6	0	159	10	1	9	0	20	331
Total	43	575	30	0	648	23	18	8	0	49	16	628	56	0	700	34	19	49	3	105	1502

BREAK

03:00 PM	5	127	4	0	136	9	0	1	0	10	3	119	9	0	131	4	2	8	0	14	291
03:15 PM	5	137	11	0	153	4	0	4	0	8	1	111	4	0	116	6	0	9	0	15	292
03:30 PM	7	160	3	0	170	4	3	1	0	8	1	135	8	0	144	8	3	15	0	26	348
03:45 PM	8	158	3	0	169	2	4	2	0	8	1	144	5	0	150	7	2	7	0	16	343
Total	25	582	21	0	628	19	7	8	0	34	6	509	26	0	541	25	7	39	0	71	1274
04:00 PM	9	156	11	0	176	3	1	3	0	7	2	137	4	0	143	0	4	13	1	18	344
04:15 PM	8	175	10	0	193	1	2	4	0	7	1	108	9	0	118	10	3	9	0	22	340
04:30 PM	9	133	6	3	151	6	2	1	0	9	2	135	13	0	150	6	3	12	0	21	331
04:45 PM	12	159	6	4	181	8	3	3	0	14	0	144	8	0	152	11	2	4	1	18	365
Total	38	623	33	7	701	18	8	11	0	37	5	524	34	0	563	27	12	38	2	79	1380
05:00 PM	5	207	13	0	225	5	3	3	0	11	2	130	14	0	146	5	6	16	0	27	409
05:15 PM	12	204	12	0	228	7	3	3	0	13	2	146	10	0	158	8	0	9	0	17	416
05:30 PM	14	158	10	0	182	4	5	1	0	10	2	119	10	0	131	8	3	10	0	21	344
05:45 PM	11	116	3	0	130	3	5	0	0	8	1	107	7	0	115	9	1	10	1	21	274
Total	42	685	38	0	765	19	16	7	0	42	7	502	41	0	550	30	10	45	1	86	1443
Grand Total	219	3581	165	7	3972	124	97	57	2	280	64	3733	226	0	4023	196	96	307	8	607	8882
Apprch %	5.5	90.2	4.2	0.2		44.3	34.6	20.4	0.7		1.6	92.8	5.6	0.0		32.3	15.8	50.6	1.3		
Total %	2.5	40.3	1.9	0.1	44.7	1.4	1.1	0.6	0.0	3.2	0.7	42.0	2.5	0.0	45.3	2.2	1.1	3.5	0.1	6.8	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: Ayres Associates
Weather:
Other:

File Name : SWALTE~1
Site Code : 00052008
Start Date : 5/20/2008
Page No : 1

↓
Groups Printed- All Vehicles
↓

Start Time	Walterscheid Blvd From North				Allison Rd From East				Walterscheid Blvd From South				Allison Rd From West				Int. Total				
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds					
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0					
07:00 AM	39	13	3	55	0	1	18	1	20	0	5	25	32	0	16	26	19	0	198		
07:15 AM	39	10	0	49	0	4	8	0	12	0	4	22	18	0	13	21	21	0	160		
07:30 AM	6	8	5	19	0	4	6	3	13	0	6	33	10	0	7	13	7	0	108		
07:45 AM	4	16	2	22	0	2	15	6	23	0	3	39	6	0	7	8	7	0	115		
Total	88	47	10	145	0	11	47	10	68	0	18	119	66	203	0	43	68	54	165	0	581
08:00 AM	2	19	3	24	0	2	9	2	13	0	3	22	1	0	1	7	8	0	79		
08:15 AM	2	15	6	23	0	4	11	6	22	0	4	21	3	0	7	9	3	0	91		
08:30 AM	5	16	2	23	0	2	2	7	11	0	3	16	1	0	4	9	8	0	75		
08:45 AM	5	13	3	21	0	3	5	1	9	0	0	13	6	0	1	7	6	0	63		
Total	14	63	14	91	0	11	27	16	0	0	10	72	11	0	13	32	25	70	0	308	
*** BREAK ***																					
03:00 PM	6	22	3	0	0	5	18	4	0	0	3	19	8	0	7	12	12	1	120		
03:15 PM	5	30	3	0	0	5	13	5	2	0	17	14	8	0	3	12	7	0	124		
03:30 PM	9	32	11	0	0	4	14	2	0	0	8	20	2	0	8	25	8	0	143		
03:45 PM	5	23	6	0	0	7	18	4	0	0	6	19	6	0	7	12	14	0	127		
Total	25	107	23	0	0	21	63	15	2	0	34	72	24	0	25	61	41	1	514		
04:00 PM	10	37	8	0	0	4	15	6	0	0	3	18	5	0	3	15	7	0	131		
04:15 PM	5	30	7	0	0	11	13	6	0	0	7	28	5	0	2	5	4	0	123		
04:30 PM	5	35	4	3	0	6	12	5	22	1	3	15	4	1	2	12	7	1	116		
04:45 PM	4	40	5	1	0	7	14	8	29	0	4	21	6	1	3	12	3	18	0	129	
Total	24	142	24	194	4	28	54	25	1	0	17	82	20	121	2	10	44	21	1	499	
05:00 PM	5	58	6	0	0	5	16	6	27	0	7	21	6	0	4	11	4	19	0	149	
05:15 PM	7	52	5	0	0	5	13	12	30	0	11	16	5	1	4	12	5	21	0	148	
05:30 PM	5	43	4	0	0	9	14	6	29	1	8	31	6	0	5	12	2	19	0	146	
05:45 PM	2	30	6	0	0	10	11	6	27	0	2	19	4	0	6	13	7	26	0	116	
Total	19	183	21	220	0	29	54	30	1	0	28	87	21	137	1	19	48	18	0	559	
Grand Total	170	542	92	4	0	100	245	96	4	0	107	432	142	3	110	253	159	2	2461		
Apprch %	21.0	67.1	11.4	0.5	0	22.5	55.1	21.6	0.9	0	15.6	63.2	20.8	0.4	21.0	48.3	30.3	0.4			
Total %	6.9	22.0	3.7	0.2	0	4.1	10.0	3.9	0.2	0	4.3	17.6	5.8	0.1	4.5	10.3	6.5	0.1			

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: Lynn & James
Weather: Clear
Other: 5th & Deming Closed

File Name : DESMET~1
Site Code : 00022609
Start Date : 2/26/2009
Page No : 1

↓
Groups Printed- Vehicles - Axels 2+

Start Time	Desmet From North					Allison Rd From East				From South		Allison Rd From West				Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Peds	App. Total	Peds	App. Total	Thru	Left	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0		1.0		1.0	1.0	1.0		
07:00 AM	3	0	1	0	4	1	81	0	82	0	0	52	1	0	53	139
07:15 AM	3	0	2	0	5	0	60	0	60	0	0	61	2	0	63	128
07:30 AM	1	0	4	0	5	2	16	0	18	0	0	24	1	0	25	48
07:45 AM	1	0	8	0	9	2	14	0	16	0	0	11	1	0	12	37
Total	8	0	15	0	23	5	171	0	176	0	0	148	5	0	153	352
08:00 AM	0	0	4	0	4	7	12	0	19	0	0	11	0	0	11	34
08:15 AM	0	0	8	0	8	4	18	0	22	0	0	17	0	0	17	47
08:30 AM	0	0	6	0	6	3	9	0	12	0	0	12	0	0	12	30
08:45 AM	1	0	5	0	6	8	12	0	20	0	0	12	1	0	13	39
Total	1	0	23	0	24	22	51	0	73	0	0	52	1	0	53	150
BREAK																
11:00 AM	2	0	1	0	3	4	14	0	18	0	0	14	0	0	14	35
11:15 AM	0	0	3	0	3	2	11	0	13	0	0	20	0	0	20	36
11:30 AM	0	0	2	0	2	4	13	0	17	0	0	18	1	0	19	38
11:45 AM	5	0	9	0	14	4	15	0	19	0	0	18	1	0	19	52
Total	7	0	15	0	22	14	53	0	67	0	0	70	2	0	72	161
12:00 PM	2	0	6	0	8	10	22	0	32	0	0	45	3	0	48	88
12:15 PM	2	0	1	0	3	6	27	0	33	0	0	13	0	0	13	49
12:30 PM	3	0	1	0	4	3	19	0	22	0	0	13	0	0	13	39
12:45 PM	1	0	4	0	5	6	19	0	25	0	0	14	0	0	14	44
Total	8	0	12	0	20	25	87	0	112	0	0	85	3	0	88	220
BREAK																
02:00 PM	1	0	4	0	5	4	23	0	27	0	0	12	1	0	13	45
02:15 PM	1	0	3	0	4	3	45	0	48	0	0	17	1	0	18	70
02:30 PM	1	0	3	0	4	6	20	0	26	0	0	77	2	0	79	109
02:45 PM	3	0	2	0	5	2	18	0	20	0	0	28	0	0	28	53
Total	6	0	12	0	18	15	106	0	121	0	0	134	4	0	138	277
03:00 PM	2	0	7	0	9	5	17	0	22	0	0	21	3	0	24	55
03:15 PM	2	0	9	0	11	10	16	0	26	0	0	32	3	0	35	72
03:30 PM	1	0	4	0	5	9	25	0	34	0	0	58	0	0	58	97
03:45 PM	3	0	8	0	11	10	18	0	28	0	0	26	3	0	29	68
Total	8	0	28	0	36	34	76	0	110	0	0	137	9	0	146	292
04:00 PM	0	0	4	0	4	7	23	0	30	0	0	24	2	0	26	60
04:15 PM	1	0	7	0	8	7	28	0	35	0	0	31	3	0	34	77
04:30 PM	0	0	4	0	4	11	24	0	35	0	0	19	1	1	21	60
04:45 PM	2	0	6	1	9	11	25	0	36	0	0	27	3	0	30	75
Total	3	0	21	1	25	36	100	0	136	0	0	101	9	1	111	272
05:00 PM	0	0	4	0	4	9	23	0	32	0	0	27	2	0	29	65
05:15 PM	0	0	7	0	7	6	37	0	43	0	0	30	1	0	31	81
05:30 PM	1	0	5	0	6	5	24	0	29	0	0	22	1	0	23	58
05:45 PM	1	0	5	0	6	4	20	0	24	0	0	21	1	0	22	52
Total	2	0	21	0	23	24	104	0	128	0	0	100	5	0	105	256
Grand Total	43	0	147	1	191	175	748	0	923	0	0	827	38	1	866	1980
Apprch %	22.5	0.0	77.0	0.5		19.0	81.0	0.0		0.0	0.0	95.5	4.4	0.1		
Total %	2.2	0.0	7.4	0.1	9.6	8.8	37.8	0.0	46.6	0.0	0.0	41.8	1.9	0.1	43.7	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James Lynn
Weather: Clear
Other:

