PROPOSAL FOR TRANSPORT OF HIGH-WIDE LOADS

BONNER, MONTANA TO PORT OF ENTRY – SWEETGRASS, MONTANA

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SECTION 1: SUMMARY AND PURPOSE

The purpose of this document is to provide a plan for the transport of high and wide loads manufactured in Bonner, Montana to the Port of Entry - Sweetgrass, Montana.

The dimensions of the loads specific to this document are approximately 24' wide, 24' high and 80' long. The weight will be approximately 280 US tons. These dimensions and weights do not include the pull/push vehicle and trailer. The total loaded height is expected to be approximately 27' to 29'. The loaded length, including pull vehicle, will be approximately 140'. These dimensions are large enough to necessitate travel on roadways free of permanent overhead obstructions (i.e., overpasses). Interstate highways are not considered in this proposal due to the presence of permanent overhead structures too low to permit passage of proposed load heights. Loads less than 14' wide do not require special traffic control considerations and will not be addressed in this document.

NOTE: *The dimensions described above are descriptive of typical loads that have been discussed in the planning phase and may vary widely according to manufacturing demands for products. Several higher and longer loads (up to 30' high and 280' long) have been successfully maneuvered on the proposed route. At which time production begins at the Bonner manufacturing site and specific weights and dimensions are known, the transport company will apply for a 32J permit from the Montana Department of Transportation (MDT). Final load dimensions and transport configurations will be determined and outlined for each type of load in conjunction with permit applications.*

Included in this document:

- Travel routes
- Traffic management plans
- Travel times
- Traffic count data
- Load and transport equipment descriptions
- Overhead utility conflicts and solutions
- Emergency response plans and contact information

Due to the anticipated frequency and dimensions of these loads, travel will occur between the hours of 10 p.m. and 6 a.m. MDT traffic count data shows that traffic volumes will be at their lowest during these hours, reducing conflicts with commuting and traveling public and school buses. Loads will travel only from Sunday night through Thursday night to avoid conflicts with weekend travel. Operations will be suspended for holidays and special community events as needed (rodeos, fairs, etc). This operation is anticipated to continue year-round, weather permitting. Regular scheduling of loads will depend on manufacturing and travel logistics. Assuming that overhead utility conflicts have been mitigated prior to the final travel plans being submitted, it is projected that most loads, under good weather and road conditions, will complete the route in two nights.

Poteet Construction Inc. (PCI), of Missoula, Montana has been retained to outline this proposal by virtue of their experience in planning for and effecting the movement of high and wide loads along the

proposed route in a safe and efficient manner with minimum impact to residents, communities and the travelling public. PCI has been incorporated since 1987 and has provided traffic control services for private, state and federal highway projects throughout Montana and surrounding states. PCI will provide all traffic control devices and personnel for all load moves associated with this proposal.

Sarens Group, a world-wide leader in heavy load lifting and transport, will be the contracted transport company. Sarens currently has a branch office in Missoula and has provided their expertise in moving oversized loads to the preparation of this proposal. Typical drawings of proposed loads and transport equipment are provided in Appendix C of this document.

SECTION 2: PROPOSED ROUTE

The proposed route lies entirely within Montana and consists of U.S. and State highways and secondary roads from the manufacturing point in Bonner, Montana, to the Port of Entry-Sweetgrass, Montana, on the Canadian border. The proposed route is free from permanent overhead structures and has been used for the transport of high and wide oversized loads since 2011.

The route is described as follows:

- Montana State Highway 200 from Bonner to Bowman's Corner (110.0 miles).
- U.S. Highway 287 from Bowman's Corner to Choteau (44.7 miles).
- U.S. Highway 89 from Choteau to its junction with Montana Highway 44 just north of Dupuyer (42.7 miles).
- Montana Highway 44 to Valier (13.9 miles).
- Montana Secondary Road 358 from Valier to its junction with U.S. Highway 2 in Cut Bank (28 .0 miles).
- U.S. Highway 2 from its junction with Montana 358 to the new overpass at 5th Street in Cut Bank (1.5 miles).
- Montana Secondary Road 213 from Cut Bank to its junction with Montana Secondary Road 214 (7.0 miles).
- Montana Secondary Road 214 from its junction with Montana 213 to the Port of Sweetgrass (41 miles).

In the pages that follow, this route is broken down into segments in order to address the unique conditions and challenges inherent to each. A table listing turnouts large enough to accommodate oversized loads for emergency and/or stop-over parking is included with each segment discussion.

Segment 1: Montana Highway 200, Bonner to Clearwater Junction

Length: 32 miles

Estimated travel time: 1 – 2 hours

Loads will depart from the Bonner manufacturing facility at 10 p.m. and will require one to two hours to arrive at Clearwater Junction. This segment consistently has the highest traffic volumes of any segment of the route. However, this segment is sufficiently wide (with full traffic lanes and wide shoulders) as to allow easy passage of controlled traffic past the load. The load can be safely moved to the side of the road at virtually any point to allow controlled traffic to pass in either direction to minimize delays. Trailers supporting the loads will be 10'-6" in width, allowing the load to overhang the edge of the pavement in most cases, thereby increasing the effective width of the road. No serious challenges to adhering to the 10-minute Rule for oncoming traffic have been encountered on this segment during previous moves. MDT allows for no more than a 20-minute delay to following traffic as long as it has not been stopped. Following traffic will be cleared at every opportunity and is typically not delayed for more than 10 minutes.

Hwy. 200	Mile Post	Description	L x W (FT)	Landmark/Intersection
	2	Turnout	200'X50'	East end of Bonner
	9	Turnout	200'X80'	Rainbow Bend
	27	Turnout	168' X 50'	Roundup Bridge, 9-Mile Prairie

Table 1. MT Highway 200 turnouts, Bonner to Clearwater Junction.

Segment 2: Montana Highway 200, Clearwater Junction to Lincoln

Length: 40 miles

Estimated travel time: 1 – 2 hours

Highway 200 narrows significantly east of Clearwater Junction, necessitating the use of turnouts to clear traffic. Numerous smaller turnouts (driveways, approaches, etc.) exist where oncoming traffic can be moved from the road, allowing the load to pass without stopping. Larger turnouts are sufficiently spaced to allow the load to move to the side of the road and allow following traffic to be safely conducted past the load from behind and to allow oncoming commercial traffic to be moved from the road to allow the load to pass (see Table 2 below). Passing lanes exist on steeper grades just west of Lincoln, allowing easy passage of controlled traffic in either direction when the load is moving more slowly or stopped. Turnouts of sufficient size (at least 250' in length) for the load to move off the road are numerous on this segment, allowing for emergency and/or stop-over parking if necessary (Table 2). Traffic tends to be fairly light on this segment during proposed load move hours and has been manageable using the traffic control plan outlined in this proposal.

Hwy. 200	Mile Post	Description	L x W (FT)	Landmark/Intersection
	32	Turnout, Scales		Wide intersection, Clearwater Truck Scales
	32.4	Turnout	313' X 36'	
	35.3	Turnout	340' X 18'	
	39.3	Turnout	225' X 34.5'	
	40.2	Turnout	240' X 42'	
	45.3	Wide intersection	263' X 50'	Wide road, Trixie's parking lot (private)
	50.3	Turnout	360' X 30'	Bob Marshall interpretive pullout
	55.2	Turnout	225' X 45'	Helmville cut-off
	55.7	Turnout	135' X 37'	Helmville cut-off
	56.8	Turnout	204'X 40'	
	59.5	Turnout	280' X 22'	
	60.4	Turnout	130' X 45'	
	62.9	Turnout	257' X 58'	
	63.8	Turnout	112' X 28'	
	63.9	Turnout	225' X 60'	
	65.3	Turnout	400' X 40'	
	66.5	Turnout	220' X 20'	
	66.5	Turnout	160' X 10'	
	66.7	Turnout	305' X 70'	

Table 2. MT Highway 200 turnouts, Clearwater Junction to Lincoln.

Segment 3: Montana Highway 200, Lincoln to Rogers Pass

Length: 30 miles

Estimated travel time: 1 hour

The road remains narrow through most of this segment but, as with the previous segment, numerous small turnouts can be used to move oncoming traffic from the road with several larger turnouts for emergency and/or overnight parking (Table 3). This segment is generally traveled between midnight and 2 a.m. Traffic is very minimal on this stretch of road during these hours and mostly consists of a few commercial vehicles. Included in this segment is the town of Lincoln. The road widens significantly in Lincoln allowing for easy clearing of traffic in both directions before continuing east. Traffic approaching from side streets in Lincoln is easily controlled using pilot and escort vehicles. Loads usually stop briefly at the large turnout on top of Rogers Pass to ensure that brakes and other equipment are working properly prior to descending the pass.

Utilizing the traffic control plan described later in this document and using existing turnouts, PCI has had little difficulty in managing commercial traffic on this segment of the route in the past. During winter months, with the associated unpredictabilty of weather and road conditions on Rogers Pass, traffic control personnel will be dispatched to assess conditions prior to the load leaving the large public parking area at mile post 75 just east of Lincoln. In the event of unexpected severe weather on the pass, loads can be parked at this area for an extended period without major inconvenience to motorists and recreationists.

NOTE: ***Details for controlling traffic and moving loads through Lincoln are included in Section 4 of this document.***

Hwy. 200	Mile Post	Description	L x W (FT)	Landmark/Intersection
	75	Turnout, (opposite side)	400' X 70'	Old state yard
	82.7	Turnouts	200' X 25'	Both sides of road
	85	Turnout	195' X 43'	
	86.8	East-bound turnout	450' X 29'	Chain up area
	86.8	West-bound turnout	265' X30'	Chain removal area
	88.4	Turnout (opposite side)	262' X 39'	
	89.3	Turnout (opposite side)	180' X 16'	Top of Rogers Pass
	89.8	West-bound turnout	420' X 25'	Top of Rogers Pass
	89.8	East-bound turnout	430' X 26'	Top of Rogers Pass

Table 3. MT Highway 200 turnouts, Lincoln to Rogers Pass.

Segment 4: Montana Highway 200, Rogers Pass to Bowman's Corner

Length: 20 miles

Estimated travel time: 1 hour

Numerous large turnouts are located on the east side of the pass and the road widens significantly from the bottom of the pass to the Highway 287 junction at Bowman's Corner. Traffic tends to be very minimal during the expected travel window on this segment (1 a.m. to 4 a.m.) and generally consists of a few tractor-trailers. The road width on most of this segment is sufficient to allow passage of controlled traffic at virtually any point. A flagger station with an advance-warning sign series will be set up on the east side of the Highway 287 junction to control traffic approaching over the blind hill in that area as the load makes the turn north onto Highway 287. Following traffic will be controlled by the rear escort vehicles from the top of the hill to the west prior to descending into the low area at the junction. The north- and south-bound Highway 287 approaches will be controlled by flaggers using the existing stop signs.

Hwy. 200	Mile Post	Description	L x W (FT)	Landmark/Intersection
	91.3	Turnout	480' X 70'	East side of pass on hill
	92.1	East-bound turnout	240'X 60'	
	92.1	West-bound turnout	320' X 20'	
	93.1	East-bound turnout	340' X 56'	
	93.1	West-bound turnout	430' X 25'	
	93.4	Turnout	571' X 22'	
	94	Wide grass shoulder		
	97.5	Turnout	340' X 20'	
	98.8	East-bound turnout	480' X 30	Both sides of road, near MDT yard
	106.5	Turnouts	330' X 30'	Both sides of road

Table 4. MT Highway 200 turnouts, Rogers Pass to Bowman's Corner.

Segment 5: U.S. Highway 287, Bowman's Corner to Augusta

Length: 20 miles

Estimated travel time: Less than 1 hour

As indicated by the MDT traffic control data, few vehicles travel this segment during proposed travel hours. Poteet Construction has moved several loads along this route and has rarely encountered more than one or two passenger vehicles on this segment during proposed travel hours. Tractor-trailers have not been encountered at all. Numerous small turnouts and approaches are located throughout this segment, providing ample opportunity to move oncoming passenger cars off the road and allowing the load to pass. Following traffic, if encountered, will likely be required to follow the load until reaching Augusta. However, the load should be able to travel this segment quickly and delays to the following traffic will be minimal. PCI personnel have yet to encounter any following traffic on this segment during proposed travel hours.

NOTE: ***Travel through the town of Augusta requires special consideration and is detailed in Section 4 of this document.***

Special Traffic Control Considerations, Bowman's Corner to Augusta

As the load approaches the Highway 287 junction from the west, one flagger will be dispatched to the town of Augusta to convey information regarding road conditions and possible impediments to travel to the road manager (via radio and cell-phone). Turnouts large enough to move the load off the road do not currently exist on this segment, necessitating an "all-clear" confirmation before the load continues travel to Augusta. Under no circumstances will the load continue travel past Bowman's Corner prior to receiving the all-clear message. Southbound commercial traffic that cannot be moved past the load on this segment will be given the option of "right-of-way" or to remain in Augusta while the load traverses this segment. The flagger will remain at the Augusta town border during this segment of travel to communicate information to the pilot vehicles about traffic travelling south and to advise motorists of the operation.

NOTE: Due to the limited width of this segment and the lack of large turnouts or intersections, any impediment to load movement will require rapid implementation of an emergency plan to minimize delays to the travelling public. In the event a catastrophic breakdown occurs on this segment and the load cannot be moved immediately, the flagger stationed in Augusta may be instructed to inform southbound motorists of the situation and provide information regarding an alternate route to Highway 200. Another flagger will be stationed at the Highway 200 junction with similar instructions. (*Please see the "Emergency Response Plan" section of this document for more details*.)

Segment 6: U.S. Highway 287, Augusta to Choteau

Length: 24 miles

Estimated travel time: Less than 1 hour

Traffic remains light on this segment and reliably consists of passenger vehicles. Numerous small turnouts and several intersections and wide areas will provide opportunities to move traffic around from the rear of the load. A few larger turnouts exist, providing emergency stopover parking for the load. Depending on load length, these turnouts may not be large enough for loads to move completely off the road and may require a one-lane, two-way flagging operation for the duration of an extended emergency stop-over (please see the "Emergency Response Plan" section of this document for details of this operation).

NOTE: ***Travel through the town of Choteau requires special consideration and is detailed in Section 4 of this document.***

US Hwy. 287	Mile Post	Description	L x W (FT)	Landmark/Intersection
	40.5	Turnout, opposite side	166' X 28'	
	41.9	Turnout	150' X 30'	
	45	Wide intersection, traffic clearing, emergency parking		Fairfield Junction
	57.5	Turnout	120' X 40'	Egg Mt Historic Point

Table 5. U.S. Highway 287 turnouts, Augusta to Choteau.

Segment 7: U.S. Highway 89, Choteau to Montana Highway 44 Junction

Length: 43 miles

Estimated travel time: 1.5 – 2 hours

With a few exceptions (mostly just south and north of the town of Dupuyer where the road widens appreciably), this segment of the route remains relatively narrow with plenty of turnouts for traffic-clearing opportunities. Between Bynum and Dupuyer, the road is narrow and winds somewhat sharply through hilly terrain. This section has required slower travel and maneuvering for some longer loads. Few traffic-clearing opportunities exist in this section, requiring extra consideration for oncoming traffic. Flaggers will be stationed far ahead of the load to relay information about oncoming traffic prior to the load entering these areas. If there is any doubt that oncoming traffic will not be able to be safely conducted past the load at any point along this route or adherence to the 10-minute Rule cannot be assured, the load will halt at a traffic clearing area prior to this section and the oncoming traffic will be given right-of-way. However, traffic has been nearly non-existent on this segment during proposed travel hours. The towns of Bynum and Dupuyer have wide shoulders allowing for clearing of traffic in either direction and numerous turnouts provide emergency parking.

As with the Highway 200/287 junction, a flagger will be posted north of the Hwy 44 junction to control southbound traffic as the load makes the east-bound turn onto MT Highway 44. A flagger and pilot car will be dispatched to the town of Valier to relay information about traffic and road conditions prior to the load arriving at the junction.