File Name : CRIBBO~1
Site Code : 00021009
Start Date : 2/10/2009
Page No : 1

↓
Groups Printed- Vehicles

Start Time	Cribbon From North					Allison From East					South High Construction From South					Allison From West					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	1	0	30	1	32	42	10	1	1	54	1	0	1	1	3	0	23	2	6	31	120
07:15 AM	1	1	20	0	22	29	7	3	0	39	0	0	0	0	0	0	11	1	1	13	74
07:30 AM	1	0	8	0	9	1	6	0	0	7	1	0	0	0	1	0	11	3	1	15	32
07:45 AM	2	0	4	0	6	7	4	1	0	12	0	0	0	0	0	3	5	3	0	11	29
Total	5	1	62	1	69	79	27	5	1	112	2	0	1	1	4	3	50	9	8	70	255
08:00 AM	4	0	6	0	10	2	2	4	1	9	1	0	0	0	1	1	5	8	6	20	40
08:15 AM	0	0	2	0	2	3	2	1	0	6	0	1	0	0	1	0	3	6	3	12	21
08:30 AM	4	0	5	0	9	0	4	0	0	4	1	0	1	0	2	1	5	1	0	7	22
08:45 AM	0	2	4	0	6	2	3	2	1	8	1	0	0	0	1	0	6	0	0	6	21
Total	8	2	17	0	27	7	11	7	2	27	3	1	1	0	5	2	19	15	9	45	104
BREAK																					
11:00 AM	1	0	3	0	4	3	6	0	0	9	0	0	0	0	0	0	1	2	0	3	16
11:15 AM	0	0	4	0	4	9	4	0	0	13	1	0	0	0	1	0	1	0	0	1	19
11:30 AM	0	0	3	1	4	5	7	0	0	12	0	1	2	0	3	1	2	0	1	4	23
11:45 AM	1	0	3	0	4	4	4	1	0	9	0	0	0	0	0	1	4	0	0	5	18
Total	2	0	13	1	16	21	21	1	0	43	1	1	2	0	4	2	8	2	1	13	76
12:00 PM	0	0	7	0	7	7	7	1	0	15	2	2	2	0	6	0	2	2	0	4	32
12:15 PM	2	0	4	0	6	5	4	1	0	10	1	1	2	0	4	2	5	2	0	9	29
12:30 PM	0	0	5	2	7	5	4	1	0	10	0	0	0	2	2	0	3	0	0	3	22
12:45 PM	1	0	10	0	11	3	7	2	2	14	1	0	1	0	2	2	7	0	1	10	37
Total	3	0	26	2	31	20	22	5	2	49	4	3	5	2	14	4	17	4	1	26	120
BREAK																					
02:00 PM	1	0	12	0	13	4	8	1	0	13	0	1	0	0	1	0	5	4	0	9	36
02:15 PM	2	0	13	0	15	18	3	2	1	24	1	0	0	0	1	0	6	3	0	9	49
02:30 PM	2	1	6	0	9	27	10	5	7	49	1	1	0	0	2	0	15	3	1	19	79
02:45 PM	1	1	4	0	6	10	7	0	2	19	2	0	2	0	4	0	8	3	1	12	41
Total	6	2	35	0	43	59	28	8	10	105	4	2	2	0	8	0	34	13	2	49	205
03:00 PM	1	0	6	0	7	7	4	3	2	16	1	0	1	0	2	1	10	3	0	14	39
03:15 PM	7	0	12	0	19	10	15	1	9	35	6	0	2	0	8	0	8	4	3	15	77
03:30 PM	5	0	6	0	11	9	16	0	2	27	7	6	1	0	14	2	8	3	0	13	65
03:45 PM	3	1	10	0	14	14	7	1	3	25	0	1	1	0	2	1	7	1	1	10	51
Total	16	1	34	0	51	40	42	5	16	103	14	7	5	0	26	4	33	11	4	52	232
04:00 PM	3	0	11	0	14	15	7	0	0	22	3	0	3	0	6	0	5	3	1	9	51
04:15 PM	5	0	8	0	13	8	4	1	1	14	2	1	1	0	4	0	6	0	0	6	37
04:30 PM	3	0	6	0	9	6	5	1	2	14	1	1	0	0	2	0	5	4	0	9	34
04:45 PM	3	0	12	0	15	11	9	0	0	20	2	0	0	0	2	0	12	1	1	14	51
Total	14	0	37	0	51	40	25	2	3	70	8	2	4	0	14	0	28	8	2	38	173
05:00 PM	2	0	12	0	14	13	11	2	0	26	3	1	2	0	6	0	7	3	0	10	56
05:15 PM	3	0	7	0	10	9	5	1	0	15	1	0	0	0	1	0	3	3	0	6	32
05:30 PM	1	0	11	0	12	7	7	0	0	14	0	0	0	0	0	0	7	1	0	8	34
05:45 PM	1	0	9	0	10	6	5	1	0	12	1	1	0	0	2	0	2	1	0	3	27
Total	7	0	39	0	46	35	28	4	0	67	5	2	2	0	9	0	19	8	0	27	149
Grand Total	61	6	263	4	334	301	204	37	34	576	41	18	22	3	84	15	208	70	27	320	1314
Apprch %	18.3	1.8	78.7	1.2		52.3	35.4	6.4	5.9		48.8	21.4	26.2	3.6		4.7	65.0	21.9	8.4		
Total %	4.6	0.5	20.0	0.3	25.4	22.9	15.5	2.8	2.6	43.8	3.1	1.4	1.7	0.2	6.4	1.1	15.8	5.3	2.1	24.4	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James & Lynn
Weather: Clear
Other:

File Name : PARSLE~3
Site Code : 00020509
Start Date : 2/5/2009
Page No : 1

Groups Printed- Vehicles - Axels 2+

Start Time	Parsley From North					W Jefferson From East					Parsley From South					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	10	19	0	29	35	0	7	0	42	2	29	0	0	31	102
07:15 AM	0	17	10	0	27	25	0	5	0	30	1	19	0	0	20	77
07:30 AM	0	19	12	0	31	25	0	0	0	25	1	21	0	0	22	78
07:45 AM	0	27	11	0	38	33	0	3	0	36	2	42	0	0	44	118
Total	0	73	52	0	125	118	0	15	0	133	6	111	0	0	117	375
08:00 AM	0	28	7	0	35	16	0	11	0	27	5	24	0	1	30	92
08:15 AM	0	10	14	0	24	27	0	3	0	30	5	26	0	0	31	85
08:30 AM	0	18	6	0	24	18	0	2	0	20	2	17	0	0	19	63
08:45 AM	0	17	11	0	28	11	0	1	0	12	1	15	0	0	16	56
Total	0	73	38	0	111	72	0	17	0	89	13	82	0	1	96	296

BREAK

11:00 AM	0	24	9	0	33	8	0	3	0	11	2	31	0	0	33	77
11:15 AM	0	35	10	0	45	11	0	0	0	11	3	20	0	0	23	79
11:30 AM	0	20	6	0	26	7	0	5	0	12	4	28	0	0	32	70
11:45 AM	0	18	11	0	29	7	0	1	0	8	4	27	0	0	31	68
Total	0	97	36	0	133	33	0	9	0	42	13	106	0	0	119	294
12:00 PM	0	33	22	0	55	11	0	4	0	15	3	14	0	0	17	87
12:15 PM	0	25	11	0	36	19	0	5	0	24	3	29	0	0	32	92
12:30 PM	0	25	14	0	39	18	0	5	0	23	4	21	0	0	25	87
12:45 PM	0	21	9	0	30	23	0	2	0	25	3	26	0	0	29	84
Total	0	104	56	0	160	71	0	16	0	87	13	90	0	0	103	350

BREAK

02:00 PM	0	21	13	0	34	14	0	4	0	18	5	14	0	0	19	71
02:15 PM	0	25	13	0	38	5	0	1	0	6	5	24	0	0	29	73
02:30 PM	0	20	17	1	38	21	0	7	0	28	6	25	0	0	31	97
02:45 PM	0	35	16	0	51	13	0	6	0	19	3	31	0	0	34	104
Total	0	101	59	1	161	53	0	18	0	71	19	94	0	0	113	345
03:00 PM	0	47	24	1	72	15	0	3	1	19	4	34	0	0	38	129
03:15 PM	0	47	21	0	68	15	0	7	0	22	7	28	0	0	35	125
03:30 PM	0	22	11	0	33	15	0	4	0	19	12	79	0	0	91	143
03:45 PM	0	18	22	0	40	22	0	5	0	27	9	25	0	0	34	101
Total	0	134	78	1	213	67	0	19	1	87	32	166	0	0	198	498
04:00 PM	0	27	24	0	51	7	0	3	0	10	6	29	0	0	35	96
04:15 PM	0	35	27	0	62	5	0	4	0	9	4	25	0	0	29	100
04:30 PM	0	28	21	0	49	15	0	3	0	18	6	26	0	0	32	99
04:45 PM	0	24	31	0	55	14	0	3	0	17	5	24	0	0	29	101
Total	0	114	103	0	217	41	0	13	0	54	21	104	0	0	125	396
05:00 PM	0	19	29	0	48	11	0	2	0	13	2	25	0	0	27	88
05:15 PM	0	28	26	0	54	14	0	2	0	16	4	19	0	0	23	93
05:30 PM	0	19	17	0	36	7	0	3	0	10	3	16	0	0	19	65
05:45 PM	0	16	13	0	29	5	0	3	0	8	4	13	0	0	17	54
Total	0	82	85	0	167	37	0	10	0	47	13	73	0	0	86	300
Grand Total	0	778	507	2	1287	492	0	117	1	610	130	826	0	1	957	2854
Apprch %	0.0	60.5	39.4	0.2		80.7	0.0	19.2	0.2		13.6	86.3	0.0	0.1		
Total %	0.0	27.3	17.8	0.1	45.1	17.2	0.0	4.1	0.0	21.4	4.6	28.9	0.0	0.0	33.5	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James & Lynn
Weather: Clear
Other: Demming & 5th ST Closed