U.S. Hwy. 89	Mile Post	Description	L x W (FT)	Landmark/Intersection
	42	Off street parking area	190' X 50'	Stage Stop Inn
	43.3	Turnout	240' X 25'	
	45	Turnout	130' X 20'	
	46.5	Turnout, opposite side	182' X 20'	
	55	Turnout	170'X 70'	Town of Bynum, private property
	62.5	Turnout	100 'X 25'	Jct 219 & 89
	70.5	Wide road to Dupuyer		
	75.4	Wide road, shoulders, in town	800' X 25'	Town of Dupuyer
	76	Rest area, no overhead obstruction	300' X 40'	Rest area, just north of Dupuyer

Table 6.U.S. Highway 89 turnouts, Choteau to MT Highway 44 Junction.

Segment 8: Montana Highway 44 to Valier

Length: 14 miles

Estimated travel time: 20 -25 minutes

MT Highway 44 from the U.S. Highway 89 junction to the town of Valier is relatively straight and wide with plenty of opportunities to clear traffic in either direction at any point. A flagger and pilot car will be stationed on the west end of Valier to advise the load supervisor and pilot cars of any traffic travelling west on Highway 44 before the load begins travel east from the Highway 89 junction. Traffic is very light during proposed travel hours and has been virtually non-existent after 2 a.m. In case of emergency, the load may be safely parked either at the Highway 89 junction or at a turnout near mile post 4.

NOTE: ***Travel through the town of Valier requires special consideration and will be detailed in Section 4 of this document.***

MT Hwy. 44	Mile Post	Description	L x W (FT)	Landmark/Intersection
	0	Turnout	200' X 10'	Junction 89 & 44
	4.2	Turnout	280' X 20'	

Table 7. MT Highway 44 turnouts, U.S. Highway 89 junction to Valier.

Segment 9: Montana Secondary 358, Valier to the U.S. Highway 2 Junction (Cut Bank)

Length: 28 miles

Estimated travel time: 45 minutes - 1 hour

This segment has been almost entirely clear of traffic during proposed travel hours. The road is easily negotiated by high and wide loads and several opportunities exist to clear traffic in either direction. Flaggers and pilot cars will be spaced well ahead of the load prior to departing Valier to convey traffic and road condition information to the load manager. As with previous junctions, a flagger will be placed on the west side of the Hwy 2 junction to control traffic headed east as the load makes the right-hand turn east onto Hwy 2.

NOTE: ***Travel through the town of Cut Bank requires special consideration and will be detailed in Section 4 of this document.***

Sec. 358	Mile Post	Description	L x W (FT)	Landmark/Intersection
	0.1	Turnout	Large, irregular	North end of Valier
	3	Large gravel intersection	400' X 16'	Double approach intersection
	17.7	Turnout, opposite side	138' X 55'	Glacier County Line

Table 8. Secondary 358 turnouts, Valier to U.S. Highway 2 junction.

Segment 10: Secondary 213, Cut Bank to Secondary 214 Junction

Length: 7 miles

Estimated travel time: 20 minutes

Once past the more populated areas of Cut Bank, the load should travel quickly. Traffic in either direction has rarely been encountered during proposed travel times and is easily managed by traffic control personnel with very little delay.

Segment 11: Secondary 214, from Junction with Secondary 213 to Port of Sweetgrass

Length: 41 miles

Travel time: 1.5 – 2 hours

This segment begins as a paved, two-lane rural road with turnouts for traffic clearing and emergency parking located at mile posts 2 and 6. The road surface narrows and deteriorates considerably beginning approximately 13 miles from the Highway 213 junction. The rough, narrow conditions persist for about 5 miles before giving way to a wide engineered gravel road approximately 18 miles north of the Highway 213 junction. Advance traffic control personnel will be stationed far enough ahead of the rough, narrow section to inform the load manager of any oncoming traffic since almost no opportunity to clear traffic from either direction is to be found. As with other narrow sections of road with few traffic-clearing opportunities, traffic will either be held while the load completes this section or the load will pause at a traffic-clearing area until the oncoming traffic has passed to ensure adherence to the 10-minute Rule. The gravel portion of this segment is wide enough to easily clear escorted traffic in either direction at any point. Most traffic associated with the Port of Sweetgrass is via Interstate 15. As indicated by the Montana Department of Transportation traffic count data, traffic on this segment during proposed travel hours has been virtually non-existent during past load moves.

NOTE: ***Travel through the town of Sweetgrass requires special consideration and will be detailed in Section 4 of this document.***

Hwy. 214	Mile Post	Description	L x W (FT)	Landmark/Intersection
	2	Turnout	N/A	
	5.9	Turnout	N/A	Farm access approach
	13.5	Road narrows		

Table 9. Secondary 214 turnouts, Secondary 213 junction to Port of Sweetgrass.

SECTION 3: TRAFFIC CONTROL OVERVIEW

The dimensions of the proposed loads will prevent traffic from travelling past a moving load without assistance from traffic control personnel on most of the proposed route. The state of Montana requires that the travelling public shall not be stopped for more than 10 minutes (Ten-minute Rule). This rule will apply mainly to traffic approaching the load in the opposite lane of travel (on-coming traffic). MDT stipulates that traffic approaching from the rear of the operation, if not stopped, may not be delayed for more than 20 minutes. This rule necessitates a clearly defined and coordinated traffic control plan using a combination of advance warning signs and devices, flaggers, pilot vehicles and load escort vehicles (*Figure 1*). Each of these four components will be detailed separately in this section.

This proposal utilizes traffic volume data gathered by the Montana Department of Transportation (MDT) in order to determine the hours of permitted travel that are least likely to cause excessive delays and inconvenience to the travelling public. Based on this traffic volume data, load movement will be restricted to the hours between 10 p.m. and 6 a.m., from Sunday night through Friday morning, in order take advantage of low traffic volumes and to avoid conflicts with commuters and school bus traffic. Every effort will be made to ensure adherence to the MDT rules concerning delays to the travelling public.

NOTE: ***The following traffic management plan has been developed by PCI while escorting loads over the proposed route since 2011. It has been refined so that delays to traffic are typically well under 10 minutes for oncoming traffic and 20 minutes for following traffic. PCI has developed this system in response to the challenges of adhering to MDT mandated traffic delay limits while escorting loads over the proposed route. Spacing flaggers far ahead of the load minimizes the number of personnel and devices needed to safely contend with oncoming traffic. Pilot cars are able to escort oncoming traffic towards the load to a safe clearing location. This allows the load to remain moving and reduces the time needed to complete the route. Oncoming traffic is typically held for no more than 2 to 3 minutes at the flagger station and are escorted as close to the load as possible, reducing waiting time at the clearing location to 2-3 minutes or less. In many instances, total delays to oncoming traffic are less than 5 minutes and rarely approach 10 minutes. Moving traffic from the road and allowing the load to pass provides many more opportunities for traffic clearing than having the load move from the road at an appropriate turnout. An added bonus is that the building of new turnouts has not been necessary. Holding traffic at flagger stations had proven to be very ineffective and resulted in unpredictable delay times and slowed load travel considerably. On at least two occasions, MDT personnel monitored the operation and conveyed their approval of the overall traffic management plan to PCI personnel. It is worth noting that other traffic control and escort companies have since adopted this method and it is now the "standard" means of traffic management for oversized load moves.***

Advance Warning Devices

All flagger stations will be preceded by an appropriate advance warning sign series (*refer to Figure1*). These are a five-sign series designed to safely reduce traffic speed and to warn oncoming traffic of the flagger's presence. All devices and spacing will be in compliance with MUTCD standards for stopping traffic on two-lane highways. In some circumstances, a Variable Message Board (VMB) may be used on busy highways to alert traffic to the operation well in advance of the flagger stations. The VMB is a high-visibility electronic sign that can display up to three pages of programmable text and can be very effective at communicating information to traffic.