File Name : PARSLE~2
Site Code : 00000000
Start Date : 2/19/2009
Page No : 1

Start Time	Parsley Blvd From North					Sundance From East					Parsley Blvd From South					From West					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	0	10	2	0	12	3	0	9	0	12	13	27	0	0	40	0	0	0	0	0	64
07:15 AM	0	14	1	0	15	2	0	11	0	13	8	35	0	0	43	0	0	0	0	0	71
07:30 AM	0	20	1	0	21	3	0	4	0	7	2	41	0	0	43	0	0	0	0	0	71
07:45 AM	0	20	0	0	20	8	0	4	0	12	4	53	0	0	57	0	0	0	0	0	89
Total	0	64	4	0	68	16	0	28	0	44	27	156	0	0	183	0	0	0	0	0	295
08:00 AM	0	21	1	0	22	2	0	4	0	6	5	29	0	0	34	0	0	0	0	0	62
08:15 AM	0	17	1	0	18	2	0	5	0	7	0	39	0	0	39	0	0	0	0	0	64
08:30 AM	0	27	0	0	27	1	0	4	0	5	2	13	0	0	15	0	0	0	0	0	47
08:45 AM	0	17	1	0	18	1	0	5	0	6	3	13	0	0	16	0	0	0	0	0	40
Total	0	82	3	0	85	6	0	18	0	24	10	94	0	0	104	0	0	0	0	0	213
BREAK																					
10:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
11:00 AM	1	27	2	0	30	1	0	3	0	4	1	25	0	0	26	0	0	0	0	0	60
11:15 AM	0	22	1	0	23	1	0	3	0	4	1	18	0	0	19	0	0	0	0	0	46
11:30 AM	0	34	2	0	36	1	0	1	0	2	4	20	0	0	24	0	0	0	0	0	62
11:45 AM	0	29	2	0	31	3	0	1	0	4	1	29	0	0	30	0	0	0	0	0	65
Total	1	112	7	0	120	6	0	8	0	14	7	92	0	0	99	0	0	0	0	0	233
12:00 PM	0	30	2	0	32	1	0	5	0	6	2	28	0	0	30	0	0	0	0	0	68
12:15 PM	0	29	0	0	29	0	0	6	0	6	5	35	0	0	40	0	0	0	0	0	75
12:30 PM	0	30	2	0	32	3	0	2	0	5	0	30	0	0	30	0	0	0	0	0	67
12:45 PM	0	22	2	0	24	3	0	3	0	6	5	30	0	0	35	0	0	0	0	0	65
Total	0	111	6	0	117	7	0	16	0	23	12	123	0	0	135	0	0	0	0	0	275
BREAK																					
02:00 PM	0	16	0	0	16	0	0	0	0	0	2	20	0	0	22	0	0	0	0	0	38
02:15 PM	0	15	3	0	18	1	0	3	0	4	6	12	0	0	18	0	0	0	0	0	40
02:30 PM	0	22	1	0	23	2	0	10	0	12	0	21	0	0	21	0	0	0	0	0	56
02:45 PM	0	26	3	0	29	5	0	5	0	10	5	29	0	0	34	0	0	0	0	0	73
Total	0	79	7	0	86	8	0	18	0	26	13	82	0	0	95	0	0	0	0	0	207
03:00 PM	0	46	2	0	48	1	0	3	0	4	2	31	0	0	33	0	0	0	0	0	85
03:15 PM	0	28	2	0	30	1	0	4	0	5	3	28	0	0	31	0	0	0	0	0	66
03:30 PM	0	50	1	0	51	1	0	14	0	15	7	23	0	0	30	0	0	0	0	0	96
03:45 PM	0	39	5	0	44	3	0	7	0	10	7	21	0	0	28	0	0	0	0	0	82
Total	0	163	10	0	173	6	0	28	0	34	19	103	0	0	122	0	0	0	0	0	329
04:00 PM	0	30	4	0	34	2	0	5	0	7	2	20	0	0	22	0	0	0	0	0	63
04:15 PM	0	30	7	0	37	1	0	4	0	5	5	16	0	0	21	0	0	0	0	0	63
04:30 PM	0	39	4	0	43	2	0	3	0	5	4	17	0	0	21	0	0	0	0	0	69
04:45 PM	0	27	5	0	32	0	0	4	0	4	3	15	0	0	18	0	0	0	0	0	54
Total	0	126	20	0	146	5	0	16	0	21	14	68	0	0	82	0	0	0	0	0	249
05:00 PM	0	51	7	0	58	2	0	6	0	8	3	17	0	0	20	0	0	0	0	0	86
05:15 PM	0	41	3	0	44	2	0	4	0	6	4	18	0	0	22	0	0	0	0	0	72
05:30 PM	0	31	2	0	33	1	0	3	0	4	4	15	0	0	19	0	0	0	0	0	56
05:45 PM	0	24	2	0	26	1	0	2	0	3	1	15	0	0	16	0	0	0	0	0	45
Total	0	147	14	0	161	6	0	15	0	21	12	65	0	0	77	0	0	0	0	0	259
Grand Total	1	885	71	0	957	60	0	147	0	207	114	784	0	0	898	0	0	0	0	0	2062
Apprch %	0.1	92.5	7.4	0.0		29.0	0.0	71.0	0.0		12.7	87.3	0.0	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	42.9	3.4	0.0	46.4	2.9	0.0	7.1	0.0	10.0	5.5	38.0	0.0	0.0	43.5	0.0	0.0	0.0	0.0	0.0	

Cheyenne MPO
2101 O'Neil Ave
Cheyenne WY 82001

Counter:
Counted By: James & Lynn
Weather: Clear
Other: Demming & 5th ST Closed

File Name : PARSLE~1
Site Code : 00000000
Start Date : 2/19/2009
Page No : 1

Groups Printed- Pinto - Vehicles 2+

Start Time	Parsley Blvd From North					Pinto From East					Parsley Blvd From South					From West					Int. Total
	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	Rig ht	Thr u	Left	Ped s	App. Total	
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
07:00 AM	1	19	0	0	20	4	0	8	0	12	1	33	2	0	36	0	0	0	0	0	68
07:15 AM	0	25	0	0	25	7	0	4	0	11	0	36	0	0	36	1	0	0	0	1	73
07:30 AM	0	23	1	0	24	4	0	0	0	4	0	39	2	0	41	2	0	0	0	2	71
07:45 AM	0	23	1	0	24	1	0	4	0	5	6	56	0	0	62	1	0	0	0	1	92
Total	1	90	2	0	93	16	0	16	0	32	7	164	4	0	175	4	0	0	0	4	304
08:00 AM	1	23	2	0	26	3	0	3	0	6	1	31	0	0	32	1	0	0	0	1	65
08:15 AM	0	20	1	0	21	3	0	0	0	3	1	36	2	0	39	1	0	0	0	1	64
08:30 AM	0	30	1	0	31	1	0	1	0	2	1	13	1	0	15	1	0	0	0	1	49
08:45 AM	0	22	0	0	22	0	0	1	0	1	0	15	0	0	15	2	0	0	0	2	40
Total	1	95	4	0	100	7	0	5	0	12	3	95	3	0	101	5	0	0	0	5	218
BREAK																					
10:45 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
11:00 AM	0	30	0	0	30	2	0	0	0	2	3	24	1	0	28	2	0	0	0	2	62
11:15 AM	0	21	4	0	25	0	0	2	0	2	3	19	1	0	23	1	0	0	0	1	51
11:30 AM	0	33	2	0	35	1	0	1	0	2	1	23	0	0	24	0	0	1	0	1	62
11:45 AM	0	30	0	0	30	4	0	2	0	6	1	26	1	0	28	1	0	0	0	1	65
Total	0	114	6	0	120	7	0	5	0	12	8	92	3	0	103	4	0	1	0	5	240
12:00 PM	2	35	0	0	37	1	0	0	0	1	1	29	1	0	31	0	0	1	0	1	70
12:15 PM	0	34	1	0	35	1	0	0	0	1	0	39	0	0	39	1	0	1	0	2	77
12:30 PM	0	31	1	0	32	1	0	1	0	2	1	29	0	0	30	1	0	0	0	1	65
12:45 PM	0	25	0	0	25	0	0	0	0	0	1	35	0	0	36	0	0	0	0	0	61
Total	2	125	2	0	129	3	0	1	0	4	3	132	1	0	136	2	0	2	0	4	273
BREAK																					
02:00 PM	0	14	2	0	16	0	0	1	0	1	2	22	0	0	24	2	0	0	0	2	43
02:15 PM	0	17	1	0	18	0	0	4	0	4	2	18	1	0	21	0	0	0	0	0	43
02:30 PM	0	29	3	0	32	0	0	1	0	1	0	21	0	0	21	1	0	0	0	1	55
02:45 PM	0	30	1	0	31	3	0	1	0	4	4	31	0	0	35	1	0	0	0	1	71
Total	0	90	7	0	97	3	0	7	0	10	8	92	1	0	101	4	0	0	0	4	212
03:00 PM	0	48	1	0	49	3	0	3	0	6	0	30	0	0	30	0	0	0	0	0	85
03:15 PM	0	30	2	0	32	1	0	4	0	5	7	30	0	0	37	0	0	0	0	0	74
03:30 PM	0	64	2	0	66	3	0	2	0	5	2	27	0	0	29	0	0	0	0	0	100
03:45 PM	0	38	7	0	45	2	0	2	0	4	5	26	1	0	32	0	0	0	0	0	81
Total	0	180	12	0	192	9	0	11	0	20	14	113	1	0	128	0	0	0	0	0	340
04:00 PM	0	33	2	0	35	1	0	1	0	2	2	21	0	0	23	0	0	2	0	2	62
04:15 PM	0	31	3	0	34	5	0	2	0	7	3	16	0	0	19	0	0	0	0	0	60
04:30 PM	0	37	5	0	42	0	0	0	0	0	2	21	1	0	24	0	0	0	0	0	66
04:45 PM	0	30	1	0	31	2	0	0	0	2	2	16	0	0	18	0	0	0	0	0	51
Total	0	131	11	0	142	8	0	3	0	11	9	74	1	0	84	0	0	2	0	2	239
05:00 PM	0	54	3	0	57	2	0	3	0	5	2	18	0	0	20	1	0	0	0	1	83
05:15 PM	2	40	5	0	47	1	0	2	0	3	6	21	0	0	27	1	0	0	0	1	78
05:30 PM	0	21	3	0	24	1	0	1	0	2	1	18	0	0	19	0	0	0	0	0	45
05:45 PM	0	25	1	0	26	2	0	1	0	3	1	14	0	0	15	1	0	0	0	1	45
Total	2	140	12	0	154	6	0	7	0	13	10	71	0	0	81	3	0	0	0	3	251
Grand Total	6	966	56	0	1028	59	0	55	0	114	62	834	14	0	910	22	0	5	0	27	2079
Apprch %	0.6	94.0	5.4	0.0		51.8	0.0	48.2	0.0		6.8	91.6	1.5	0.0		81.5	0.0	18.5	0.0		
Total %	0.3	46.5	2.7	0.0	49.4	2.8	0.0	2.6	0.0	5.5	3.0	40.1	0.7	0.0	43.8	1.1	0.0	0.2	0.0	1.3	

24 HOUR ADT

Data For Site : Parsley South of I 80
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 40
 Record Interval Length : 15 min

NB		SB		NB		SB		NB		SB		NB		SB	
0:00	7	8	6:00	31	24	12:00	25	16	18:00	24	56				
15	6	7	15	33	20	15	28	17	15	21	45				
30	6	5	30	29	21	30	26	17	30	12	31				
45	5	5	45	35	26	45	29	15	45	19	26				
1:00	5	8	7:00	38	30	13:00	22	20	19:00	15	25				
15	5	7	15	67	65	15	29	23	15	18	19				
30	6	5	30	75	61	30	24	25	30	21	15				
45	7	6	45	76	63	45	26	35	45	11	14				
2:00	7	4	8:00	70	65	14:00	31	27	20:00	4	13				
15	5	5	15	59	55	15	22	34	15	2	11				
30	3	4	30	52	40	30	20	48	30	5	6				
45	6	3	45	51	31	45	26	37	45	3	5				
3:00	4	2	9:00	49	35	15:00	21	37	21:00	2	3				
15	2	3	15	36	29	15	18	48	15	1	4				
30	2	2	30	30	28	30	19	39	30	2	2				
45	4	1	45	28	23	45	21	35	45	1	3				
4:00	3	1	10:00	29	25	16:00	17	26	22:00	1	2				
15	5	5	15	26	23	15	29	32	15	1	1				
30	6	6	30	28	25	30	28	34	30	1	1				
45	8	8	45	26	24	45	17	30	45	2	1				
5:00	9	7	11:00	25	26	17:00	16	40	23:00	5					
15	10	9	15	23	28	15	20	49	15	3	1				
30	11	8	30	25	23	30	19	56	30	2	1				
45	15	14	45	24	22	45	24	72	45	1	2				

24 Hour Total

3579

24 HOUR ADT

Data For Site : Parsley North of Sundance
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 40
 Record Interval Length : 15 min

	NB	SB		NB	SB		NB	SB		NB	SB
0:00	6	9	6:00	28	31	12:00	24	21	18:00	4	10
15	5	6	15	31	23	15	26	17	15	2	3
30	5	7	30	28	24	30	26	16	30	2	5
45	4	7	45	31	28	45	26	15	45	9	6
1:00	3	5	7:00	35	39	13:00	22	20	19:00	5	5
15	4	5	15	66	40	15	29	21	15	8	9
30	5	7	30	74	55	30	23	22	30	11	7
45	6	5	45	78	57	45	26	27	45	10	8
2:00	5	5	8:00	70	46	14:00	34	31	20:00	4	1
15	2	2	15	56	49	15	28	36	15	3	2
30	1	1	30	51	44	30	17	52	30	4	2
45	5	2	45	40	35	45	22	39	45	2	2
3:00	3	5	9:00	39	31	15:00	21	30	21:00	1	1
15	2	1	15	32	40	15	17	41	15	2	2
30	2	1	30	28	25	30	21	35	30	1	1
45	3	2	45	25	26	45	19	31	45	2	2
4:00	4	2	10:00	27	29	16:00	19	22	22:00	1	1
15	6	4	15	24	25	15	30	24	15	2	2
30	5	5	30	26	31	30	21	28	30	2	2
45	2	9	45	25	29	45	19	31	45	1	1
5:00	6	10	11:00	28	29	17:00	19	33	23:00	2	2
15	8	11	15	26	26	15	22	47	15	2	
30	10	11	30	21	32	30	26	46	30	3	1
45	14	12	45	23	34	45	24	55	45	2	2

24 Hour Total

3453

24 HOUR ADT

Data For Site : Pinto East of Parsley
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	EB	WB		EB	WB		EB	WB		EB	WB
0:00	1	1	6:00	1	2	12:00	5	10	18:00	5	2
15			15	2	6	15	4	11	15	3	1
30			30	2	8	30	3	3	30	2	1
45			45	3	7	45	2	9	45	1	1
1:00	1		7:00	4	12	13:00	2	10	19:00	2	2
15			15	5	29	15	5	16	15	2	2
30			30	11	26	30	5	11	30	1	3
45	1	1	45	9	27	45	7	9	45	2	3
2:00			8:00	7	29	14:00	7	17	20:00	2	1
15	1	1	15	8	15	15	7	15	15	1	1
30			30	6	15	30	19	15	30	2	1
45		1	45	5	18	45	15	9	45	1	2
3:00	1		9:00	5	10	15:00	26	8	21:00	1	1
15			15	4	14	15	15	9	15	1	1
30			30	3	17	30	15	7	30		
45			45	3	5	45	14	5	45	1	
4:00			10:00	1	4	16:00	19	8	22:00		
15			15	1	3	15	38	9	15		1
30	1	1	30	1	4	30	27	7	30	1	
45		1	45	2	2	45	26	6	45		1
5:00		1	11:00	1	3	17:00	17	11	23:00	1	
15	2	1	15	3	2	15	24	12	15	1	1
30	2	2	30	2	2	30	10	9	30	2	
45	1	3	45	2	3	45	12	7	45	1	1

24 Hour Total

994

24 HOUR ADT

Data For Site : Allison between Walterschied & South Greeely
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	EB	WB		EB	WB		EB	WB		EB	WB
0:00	1		6:00	5	2	12:00	12	15	18:00	5	7
15			15	12	7	15	16	16	15	1	6
30	2	1	30	15	5	30	14	18	30	3	4
45		1	45	20	6	45	18	14	45	5	5
1:00			7:00	29	12	13:00	12	19	19:00	7	10
15			15	51	19	15	17	22	15	10	5
30	1		30	59	33	30	14	23	30	11	6
45			45	54	39	45	18	31	45	9	7
2:00	3	2	8:00	47	26	14:00	19	29	20:00	5	2
15			15	56	31	15	21	34	15	4	4
30	1		30	48	32	30	19	49	30	6	6
45		1	45	38	21	45	20	38	45	5	2
3:00			9:00	31	16	15:00	22	36	21:00	2	1
15			15	21	14	15	26	47	15	1	1
30	2		30	22	13	30	21	39	30	2	1
45	1	1	45	9	7	45	19	35	45	1	
4:00			10:00	18	5	16:00	17	24	22:00		1
15		1	15	7	4	15	24	26	15	2	1
30			30	9	6	30	21	49	30	1	2
45	2		45	5	4	45	18	29	45		1
5:00	10		11:00	9	9	17:00	19	32	23:00	1	1
15		3	15	3	5	15	22	48	15	1	
30	6	5	30	2	1	30	26	44	30	2	1
45	4	2	45	10	11	45	21	51	45		1

24 Hour Total

2341

24 HOUR ADT

Data For Site : Parsley North of Jazz Dr
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 40
 Record Interval Length : 15 min

	NB	SB		NB	SB		NB	SB		NB	SB
0:00	5	7	6:00	29	29	12:00	23	15	18:00	5	7
15	4	5	15	32	24	15	25	16	15	1	6
30	5	5	30	27	31	30	25	18	30	3	4
45	2	6	45	33	26	45	27	14	45	6	4
1:00	4	5	7:00	36	33	13:00	21	19	19:00	6	9
15	3	4	15	65	36	15	29	22	15	7	5
30	4	6	30	71	59	30	22	23	30	9	6
45	4	5	45	74	58	45	25	31	45	8	8
2:00	3	5	8:00	69	43	14:00	29	29	20:00	2	2
15	2	4	15	54	42	15	21	34	15	3	2
30	2	3	30	49	42	30	18	49	30	5	3
45	4	5	45	45	36	45	23	38	45	3	2
3:00	2	4	9:00	44	27	15:00	20	36	21:00	1	1
15	1	2	15	33	38	15	16	47	15	1	1
30	1	2	30	29	26	30	22	39	30	1	1
45	2	1	45	24	25	45	18	35	45	1	
4:00	2	2	10:00	28	27	16:00	16	24	22:00	1	1
15	2	2	15	23	23	15	26	26	15	1	1
30	2	2	30	27	29	30	17	49	30	1	2
45	1	1	45	24	25	45	18	29	45	1	1
5:00	3	5	11:00	29	28	17:00	17	32	23:00	2	1
15	6	6	15	22	25	15	21	48	15	1	
30	9	10	30	22	31	30	24	44	30	2	1
45	12	8	45	21	33	45	18	51	45	1	1