Flaggers

Flagger stations will be employed in advance of the load to warn oncoming traffic of the approaching load and to convey information about traffic and road conditions to the pilot cars and load manager (*Figure 1*). Flagger stations will be located in areas with long-distance visibility to oncoming traffic, avoiding blind curves and hills. When determining flagger station locations, consideration is also given to providing ample space along the shoulder or turnout to move traffic off the road to allow passage of the load. Depending on the speed of the load, flagger stations will be located from 5 to 10 miles or more in advance of the load. A minimum of two flagger stations will be employed at all times in order to maintain a safe buffer in front of the load and to provide sufficient time for pilot cars to move traffic up to a safe clearing area before reaching the load.

The flagger at each station is responsible for stopping *all* oncoming traffic and speaking to each driver. Drivers are informed of the operation and asked if they are experiencing an emergency that would necessitate immediate passage around the load (*protocol for dealing with such emergencies will be detailed in the "Emergency Response" section of this document*). The flagger, at the instruction of the lead pilot car, will then either send the traffic up to the next flagger station or pilot car, or will direct the vehicles to the side of the road (or turnout) to allow for passage of the load. The flaggers will "leap-frog" each other as the operation progresses to maintain proper spacing in advance of the load. All flagger vehicles are equipped with overhead flashing lights and spot lights to illuminate the flagger. All flaggers will be equipped with the necessary and required reflective attire and equipment for nighttime flagging.

***Note: Flaggers will not be permitted to stop oncoming traffic unless and until a proper advance warning sign series is in place*.**

Pilot Vehicles

In order to maintain adherence to the 10-minute rule, a minimum of three pilot vehicles will be employed to escort oncoming traffic between the flagger stations and the load. The pilot vehicles will circulate continuously between the lead escort vehicle and the nearest flagger station to minimize delays and to ensure that no traffic is allowed to approach the load without an escort. Pilot vehicles are

responsible for instructing the flaggers to either hold traffic at their location (if the load is approaching the station), or to instruct the oncoming vehicles to continue towards the load (depending on the average speed of the load and its distance to the flagger station). As mentioned in the previous section, the flaggers will be stationed from 5 to 10 miles or more in advance of the load. This distance requires that the pilot vehicles maintain relatively even spacing between the flagger station and the lead escort vehicle in order to maintain radio communication. One pilot vehicle is pre-determined to be the "lead". The driver of the lead pilot vehicle will be an ATTSA certified Traffic Safety Supervisor (TSS). The lead pilot vehicle will remain in radio contact with the lead escort vehicle and is ultimately responsible for managing the pilot vehicles and the flaggers. One of the pilot vehicles is typically stationed closer to the near flagger station in order to relieve the flagger and to pick up advance warning signs as the operation progresses. This leaves one pilot vehicle to travel as needed to escort oncoming traffic and to relay information between the advance traffic control personnel and the load manager. (All three pilot vehicles will be involved in escorting vehicles to a safe passing area as traffic volume dictates.)

In the event that there is sufficient time to bring vehicles towards the load, the pilot vehicle will use the information from the flagger about the oncoming traffic (number and type of vehicles) and will position the pilot vehicle facing towards the load. As the oncoming traffic approaches, the pilot vehicle will begin moving towards the load to a pre-determined location deemed wide enough to allow the oncoming traffic to pull to the side of the road and allow the load to pass. These locations may be identified by the pilot vehicle or by the lead escort vehicle. When the stopping location is reached, the pilot vehicle operator will stop in the road, exit the vehicle and instruct the motorist(s) to move to the shoulder or turnout. The operator then will speak to the motorist(s) again, informing them of the operation and that they are free to continue travel only after the load has passed. The lead escort vehicle will relieve the pilot vehicle and hold traffic until being relieved in turn by the load manager escort vehicle. At no time will un-escorted traffic be permitted to approach the load. The number of advance personnel and vehicles (two flaggers, three pilot vehicles and two lead escort vehicles) ensures multiple safeguards against unescorted vehicles approaching the load from the front.

Escort Vehicles

Depending on the dimensions and configuration of the loads, three to four escort vehicles will accompany each individual load on the entire route from Bonner to Sweetgrass. These will include at least one following vehicle and two lead vehicles. The following escort vehicle(s) will follow the load at a distance of approximately 100 yards. The rear-most escort vehicle will be responsible for alerting the load manager of following traffic and will also be responsible for waving following traffic around the load at the instruction of the load manager when the load and all oncoming traffic has been halted. Clearing of following traffic will be directed by the load manager and can be accomplished at any wide area or turnout on the route. Following traffic is most prevalent on Highway 200 can be cleared at many locations. MDT rules require that following traffic, if not stopped, may not be slowed for more than 20 minutes. However, the load manager will make every effort to clear following traffic at every convenient location and following traffic has reliably been cleared in well under 20 minutes.

The lead escort vehicle will travel at a variable distance from the load (0.5 - 2 miles depending on the speed of the load) and will be primarily responsible for helping to find adequate turnouts for oncoming traffic and to alert the load manager of road conditions and obstacles in the road. The load manager will be in the escort vehicle in close proximity to the load or lead support vehicle. This escort vehicle will also be equipped with a height pole to measure heights of overhead obstructions (i.e., low tree branches, existing utility lines).

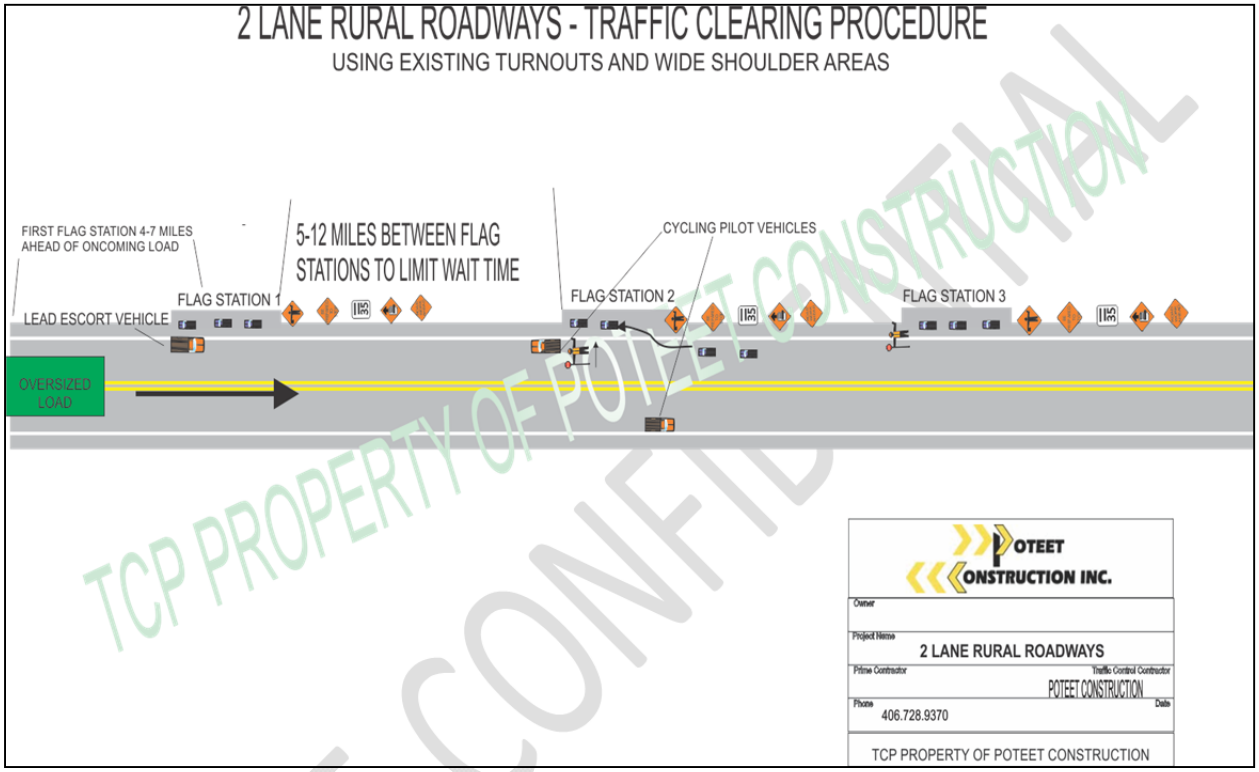


Figure 1. Typical traffic-clearing procedure for moving load on two-lane rural roadway.

Controlling Traffic at Approaches

Numerous side roads enter the proposed route. Whenever possible, a flagger station will be located such that the flagger will be able to stop traffic on the main route while also utilizing an existing stop sign to control traffic approaching from the side road. When this situation is not feasible, a pilot vehicle will control approaching traffic from the side road. The pilot car will remain at the intersection until relieved by the lead escort vehicle, which will hold the position until relieved by the load manager. At no time will intersecting roadways be left unattended between the closest flagger station and the load.

Private driveway approaches cannot all be controlled in this manner as they are far too numerous. The proposed number of escort and pilot vehicles in advance of the load has proven to be sufficient to observe and provide warning of vehicles entering the route from private drives. Traffic entering from

private drives and side roads will be managed in the same fashion as oncoming traffic on the main route and will not be delayed more than 10 minutes.

Communication

Communication between load operation personnel and traffic control personnel will be primarily achieved through the use of two-way radios. All personnel tasked with traffic safety will carry two-way radios with at least two dedicated proprietary channels in case of outside interference. The distance over which the operation may be spread, with flagger stations being several miles ahead of the load, necessitates efficient relaying of information through the circulating pilot cars to the load manager and lead pilot car.

Cell phones may also be used to convey information, especially via text messaging. Text messages can be received even in areas with a minimum of cell phone coverage. This has proven to be especially useful in conveying information to the load manager about road conditions from personnel far in advance of the operation. With changing road conditions in the winter and few options for stop-over parking, this information can be invaluable in determining when and where the load move should be suspended due to inclement weather or other emergency scenarios. All personnel sending and receiving text messages will do so from stopped vehicles in a safe location off of the lanes of travel.

Emergency Breakdown Response Plan

In the event that the load experiences a breakdown in an area where removal from the roadway is not immediately feasible, an emergency traffic control plan will be implemented. In addition to the advance warning sign series used for flagging stations, an advanced warning sign series will be carried by one lead and one follow escort vehicle. These signs can be set up quickly in the event of an emergency to facilitate a standard two-way, one-lane flagging operation around a disabled load (*Figure 2*). All escort and pilot vehicles will be operated by flaggers trained and certified by ATSSA. All traffic control and escort vehicles will be equipped with hand-held, two-way radios for communication outside of the vehicle, as well as a stop/slow paddle and safety-cone flashlight for traffic control. An emergency flagging operation can be maintained day or night for an indefinite period. All non-essential vehicles and personnel will be moved off the road in order to keep the flagging operation as short as possible and minimize delays to the travelling public.

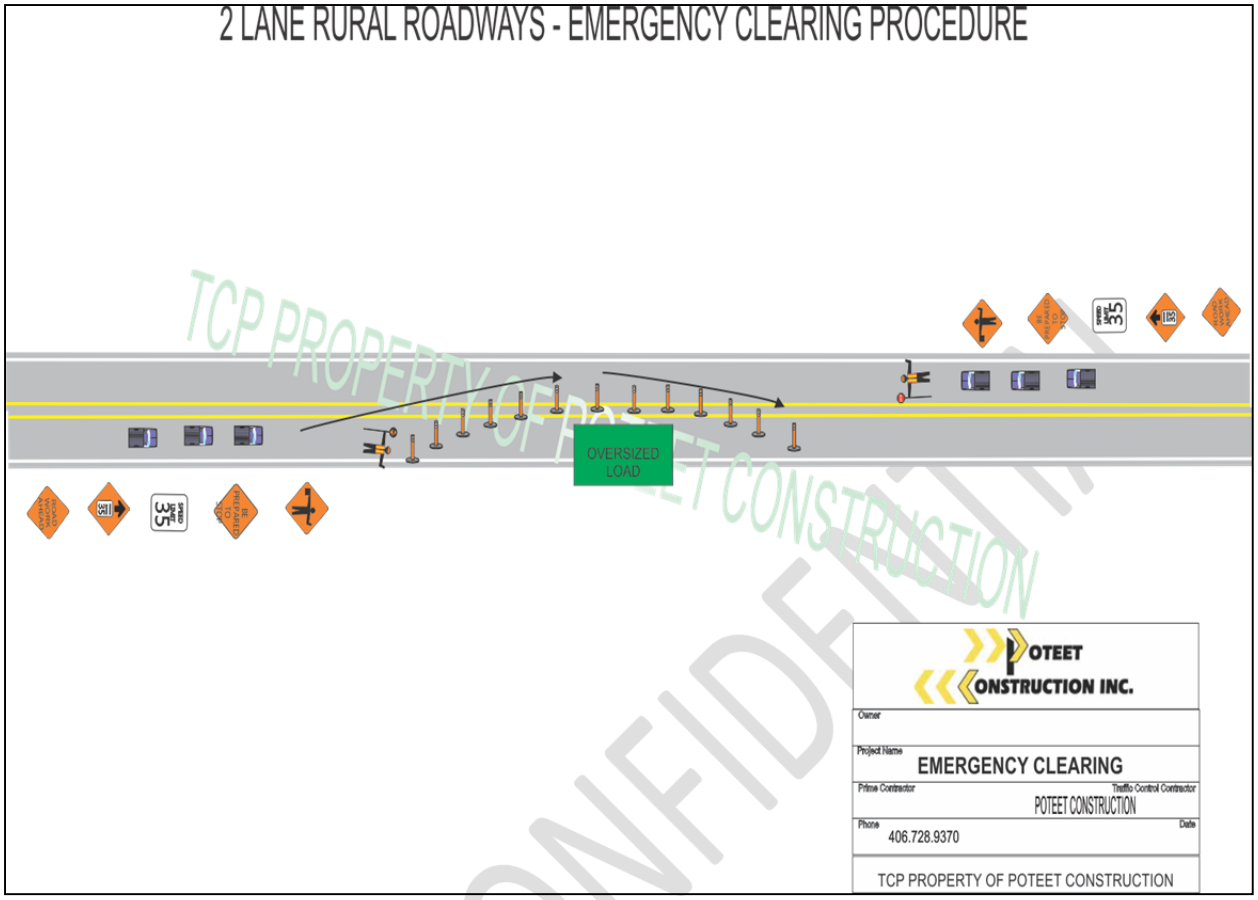


Figure 2. Typical procedure for clearing traffic on two-lane rural road with lane obstruction.

Civilian Vehicle with Medical or Other Emergency

As mentioned in the *Flagger* section previously, the flagger is responsible for speaking directly with each driver stopped at his or her location. Each driver will be specifically asked if he or she is experiencing an emergency necessitating quick passage past the operation. In the event that an emergency is reported, the driver will be instructed to continue past the flagger towards the load. The flagger will provide a description of the vehicle to the nearest pilot vehicle operator who will then pick up and escort the vehicle to the load as quickly as is deemed safe. Information about the vehicle and situation will be relayed to the load manager, who will halt the load at the appropriate time and location in order to ensure safe and quick passage of the vehicle around the load. All efforts will be made to minimize delay to a motorist reporting an emergency.

Emergency Vehicle Passage

Similar to the above scenario, any official emergency response vehicle will be given priority passage past the operation. The emergency vehicle will be given more leeway to travel unescorted if necessary, provided it is equipped with proper emergency lights and sirens. The load manager will be apprised of the situation as soon as possible and will halt the load and all following traffic to allow safe passage of the emergency responder. An emergency channel scanner will be carried by a designated escort vehicle at all times in order to convey emergency information to the load manager and traffic control personnel.

SECTION 4: TRAFFIC CONTROL DETAIL, RURAL COMMUNITIES

The proposed route travels through the towns of Lincoln, Augusta, Choteau, Valier, Cut Bank and Sweetgrass. While none of these towns present any real impediments to travel, special consideration is afforded them in this document due to higher population densities and maneuvering requirements.

As indicated by the MDT traffic count data, traffic volume in these towns is negligible during proposed travel hours.