24 Hour Total

3326

24 HOUR ADT

Data For Site : Cribbon Between Woodward & Gopp Ct
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	NB	SB		NB	SB		NB	SB		NB	SB
0:00	1	1	6:00	2	3	12:00	10	12	18:00	12	1
15	2	1	15	3	5	15	9	10	15	2	1
30	1	1	30	4	4	30	8	7	30	1	2
45	2	1	45	6	10	45	8	9	45	3	3
1:00	1	1	7:00	5	17	13:00	10	6	19:00	5	2
15			15	8	22	15	9	9	15	4	3
30			30	15	29	30	13	7	30	1	5
45		1	45	16	26	45	16	7	45	3	4
2:00	2	1	8:00	13	25	14:00	19	11	20:00	4	1
15	1	1	15	15	29	15	22	10	15	2	2
30	1		30	19	22	30	25	9	30	1	3
45			45	10	16	45	26	11	45	2	5
3:00	1	1	9:00	12	18	15:00	46	14	21:00	1	2
15	2	1	15	9	12	15	42	12	15	2	1
30			30	7	10	30	30	9	30	1	
45			45	6	11	45	26	10	45		1
4:00	2	1	10:00	4	6	16:00	15	16	22:00	1	1
15	1	1	15	6	5	15	14	12	15	1	2
30	2	1	30	5	2	30	24	10	30		
45			45	2	5	45	19	10	45	1	1
5:00	1	1	11:00	4	6	17:00	18	8	23:00	1	
15	2	2	15	2	4	15	16	7	15	1	
30	4	3	30	3	5	30	17	9	30	1	2
45	6	5	45	5	6	45	19	10	45	1	1

24 Hour Total

1325

24 HOUR ADT

Data For Site : Allison Between Walterschied and Desmet
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

EB		WB		EB		WB		EB		WB		EB		WB	
0:00	1	2	6:00	29	19	12:00	12	15	18:00	19	37				
15	2	1	15	22	14	15	16	16	15	19	35				
30	2	1	30	17	21	30	14	18	30	18	36				
45	2	1	45	23	16	45	18	14	45	14	29				
1:00	1	2	7:00	26	23	13:00	12	19	19:00	8	26				
15	3	1	15	55	26	15	17	22	15	9	15				
30	1	4	30	61	49	30	14	23	30	11	16				
45	1	2	45	64	48	45	18	31	45	9	12				
2:00	1	1	8:00	63	33	14:00	19	29	20:00	7	10				
15	1	1	15	54	32	15	21	34	15	6	6				
30	1	1	30	45	31	30	19	49	30	3	7				
45		1	45	41	26	45	20	38	45	8	5				
3:00	1	2	9:00	45	17	15:00	22	36	21:00	2	3				
15	1	1	15	31	28	15	26	47	15	2	2				
30	1	2	30	26	16	30	21	39	30	2	1				
45	1	1	45	18	15	45	19	35	45	1	2				
4:00	2	1	10:00	14	17	16:00	17	24	22:00	2	2				
15	1	1	15	15	13	15	24	26	15	4	2				
30	2	1	30	18	19	30	21	49	30	1	1				
45	2		45	15	15	45	18	29	45	1	1				
5:00	5	5	11:00	19	18	17:00	19	32	23:00	2	1				
15	4	8	15	12	15	15	22	48	15		2				
30	12	11	30	11	21	30	26	44	30	3					
45	9	8	45	11	23	45	21	51	45		2				

24 Hour Total

3034

24 HOUR ADT

Data For Site : Allison Between Aherns & Cribbon
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

EB		WB		EB		WB		EB		WB		EB		WB		
0:00			1	6:00	1		2	12:00	7		7	18:00		4		3
15				15	4		6	15	8		9	15		3		2
30	1		1	30	3		7	30	9		8	30		3		1
45	1		1	45	2		9	45	7		8	45		2		3
1:00				7:00	7		15	13:00	9		5	19:00		6		4
15			1	15	9		25	15	11		8	15		3		4
30	1			30	17		28	30	12		6	30		2		6
45	1			45	18		26	45	15		6	45		4		5
2:00	1		1	8:00	13		24	14:00	15		9	20:00		2		3
15				15	16		27	15	15		11	15		1		3
30	1		1	30	15		25	30	25		8	30		2		2
45	1			45	11		15	45	20		10	45		3		4
3:00			1	9:00	9		16	15:00	14		12	21:00		2		1
15				15	8		11	15	24		13	15		2		
30	1		1	30	6		10	30	19		11	30		1		1
45	1		1	45	5		9	45	18		9	45		1		1
4:00	1			10:00	2		8	16:00	13		14	22:00		1		2
15			1	15	1		4	15	15		13	15		2		1
30	1			30	4		5	30	25		11	30		1		1
45			1	45	3		2	45	16		9	45				1
5:00	1			11:00	5		4	17:00	19		9	23:00		1		2
15	4		1	15	3		2	15	21		8	15		2		1
30	2		3	30	1		1	30	22		11	30		2		1
45	1		3	45	6		5	45	23		11	45		1		1
19		18		169		286		382		226		51		53		

24 Hour Total

1204

24 HOUR ADT

Data For Site : School cut around
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : Unknown
 Record Interval Length : 15 min

EB		WB		EB		WB		EB		WB					
0:00				6:00	1			12:00	2			18:00	2		
15				15				15	1			15			1
30	1			30	2			30				30			
45		1		45	2	5		45				45			
1:00	1			7:00	1	12		13:00				19:00			1
15				15	2	15		15	3			15	2		
30		1		30	6	16		30				30			
45				45	15	19		45				45		1	
2:00				8:00	19	21		14:00				20:00			1
15	1	1		15	10	19		15	9	19		15			
30				30	9	18		30	8	16		30		1	
45	1			45	6	7		45	6	15		45		1	
3:00		1		9:00	2	5		15:00	5	12		21:00			1
15				15	1			15		13		15		1	
30				30		2		30	2	2		30			1
45	1	1		45		1		45		1		45		1	1
4:00				10:00	1			16:00				22:00			
15				15	1	1		15	1	2		15			
30	1			30	1			30	1			30			1
45				45				45	3	1		45		1	
5:00				11:00		1		17:00	4			23:00			1
15	2	1		15	2			15	3	1		15			
30				30		1		30	1	1		30			
45	2	1		45	2			45	1			45			

24 Hour Total

394

24 HOUR ADT

Data For Site : Jefferson between Arp & Parsley
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	EB	WB		EB	WB		EB	WB		EB	WB
0:00	1	1	6:00	2	4	12:00	10	10	18:00	6	4
15	1		15	4	12	15	9	11	15	5	1
30		1	30	5	16	30	7	3	30	4	2
45	1	1	45	6	15	45	4	9	45	1	3
1:00	1		7:00	9	25	13:00	6	10	19:00	5	6
15	2	1	15	10	40	15	12	16	15	4	5
30			30	25	38	30	11	11	30	5	3
45	1		45	26	36	45	16	9	45	5	2
2:00	2		8:00	15	34	14:00	15	17	20:00	3	4
15	1	1	15	19	31	15	16	15	15	2	1
30		2	30	18	18	30	30	19	30	1	2
45	1	1	45	16	19	45	26	30	45	3	3
3:00	1	1	9:00	12	21	15:00	28	46	21:00	1	2
15	1		15	10	16	15	31	26	15	2	
30			30	8	15	30	29	25	30	2	1
45			45	4	12	45	27	24	45	1	
4:00		1	10:00	3	9	16:00	25	19	22:00	2	2
15	1		15	2	6	15	26	48	15	3	1
30	2	1	30	3	9	30	24	37	30	1	
45	1	2	45	4	5	45	21	26	45		
5:00	2	1	11:00	3	6	17:00	33	27	23:00		2
15	6	2	15	6	4	15	48	24	15	1	
30	5	4	30	5	5	30	49	10	30	2	
45	3	6	45	4	6	45	39	12	45	1	

24 Hour Total

1810

24 HOUR ADT

Data For Site : Allison Between Snyder & Cribbon
 Storage Mode : Count
 Data collected by a Apollo (ver 1.45)
 Posted speed : 30
 Record Interval Length : 15 min

	EB	WB		EB	WB		EB	WB		EB	WB
0:00	1	1	6:00	2	3	12:00	13	15	18:00	12	3
15	1		15	11	8	15	15	17	15	5	2
30	2	1	30	15	6	30	17	16	30	2	1
45		1	45	18	4	45	13	15	45	5	6
1:00	1	1	7:00	30	14	13:00	17	11	19:00	10	8
15	1	1	15	53	9	15	20	16	15	7	6
30		2	30	56	34	30	23	14	30	5	4
45		5	45	51	36	45	29	13	45	7	5
2:00		1	8:00	48	26	14:00	28	18	20:00	5	2
15	2	1	15	52	32	15	37	23	15	3	2
30	1	1	30	50	30	30	50	17	30	3	1
45	2	1	45	32	22	45	40	19	45	5	2
3:00			9:00	31	18	15:00	26	25	21:00	3	
15	1		15	23	17	15	32	25	15	3	1
30		2	30	11	16	30	40	21	30	2	2
45		1	45	18	15	45	34	17	45	2	1
4:00	1	1	10:00	15	12	16:00	25	27	22:00	1	2
15	1	1	15	7	10	15	31	24	15	3	1
30	1	1	30	9	8	30	47	23	30	2	1
45		1	45	5	7	45	33	19	45	1	2
5:00	1	2	11:00	8	6	17:00	39	17	23:00	1	2
15	3	3	15	6	7	15	40	16	15	1	2
30	4	4	30	3	4	30	38	22	30	1	2
45	2	4	45	11	13	45	45	20	45	1	1

24 Hour Total

2314

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
ALLISON RD & CRIBBON AVE
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
2008 08/03/2008	613	17922	ALLISON RD CRIBBON AVE	1	0	Intersection	Not a Collision w/2 Vehicles in Transport	West	Straight Ahead	Utility Pole/Light Support	Daylight	Dry	Failed to Keep Proper Lane Wrong Side/Wrong Way Ran Off Road

TOTAL CRASHES IN THIS REPORT	1
PDO CRASHES	0
INJURY CRASHES	1
FATAL CRASHES	0
TOTAL PERSONS INJURED	1
TOTAL PERSONS KILLED	0

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
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2008	NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
1	0	0	0	1	0	1
TOTAL	1	0	0	1	0	1