The route through each town will be described separately in this section, with a map showing the specific route through each for reference purposes. *Figures 3 and 4 are standard drawings for controlling traffic at intersections and turns.*

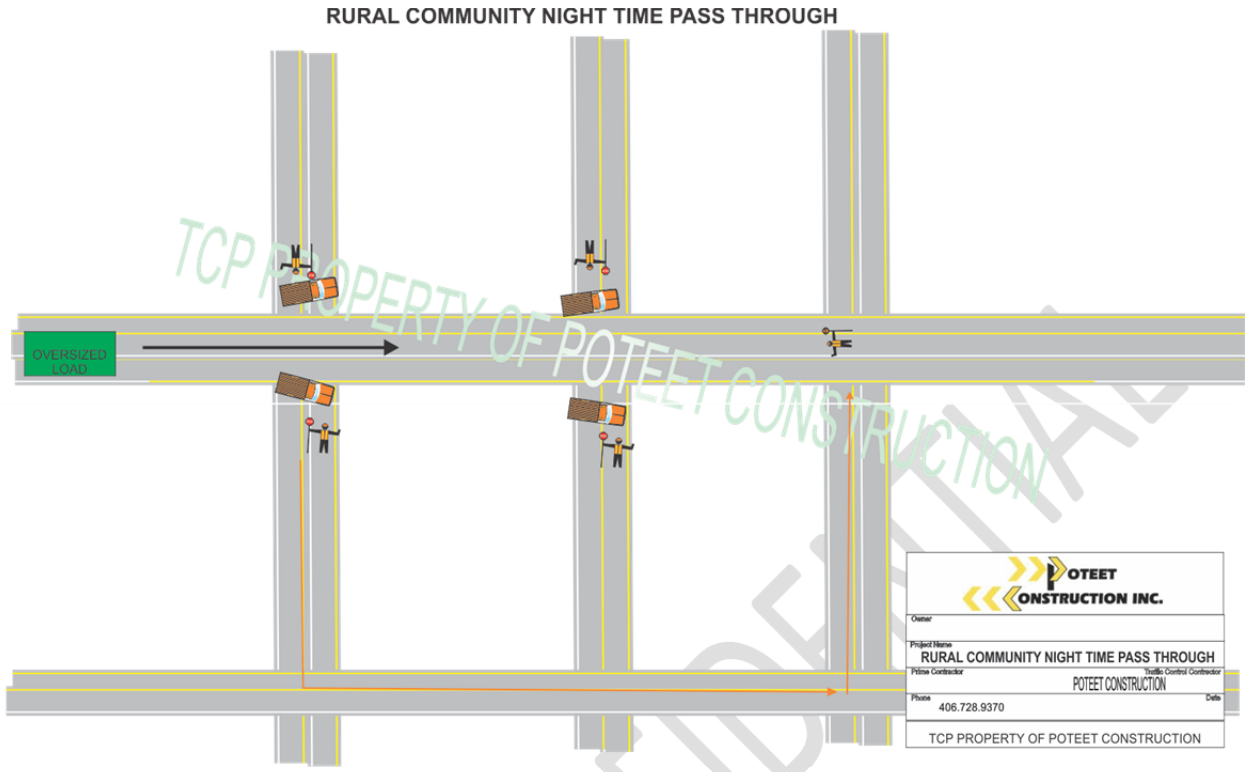


Figure 3. Typical procedure for traffic control in rural community, no turns required.

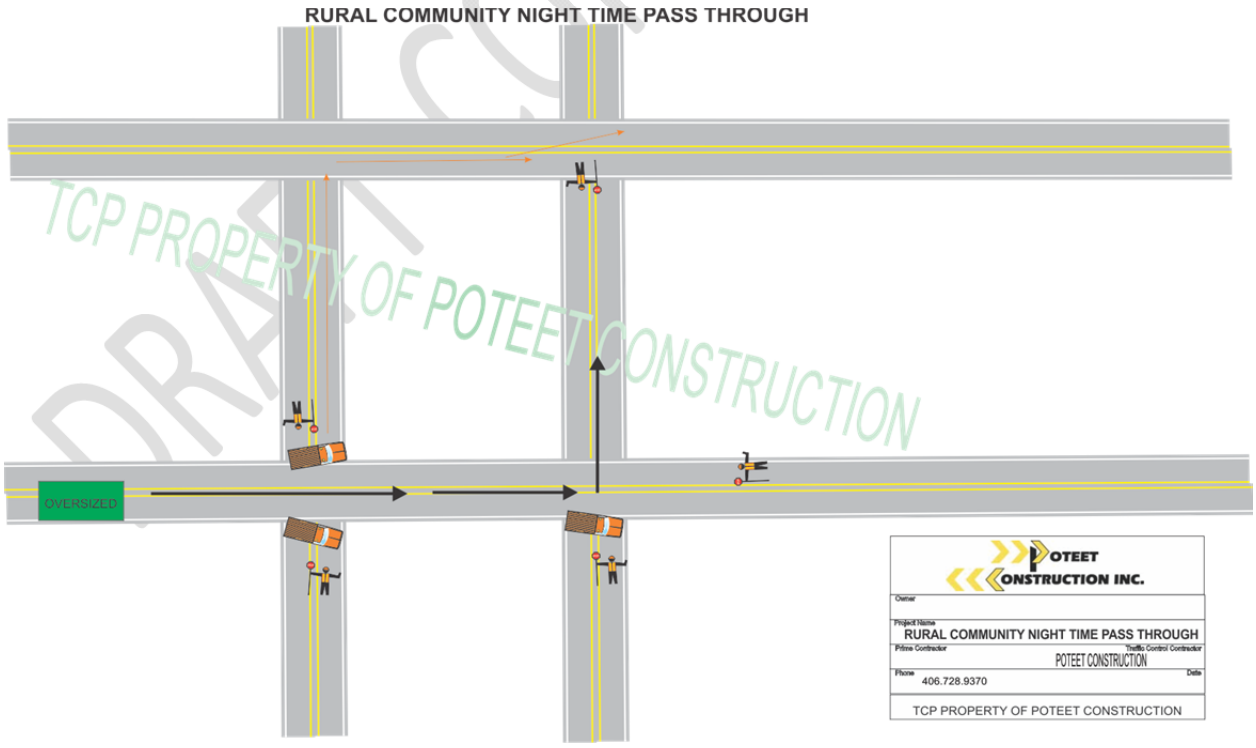


Figure 4. Typical procedure for traffic control in rural community , with turn.

Lincoln, Montana

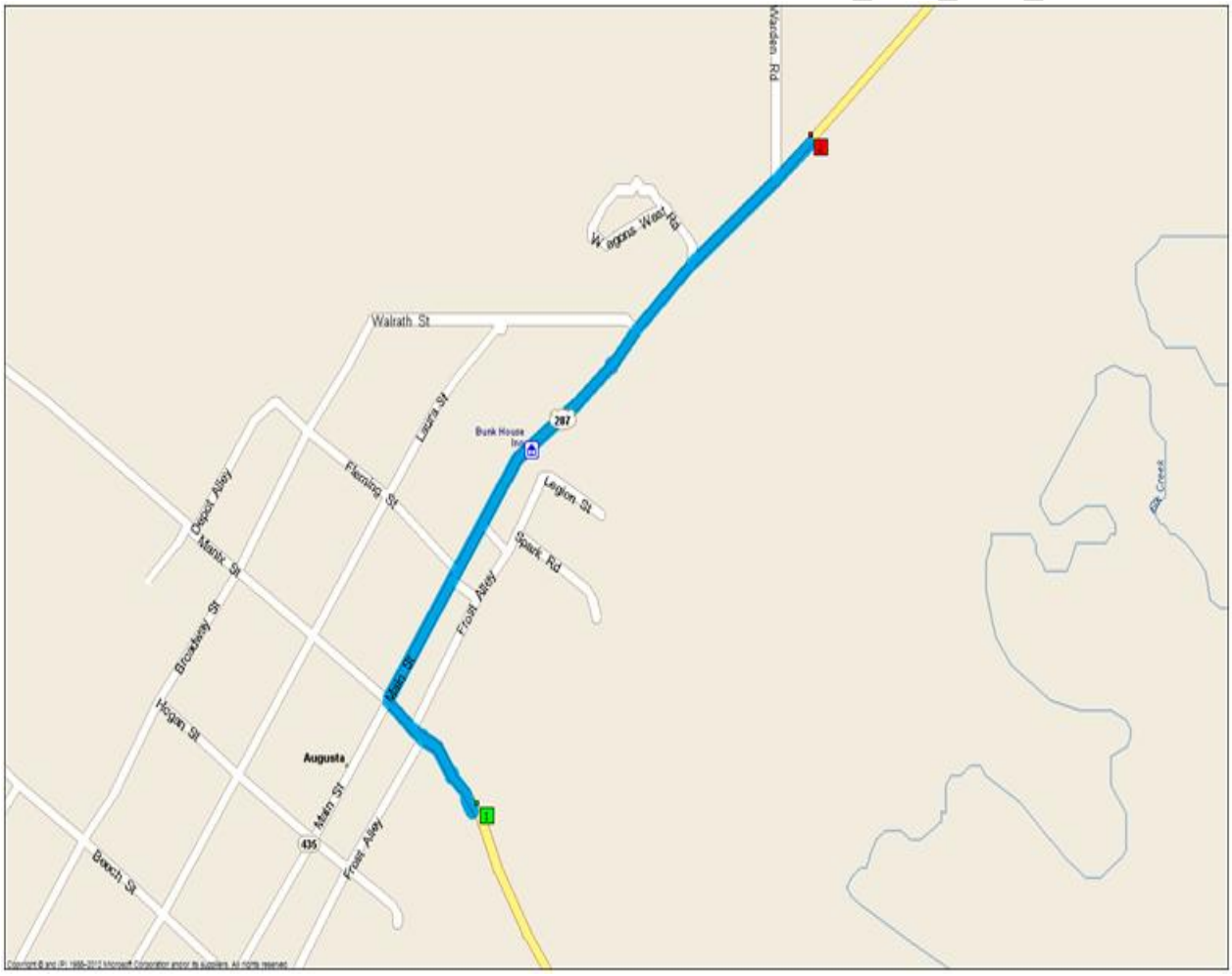
The town of Lincoln requires no turns on the part of the load. Traffic volumes are low during proposed travel times and traffic is easily controlled by flaggers, pilot cars and escort vehicles. The road through town is sufficiently wide with shoulders and parking areas providing sufficient room to hold traffic as the load passes.

One flagger will be stationed at the east end of town to control traffic approaching town from the east. The remaining pilot and escort vehicles will be stationed at each intersection as the load approaches to briefly block traffic approaching from side streets. Travel through the town of Lincoln should be completed in approximately 10 minutes.

Detail of proposed route, Lincoln, Montana.

Augusta, Montana

Loads entering the town of Augusta will be required to negotiate a 90 degree turn from Highway 287 northeast onto Main Street. PCI has escorted several loads through Augusta and all have been able to negotiate the turn onto Main Street with little difficulty. Traffic will be held on Main Street to the east of the intersection as well as on all approaches coming into the intersection. After the load has made the turn, travel through town will take approximately 20 minutes to complete. One flagger will be stationed at the Warden Road intersection northeast of town to control traffic traveling into town on Highway 287. The remaining pilot and escort vehicles will be stationed at intersections to briefly hold traffic as the load approaches.

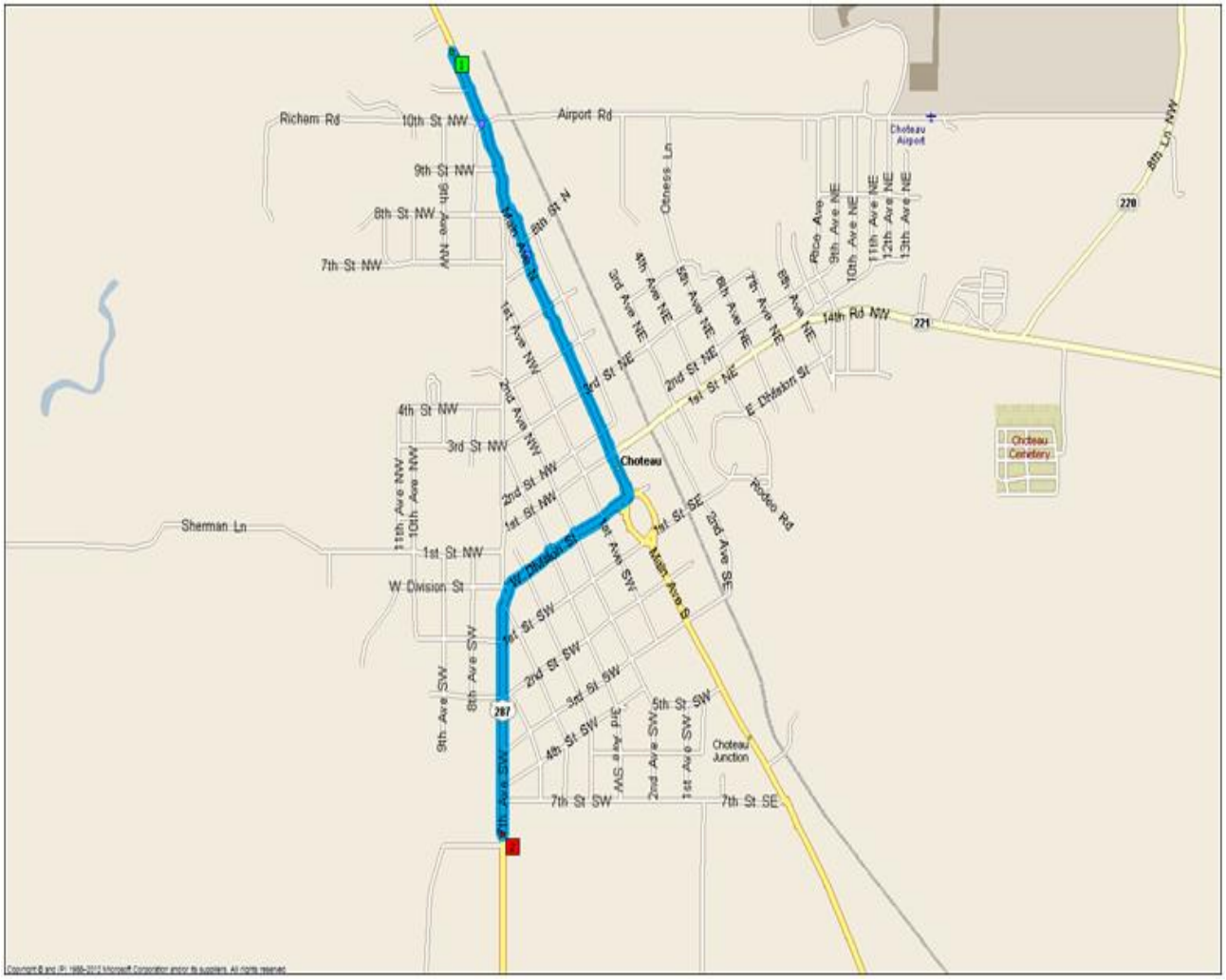


Detail of proposed route, Augusta, Montana.

Choteau, Montana

Loads will enter Choteau on Highway 287 north. A round-about at the junction with Highway 89 cannot be negotiated in the normal fashion with loads of the proposed dimensions. Instead, the load will travel against the normal traffic flow for the short segment of the northwest corner of the round-about. Traffic control vehicles and personnel will be stationed at intersections as the load proceeds through town and will block traffic at the round-about as the load makes the turn onto Highway 89 north. As the load negotiates the round-about, one flagger will be sent ahead to the Airport Road intersection to hold traffic entering town from the north on Highway 89.

As the MDT traffic count data indicates, traffic in Choteau during proposed travel hours is minimal. Travel through Choteau should be completed in approximately 20 minutes.