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
ALLISON RD & DESMET DR
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
2006													
12/09/2006	30	20402	DESMET DR ALLISON DR	0	0	Intersection Related	Unknown	South	Straight Ahead		Darkness Lighted	Dry	Unknown
2007													
03/01/2007	729	03753	ALLISON DR DESMET DR	0	0	Intersection Related	Rear End (Front to Rear)	East East	Straight Ahead Stopped in Traffic		Daylight	Dry	Following too Close No Improper Driving

TOTAL CRASHES IN THIS REPORT	2
PDO CRASHES	2
INJURY CRASHES	0
FATAL CRASHES	0
TOTAL PERSONS INJURED	0
TOTAL PERSONS KILLED	0

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
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	NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
2006	0	0	1	0	0	1
2007	0	0	1	0	0	1
TOTAL	0	0	2	0	0	2

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
ALLISON RD & S GREELEY HWY
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KILL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMIFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
2005													
04/25/2005	1617	06470	ALLISON DR S.GREELEY	0	0	Intersection Related	Head On (Front to Front)	East	Stopped in Traffic		Daylight	Dry	No Improper Driving
06/16/2005	2020	09393	ALLISON DR S.GREELEY	0	0	Intersection	Other	West	Backing		Daylight	Dry	Improper Backing
2006													
03/10/2006	1855	04445	S.GREELEY	2	0	Intersection	Angle Direction not Specified	South	Straight Ahead		Darkness Lighted	Ice/Frost	No Improper Driving
04/14/2006	1535	06578	ALLISON DR S.GREELEY	0	0	Intersection	Other	North	Straight Ahead		Daylight	Dry	Failed to Yield ROW
09/11/2006	720	14506	S.GREELEY	0	0	Intersection Related	Rear End (Front to Rear)	North	Turning Left		Daylight	Dry	No Improper Driving
10/22/2006	1405	18067	ALLISON DR S.GREELEY	1	0	Intersection Related	Angle Direction not Specified	South	Straight Ahead		Daylight	Dry	Following too Close
12/19/2006	1220	21400	ALLISON DR S.GREELEY	0	0	Intersection	Angle Direction not Specified	South	Slowing		Daylight	Dry	No Improper Driving
12/26/2006	1000	22168	S.GREELEY ALLISON DR	0	0	Intersection Related	Rear End (Front to Rear)	South	Straight Ahead		Daylight	Dry	No Improper Driving
2007													
07/01/2007	1830	11091	S.GREELEY	1	0	Intersection Related	Rear End (Front to Rear)	South	Stopped in Traffic		Daylight	Dry	Unknown
07/29/2007	1648	12908	S.GREELEY	0	0	Intersection Related	Rear End (Front to Rear)	East	Stopped in Traffic		Daylight	Dry	Unknown
09/14/2007	1232	15833	ALLISON DR S.GREELEY	0	0	Intersection	Other	West	Legacy - Starting in traffic		Daylight	Wet	Disregarded Traffic Signs
2008													
06/03/2008	955	08196	S GREELEY HWY	0	0	Intersection	Angle Right (Front to Side, includes Broads	North	Straight Ahead	Motor Vehicle in Transport on OTHER Road	Daylight	Dry	Ran Red Light
08/10/2008	1405	17700	S GREELEY HWY ALLISON RD	0	0	Intersection	Angle Same Direction (Front to Side)	West	Turning Right	Motor Vehicle in Transport on OTHER Road	Daylight	Wet	No Improper Driving
								South	Straight Ahead	Motor Vehicle in Transport on Roadway			Failed to Keep Proper Lane
								South	Stopped in Traffic	Motor Vehicle in Transport on Roadway			Speeding
													Improper Turn or No Signal
													Erratic/Reckless/Careless/Aggre

DATE TIME REPORT NUMBER CRASH LOCATION NUM INJ NUM KIL JUNCTION RELATION MANNER_OF COLLISION DIRECTION ACTIVITY PRIOR MOST HARMFUL EVENT LIGHT COND ROAD COND DRIVER ACTION

TOTAL CRASHES IN THIS REPORT 13
 PDO CRASHES 10
 INJURY CRASHES 3
 FATAL CRASHES 0
 TOTAL PERSONS INJURED 4
 TOTAL PERSONS KILLED 0

	NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
2005	0	0	2	0	0	2
2006	3	0	4	2	0	6
2007	1	0	2	1	0	3
2008	0	0	2	0	0	2
TOTAL	4	0	10	3	0	13

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
ALLISON RD & WALTERSCHEID BLVD
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
2006													
02/17/2006	1703	03327	ALLISON DR WALTERSCHD	1	0	Intersection Related	Rear End (Front to Rear)	East East	Stopped in Traffic Slowing		Daylight	Snow	No Improper Driving Drove too Fast for Conditions
2007													
01/26/2007	1042	01880	WALTERSCHD ALLISON DR	2	0	Intersection	Angle Direction not Specified	East	Straight Ahead		Daylight	Dry	Discarded Traffic Signs No Improper Driving
03/13/2007	1620	04618	WALTERSCHD ALLISON DR	4	0	Intersection	Other	North West East	Turning Left Straight Ahead		Daylight	Dry	No Improper Driving Unknown
05/24/2007	727	08650	WALTERSCHD ALLISON DR	3	0	Intersection	Angle Direction not Specified	East	Straight Ahead		Daylight	Dry	Failed to Yield ROW No Improper Driving
11/20/2007	2200	20281	ALLISON DR WALTERSCHD	1	0	Intersection Related	Unknown	Northwest East	Legacy - Standing in traffic Straight Ahead		Darkness Lighted	Snow	No Improper Driving Unknown
2008													
08/22/2008	1700	18806	WALTERSCHEID BI ALLISON RD	0	0	Intersection	Angle (Front to Side), Opposing Direction	East South	Straight Ahead Straight Ahead	Motor Vehicle in Transport on Roadway Motor Vehicle in Transport on Roadway	Daylight	Dry	Failed to Yield ROW No Improper Driving

DATE TIME REPORT NUMBER CRASH LOCATION NUM NUM JUNCTION MANNER_OF COLLISION DIRECTION ACTIVITY PRIOR MOST HARMFUL EVENT LIGHT COND ROAD COND DRIVER ACTION

TOTAL CRASHES IN THIS REPORT 6
 PDO CRASHES 1
 INJURY CRASHES 5
 FATAL CRASHES 0
 TOTAL PERSONS INJURED 11
 TOTAL PERSONS KILLED 0

	NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
2006	1	0	0	1	0	1
2007	10	0	0	4	0	4
2008	0	0	1	0	0	1
TOTAL	11	0	1	5	0	6

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
PARSLEY BLVD & PINTO LN
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
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TOTAL CRASHES IN THIS REPORT	0
PDO CRASHES	0
INJURY CRASHES	0
FATAL CRASHES	0
TOTAL PERSONS INJURED	
TOTAL PERSONS KILLED	

NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
0	0	0	0	0	0
TOTAL					0

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

**CRASH HISTORY FOR CHEYENNE AT THE INTERSECTION OF
PARSLEY BLVD & W JEFFERSON RD
FOR THE YEARS 2005 THROUGH 2008**

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
2005													
07/12/2005	1623	10528	JEFFERSON PARSLEY BL	0	0	Intersection Related	Other	South South	Turning Left Stopped in Traffic		Daylight	Dry	Unknown No Improper Driving
2007													
03/22/2007	1356	05198	PARSLEY BL JEFFERSON	0	0	Intersection	Other	West South	Turning Left Turning Left		Daylight	Dry	No Improper Driving Improper Turn or No Signal
10/12/2007	1442	17309	PARSLEY BL JEFFERSON	0	0	Intersection Related	Rear End (Front to Rear)	North North	Straight Ahead Stopped in Traffic		Daylight	Dry	Following too Close No Improper Driving

TOTAL CRASHES IN THIS REPORT	3
PDO CRASHES	3
INJURY CRASHES	0
FATAL CRASHES	0
TOTAL PERSONS INJURED	0
TOTAL PERSONS KILLED	0

DATE	TIME	REPORT NUMBER	CRASH LOCATION	NUM INJ	NUM KIL	JUNCTION RELATION	MANNER_OF COLLISION	DIRECTION	ACTIVITY PRIOR	MOST HARMFUL EVENT	LIGHT COND	ROAD COND	DRIVER ACTION
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	NUMBER PERSONS INJURED	NUMBER PERSONS KILLED	PDO* CRASHES	INJURY CRASHES	FATAL CRASHES	TOTAL CRASHES
2005	0	0	1	0	0	1
2007	0	0	2	0	0	2
TOTAL	0	0	3	0	0	3

*PDO = Property Damage Only Crashes; No Injuries, No Fatalities

HCM Signalized Intersection Capacity Analysis
159: Allison Rd & Walterscheid Blvd

Year 2014

Timing Plan: AM PEAK
10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94			0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1754			1848		1770	1826		1770	1863	1583
Flt Permitted	0.68	1.00			0.98		0.72	1.00		0.65	1.00	1.00
Satd. Flow (perm)	1266	1754			1817		1340	1826		1212	1863	1583
Volume (vph)	123	138	88	11	244	12	162	131	20	11	52	289
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	137	153	98	12	271	13	180	146	22	12	58	321
RTOR Reduction (vph)	0	38	0	0	2	0	0	9	0	0	0	205
Lane Group Flow (vph)	137	213	0	0	294	0	180	159	0	12	58	116
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	7.8	7.8			7.8		7.3	7.3		7.3	7.3	7.3
Effective Green, g (s)	9.0	9.0			9.0		8.5	8.5		8.5	8.5	8.5
Actuated g/C Ratio	0.38	0.38			0.38		0.36	0.36		0.36	0.36	0.36
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	485	672			696		485	660		438	674	573
v/s Ratio Prot		0.14						0.09			0.03	
v/s Ratio Perm	0.11				0.16		0.13			0.01		0.20
v/c Ratio	0.28	0.32			0.42		0.37	0.24		0.03	0.09	0.20
Uniform Delay, d1	5.0	5.1			5.3		5.5	5.2		4.8	4.9	5.2
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.3			0.4		0.5	0.2		0.0	0.1	0.2
Delay (s)	5.3	5.4			5.7		6.0	5.4		4.9	5.0	5.3
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.4			5.7			5.7			5.3	
Approach LOS		A			A			A			A	

Intersection Summary

HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	23.5	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
 238: Allison Rd & US 85

Timing Plan: AM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.96		1.00	1.00		1.00	0.96	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1736			1769		1770	3527		1770	3397	
Flt Permitted		0.90			0.95		0.44	1.00		0.37	1.00	
Satd. Flow (perm)		1595			1688		814	3527		684	3397	
Volume (vph)	47	37	52	8	30	18	165	641	15	18	376	138
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	52	41	58	9	33	20	183	712	17	20	418	153
RTOR Reduction (vph)	0	50	0	0	17	0	0	1	0	0	21	0
Lane Group Flow (vph)	0	101	0	0	45	0	183	728	0	20	550	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.0			8.0		53.6	53.6		53.6	53.6	
Effective Green, g (s)		9.2			9.2		54.8	54.8		54.8	54.8	
Actuated g/C Ratio		0.13			0.13		0.78	0.78		0.78	0.78	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		210			222		637	2761		535	2659	
v/s Ratio Prot								0.21			0.17	
v/s Ratio Perm		c0.09			0.04		c0.22			0.03		
v/c Ratio		0.48			0.20		0.29	0.26		0.04	0.21	
Uniform Delay, d1		28.2			27.1		2.1	2.1		1.7	2.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.7			0.4		1.1	0.2		0.1	0.2	
Delay (s)		29.9			27.6		3.3	2.3		1.8	2.1	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		29.9			27.6			2.5			2.1	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	48.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.06	Storage Space is adequate
CF2	6	
Proportion of Traffic In Platoon	0.74	Traffic moderately platooned
Ap, platoon adjustment	-4	
Main Street Volume (vph)	447	Low Volumes, coordination is lower priority
Av, volume adjustment	-5	
Cycle Length	24.9	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	10.1	
Ac, Cycle Adjustment	-5	
CF, Coordinatability Factor	18	Coordination definitely not recommended

HCM Signalized Intersection Capacity Analysis
 159: Allison Rd & Walterscheid Blvd

Year 2019

Timing Plan: AM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94			0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1754			1847		1770	1826		1770	1863	1583
Flt Permitted	0.67	1.00			0.98		0.72	1.00		0.64	1.00	1.00
Satd. Flow (perm)	1243	1754			1813		1334	1826		1194	1863	1583
Volume (vph)	129	146	93	12	249	13	170	145	22	12	57	299
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	143	162	103	13	277	14	189	161	24	13	63	332
RTOR Reduction (vph)	0	38	0	0	3	0	0	9	0	0	0	212
Lane Group Flow (vph)	143	227	0	0	301	0	189	176	0	13	63	120
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	7.9	7.9			7.9		7.4	7.4		7.4	7.4	7.4
Effective Green, g (s)	9.1	9.1			9.1		8.6	8.6		8.6	8.6	8.6
Actuated g/C Ratio	0.38	0.38			0.38		0.36	0.36		0.36	0.36	0.36
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	477	673			696		484	663		433	676	574
v/s Ratio Prot		0.15						0.10			0.03	
v/s Ratio Perm	0.12				0.17		0.14			0.01		0.21
v/c Ratio	0.30	0.34			0.43		0.39	0.27		0.03	0.09	0.21
Uniform Delay, d1	5.1	5.2			5.4		5.6	5.3		4.9	5.0	5.2
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3			0.4		0.5	0.2		0.0	0.1	0.2
Delay (s)	5.4	5.5			5.8		6.1	5.5		4.9	5.0	5.4
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.5			5.8			5.8			5.3	
Approach LOS		A			A			A			A	

Intersection Summary

HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	23.7	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		













c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

Timing Plan: AM PEAK

238: Allison Rd & US 85

10/15/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Fr _t		0.95			0.96		1.00	1.00		1.00	0.96	
Fl _t Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1736			1768		1770	3527		1770	3404	
Fl _t Permitted		0.89			0.94		0.41	1.00		0.34	1.00	
Satd. Flow (perm)		1579			1679		772	3527		626	3404	
Volume (vph)	50	39	55	9	32	20	167	708	17	20	415	141
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	43	61	10	36	22	186	787	19	22	461	157
RTOR Reduction (vph)	0	51	0	0	19	0	0	1	0	0	19	0
Lane Group Flow (vph)	0	109	0	0	49	0	186	805	0	22	599	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.3			8.3		53.3	53.3		53.3	53.3	
Effective Green, g (s)		9.5			9.5		54.5	54.5		54.5	54.5	
Actuated g/C Ratio		0.14			0.14		0.78	0.78		0.78	0.78	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		214			228		601	2746		487	2650	
v/s Ratio Prot								0.23			0.18	
v/s Ratio Perm		c0.10			0.04		c0.24			0.04		
v/c Ratio		0.51			0.21		0.31	0.29		0.05	0.23	
Uniform Delay, d ₁		28.1			26.9		2.3	2.2		1.8	2.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d ₂		1.9			0.5		1.3	0.3		0.2	0.2	
Delay (s)		30.0			27.4		3.6	2.5		2.0	2.3	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		30.0			27.4			2.7			2.3	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	5.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	50.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.06	Storage Space is adequate
CF2	6	
Proportion of Traffic In Platoon	0.74	Traffic moderately platooned
Ap, platoon adjustment	-4	
Main Street Volume (vph)	464	Low Volumes, coordination is lower priority
Av, volume adjustment	-5	
Cycle Length	25.4	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	9.6	
Ac, Cycle Adjustment	-4	
CF, Coordinatability Factor	19	Coordination definitely not recommended

HCM Signalized Intersection Capacity Analysis
 159: Allison Rd & Walterscheid Blvd

Year 2024

Timing Plan: AM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.94			0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1754			1846		1770	1826		1770	1863	1583
Flt Permitted	0.65	1.00			0.98		0.71	1.00		0.63	1.00	1.00
Satd. Flow (perm)	1212	1754			1809		1325	1826		1172	1863	1583
Volume (vph)	136	155	98	13	255	14	178	160	24	13	63	310
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	151	172	109	14	283	16	198	178	27	14	70	344
RTOR Reduction (vph)	0	39	0	0	3	0	0	9	0	0	0	217
Lane Group Flow (vph)	151	242	0	0	310	0	198	196	0	14	70	127
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	8.1	8.1			8.1		7.7	7.7		7.7	7.7	7.7
Effective Green, g (s)	9.3	9.3			9.3		8.9	8.9		8.9	8.9	8.9
Actuated g/C Ratio	0.38	0.38			0.38		0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	466	674			695		487	672		431	685	582
v/s Ratio Prot		0.16						0.11			0.04	
v/s Ratio Perm	0.12				0.17		0.15			0.01		0.22
v/c Ratio	0.32	0.36			0.45		0.41	0.29		0.03	0.10	0.22
Uniform Delay, d1	5.2	5.3			5.5		5.7	5.4		4.9	5.0	5.3
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3			0.5		0.6	0.2		0.0	0.1	0.2
Delay (s)	5.6	5.7			6.0		6.2	5.7		4.9	5.1	5.4
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.6			6.0			5.9			5.4	
Approach LOS		A			A			A			A	

Intersection Summary

HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	24.2	Sum of lost time (s)	6.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
 238: Allison Rd & US 85

Timing Plan: AM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↖	↗		↖	↗	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Fr _t		0.95			0.96		1.00	1.00		1.00	0.96	
Fl _t Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1736			1767		1770	3527		1770	3412	
Fl _t Permitted		0.89			0.94		0.39	1.00		0.30	1.00	
Satd. Flow (perm)		1571			1668		728	3527		567	3412	
Volume (vph)	53	41	59	10	34	22	169	782	19	22	458	144
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	59	46	66	11	38	24	188	869	21	24	509	160
RTOR Reduction (vph)	0	52	0	0	21	0	0	1	0	0	18	0
Lane Group Flow (vph)	0	119	0	0	52	0	188	889	0	24	651	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		8.7			8.7		52.9	52.9		52.9	52.9	
Effective Green, g (s)		9.9			9.9		54.1	54.1		54.1	54.1	
Actuated g/C Ratio		0.14			0.14		0.77	0.77		0.77	0.77	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		222			236		563	2726		438	2637	
v/s Ratio Prot								0.25			0.20	
v/s Ratio Perm		c0.11			0.04		c0.26			0.04		
v/c Ratio		0.54			0.22		0.33	0.33		0.05	0.25	
Uniform Delay, d ₁		27.9			26.6		2.4	2.4		1.9	2.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d ₂		2.5			0.5		1.6	0.3		0.2	0.2	
Delay (s)		30.4			27.1		4.0	2.7		2.1	2.5	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		30.4			27.1			3.0			2.4	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	6.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.07	Storage Space is adequate
CF2	7	
Proportion of Traffic In Platoon	0.74	Traffic moderately platooned
Ap, platoon adjustment	-4	
Main Street Volume (vph)	484	Low Volumes, coordination is lower priority
Av, volume adjustment	-4	
Cycle Length	26.1	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	8.9	
Ac, Cycle Adjustment	-4	
CF, Coordinatability Factor	20	Coordination definitely not recommended

HCM Signalized Intersection Capacity Analysis
 159: Allison Rd & Walterscheid Blvd

Year 2014

Timing Plan: PM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.95			0.98		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1777			1803		1770	1792		1770	1863	1583
Flt Permitted	0.80	1.00			0.89		0.61	1.00		0.66	1.00	1.00
Satd. Flow (perm)	1496	1777			1621		1139	1792		1237	1863	1583
Volume (vph)	149	186	83	35	109	29	46	98	33	22	213	69
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	166	207	92	39	121	32	51	109	37	24	237	77
RTOR Reduction (vph)	0	28	0	0	13	0	0	19	0	0	0	50
Lane Group Flow (vph)	166	271	0	0	179	0	51	127	0	24	237	27
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	8.0	8.0			8.0		7.2	7.2		7.2	7.2	7.2
Effective Green, g (s)	9.2	9.2			9.2		8.4	8.4		8.4	8.4	8.4
Actuated g/C Ratio	0.39	0.39			0.39		0.36	0.36		0.36	0.36	0.36
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	583	693			632		405	638		440	663	563
v/s Ratio Prot		c0.17						0.08			c0.13	
v/s Ratio Perm	0.11				0.12		0.04			0.02		0.05
v/c Ratio	0.28	0.39			0.28		0.13	0.20		0.05	0.36	0.05
Uniform Delay, d1	4.9	5.2			4.9		5.1	5.3		5.0	5.6	5.0
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4			0.2		0.1	0.2		0.1	0.3	0.0
Delay (s)	5.2	5.5			5.2		5.3	5.4		5.0	5.9	5.0
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.4			5.2			5.4			5.7	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	23.6	Sum of lost time (s)	6.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
 238: Allison Rd & US 85

Timing Plan: PM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↗	↕		↗	↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Fr't		0.95			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1734			1714		1770	3533		1770	3500	
Flt Permitted		0.87			0.94		0.27	1.00		0.39	1.00	
Satd. Flow (perm)		1535			1627		498	3533		720	3500	
Volume (vph)	94	44	78	11	15	29	62	586	7	45	804	64
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	104	49	87	12	17	32	69	651	8	50	893	71
RTOR Reduction (vph)	0	43	0	0	25	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	197	0	0	36	0	69	658	0	50	960	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		13.1			13.1		48.5	48.5		48.5	48.5	
Effective Green, g (s)		14.3			14.3		49.7	49.7		49.7	49.7	
Actuated g/C Ratio		0.20			0.20		0.71	0.71		0.71	0.71	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		314			332		354	2508		511	2485	
v/s Ratio Prot								0.19			c0.28	
v/s Ratio Perm		c0.16			0.04		0.14			0.07		
v/c Ratio		0.63			0.11		0.19	0.26		0.10	0.39	
Uniform Delay, d1		25.4			22.7		3.4	3.6		3.2	4.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		3.9			0.1		1.2	0.3		0.4	0.5	
Delay (s)		29.3			22.8		4.6	3.9		3.5	4.5	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		29.3			22.8			3.9			4.5	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.05	Storage Space is adequate
CF2	5	
Proportion of Traffic In Platoon	0.76	Traffic moderately platooned
Ap, platoon adjustment	-3	
Main Street Volume (vph)	432	Low Volumes, coordination is lower priority
Av, volume adjustment	-5	
Cycle Length	24.3	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	10.7	
Ac, Cycle Adjustment	-5	
CF, Coordinatability Factor	19	Coordination definitely not recommended

HCM Signalized Intersection Capacity Analysis
159: Allison Rd & Walterscheid Blvd

Year 2019

Timing Plan: PM PEAK
10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.95			0.98		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1777			1800		1770	1793		1770	1863	1583
Flt Permitted	0.78	1.00			0.89		0.60	1.00		0.66	1.00	1.00
Satd. Flow (perm)	1448	1777			1610		1114	1793		1221	1863	1583
Volume (vph)	151	191	85	39	115	32	49	108	36	24	235	71
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	168	212	94	43	128	36	54	120	40	27	261	79
RTOR Reduction (vph)	0	27	0	0	13	0	0	19	0	0	0	50
Lane Group Flow (vph)	168	279	0	0	194	0	54	141	0	27	261	29
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	8.1	8.1			8.1		7.5	7.5		7.5	7.5	7.5
Effective Green, g (s)	9.3	9.3			9.3		8.7	8.7		8.7	8.7	8.7
Actuated g/C Ratio	0.39	0.39			0.39		0.36	0.36		0.36	0.36	0.36
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	561	689			624		404	650		443	675	574
v/s Ratio Prot		c0.17						0.09			c0.14	
v/s Ratio Perm	0.12				0.13		0.05			0.02		0.05
v/c Ratio	0.30	0.41			0.31		0.13	0.22		0.06	0.39	0.05
Uniform Delay, d1	5.1	5.3			5.1		5.1	5.3		5.0	5.7	5.0
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4			0.3		0.2	0.2		0.1	0.4	0.0
Delay (s)	5.4	5.7			5.4		5.3	5.5		5.0	6.0	5.0
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.6			5.4			5.4			5.7	
Approach LOS		A			A			A			A	

Intersection Summary

HCM Average Control Delay	5.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	24.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
 238: Allison Rd & US 85

Timing Plan: PM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔		↙	↕		↙	↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Fr't		0.95			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1733			1713		1770	3533		1770	3501	
Flt Permitted		0.86			0.94		0.23	1.00		0.36	1.00	
Satd. Flow (perm)		1528			1624		436	3533		662	3501	
Volume (vph)	97	45	82	12	17	32	67	647	8	50	888	69
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	108	50	91	13	19	36	74	719	9	56	987	77
RTOR Reduction (vph)	0	43	0	0	28	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	206	0	0	40	0	74	727	0	56	1060	0
Turn Type	Perm		Perm			Perm			Perm			
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		13.5			13.5		48.1	48.1		48.1	48.1	
Effective Green, g (s)		14.7			14.7		49.3	49.3		49.3	49.3	
Actuated g/C Ratio		0.21			0.21		0.70	0.70		0.70	0.70	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		321			341		307	2488		466	2466	
v/s Ratio Prot								0.21			c0.30	
v/s Ratio Perm		c0.16			0.04		0.17			0.08		
v/c Ratio		0.64			0.12		0.24	0.29		0.12	0.43	
Uniform Delay, d1		25.2			22.4		3.7	3.9		3.3	4.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.3			0.2		1.9	0.3		0.5	0.5	
Delay (s)		29.6			22.5		5.5	4.2		3.9	4.9	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		29.6			22.5			4.3			4.9	
Approach LOS		C			C			A			A	

Intersection Summary

HCM Average Control Delay	7.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.05	Storage Space is adequate
CF2	5	
Proportion of Traffic In Platoon	0.76	Traffic moderately platooned
Ap, platoon adjustment	-3	
Main Street Volume (vph)	456	Low Volumes, coordination is lower priority
Av, volume adjustment	-5	
Cycle Length	25.1	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	9.9	
Ac, Cycle Adjustment	-4	
CF, Coordinatability Factor	20	Coordination definitely not recommended

HCM Signalized Intersection Capacity Analysis
 159: Allison Rd & Walterscheid Blvd

Year 2024













Timing Plan: PM PEAK
 10/15/2009

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Util. Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.95			0.98		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1777			1799		1770	1793		1770	1863	1583
Flt Permitted	0.75	1.00			0.88		0.58	1.00		0.65	1.00	1.00
Satd. Flow (perm)	1402	1777			1595		1087	1793		1204	1863	1583
Volume (vph)	153	197	87	43	122	35	52	119	40	26	259	74
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	170	219	97	48	136	39	58	132	44	29	288	82
RTOR Reduction (vph)	0	26	0	0	13	0	0	20	0	0	0	52
Lane Group Flow (vph)	170	290	0	0	210	0	58	156	0	29	288	30
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	8.2	8.2			8.2		7.7	7.7		7.7	7.7	7.7
Effective Green, g (s)	9.4	9.4			9.4		8.9	8.9		8.9	8.9	8.9
Actuated g/C Ratio	0.39	0.39			0.39		0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.2	4.2			4.2		4.2	4.2		4.2	4.2	4.2
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	542	687			617		398	657		441	682	580
v/s Ratio Prot		c0.18						0.10			c0.15	
v/s Ratio Perm	0.12				0.14		0.05			0.02		0.05
v/c Ratio	0.31	0.42			0.34		0.15	0.24		0.07	0.42	0.05
Uniform Delay, d1	5.2	5.5			5.3		5.2	5.3		5.0	5.8	5.0
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.4			0.3		0.2	0.2		0.1	0.4	0.0
Delay (s)	5.5	5.9			5.6		5.3	5.5		5.1	6.2	5.0
Level of Service	A	A			A		A	A		A	A	A
Approach Delay (s)		5.8			5.6			5.5			5.9	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	5.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	24.3	Sum of lost time (s)	6.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
 238: Allison Rd & US 85

Timing Plan: PM PEAK
 10/15/2009

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕		↙	↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	12	12	12
Total Lost time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.95			0.93		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1732			1714		1770	3533		1770	3502	
Flt Permitted		0.86			0.94		0.20	1.00		0.32	1.00	
Satd. Flow (perm)		1521			1626		373	3533		600	3502	
Volume (vph)	101	46	86	13	19	35	72	714	9	55	980	74
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	112	51	96	14	21	39	80	793	10	61	1089	82
RTOR Reduction (vph)	0	33	0	0	30	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	226	0	0	44	0	80	802	0	61	1167	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.4			14.4		47.2	47.2		47.2	47.2	
Effective Green, g (s)		15.6			15.6		48.4	48.4		48.4	48.4	
Actuated g/C Ratio		0.22			0.22		0.69	0.69		0.69	0.69	
Clearance Time (s)		4.2			4.2		4.2	4.2		4.2	4.2	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		339			362		258	2443		415	2421	
v/s Ratio Prot								0.23			c0.33	
v/s Ratio Perm		c0.17			0.05		0.21			0.10		
v/c Ratio		0.67			0.12		0.31	0.33		0.15	0.48	
Uniform Delay, d1		24.8			21.7		4.2	4.3		3.7	5.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.9			0.2		3.1	0.4		0.7	0.7	
Delay (s)		29.7			21.9		7.3	4.7		4.5	5.7	
Level of Service		C			C		A	A		A	A	
Approach Delay (s)		29.7			21.9			4.9			5.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	70.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Link: Allison Rd, Walterscheid Blvd to US 85

Variable	Value	Comments
Travel Time (s)	55	Travel Time okay For Coordination
CF1	32	
Traffic / Storage Space	0.05	Storage Space is adequate
CF2	5	
Proportion of Traffic In Platoon	0.75	Traffic moderately platooned
Ap, platoon adjustment	-4	
Main Street Volume (vph)	482	Low Volumes, coordination is lower priority
Av, volume adjustment	-4	
Cycle Length	25.9	at Walterscheid Blvd
Cycle Length	70	at US 85
Combined Cycle Length	70	
Cycle Length Increase	9.1	
Ac, Cycle Adjustment	-4	
CF, Coordinatability Factor	20	Coordination definitely not recommended