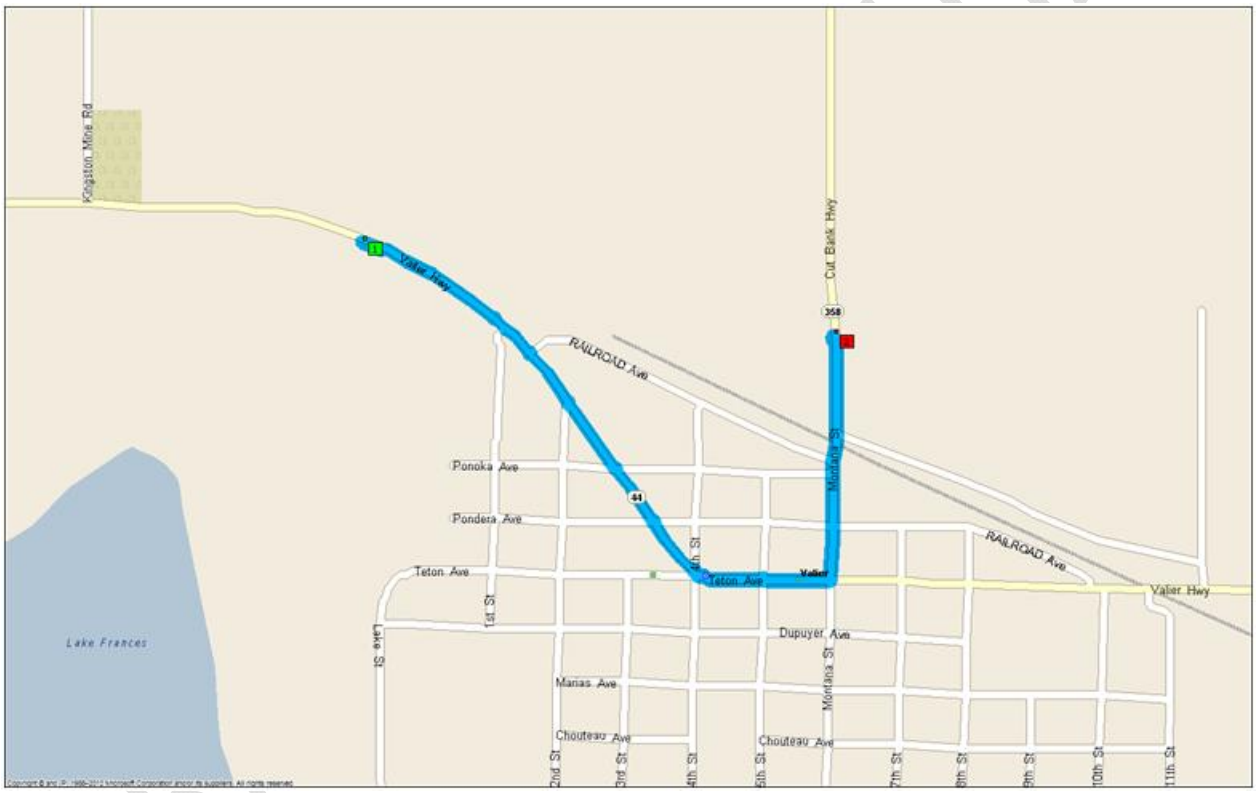


Detail of proposed route, Choteau, Montana.

Valier, Montana

Loads will enter Valier from the west on Highway 44. A 90-degree left turn to the north is required at the intersection with Route 358 to Cut Bank. Pilot cars and escort vehicles will be stationed at intersections as the load passes through town to briefly hold traffic approaching from side streets until the load has passed. One vehicle will hold traffic on the west side of the Highway 44 / Secondary 358 intersection as the load negotiates the turn to the north.

MDT traffic count data shows very light traffic in the town of Valier during proposed travel times. Travel through Valier should be completed in approximately 15 minutes.

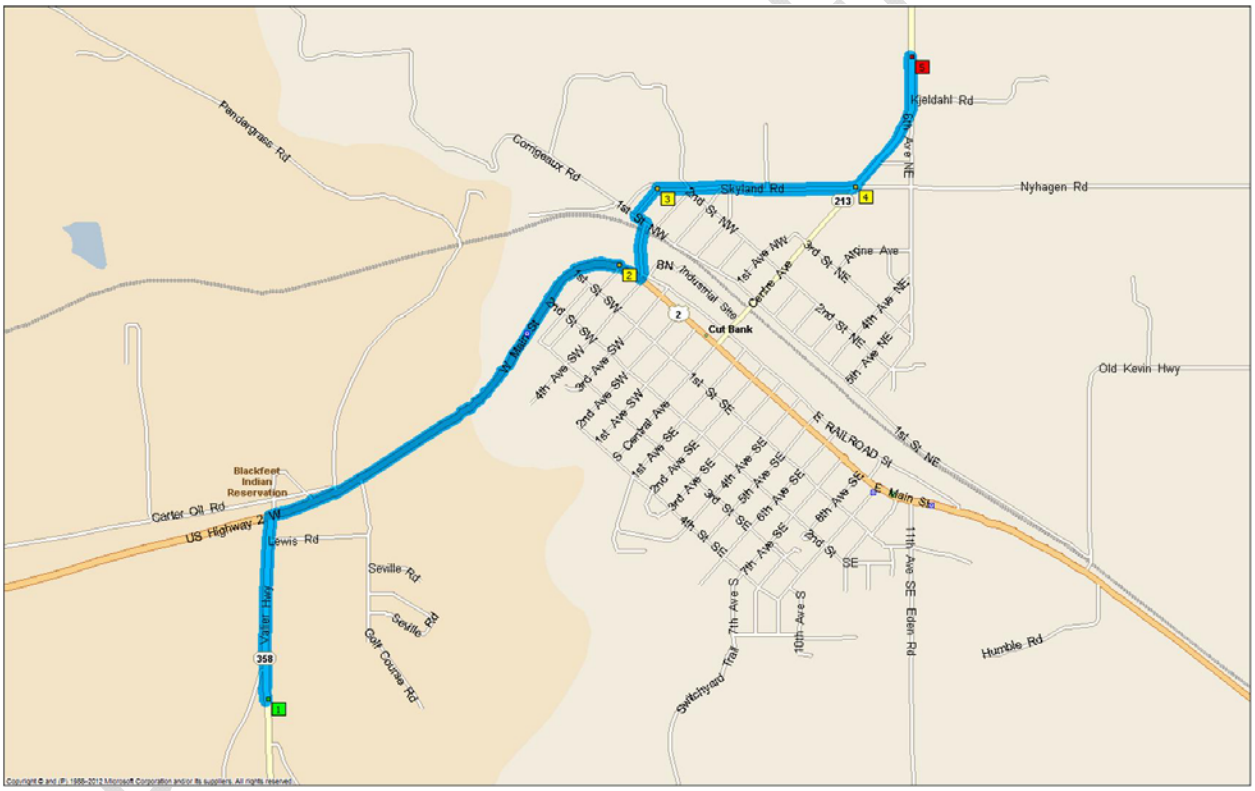


Detail of proposed route, Valier, Montana.

Cut Bank, Montana

Loads will approach Cut Bank from the intersection of Secondary 358 and U.S. Highway 2. Flaggers will be stationed at the intersection to control traffic on Highway 2 as the load negotiates the 90-degree turn onto Highway 2 east (*see figure 5 below*). After the load convoy has completed the right-hand turn onto Highway 2, the procession will stop briefly at the junction to allow traffic control personnel to stage at intersections in town. The load will make a left-hand turn at the newly constructed railroad overpass to access north-bound Secondary 213. Flaggers and pilot cars will hold traffic on Main Street (Highway 2) southeast of the intersection with the overpass and ahead of the load on the northwest side of the overpass (*see figure 6 below*).

MDT traffic count data shows that vehicle counts in and around the town of Cut Bank are minimal during proposed travel hours. Travel through the town of Cut Bank will take approximately 30 minutes.



Detail of proposed route, Cut Bank, Montana. NOTE: Map detail approximates the location of the newly constructed railroad overpass that will be used by loads traveling through Cut Bank.

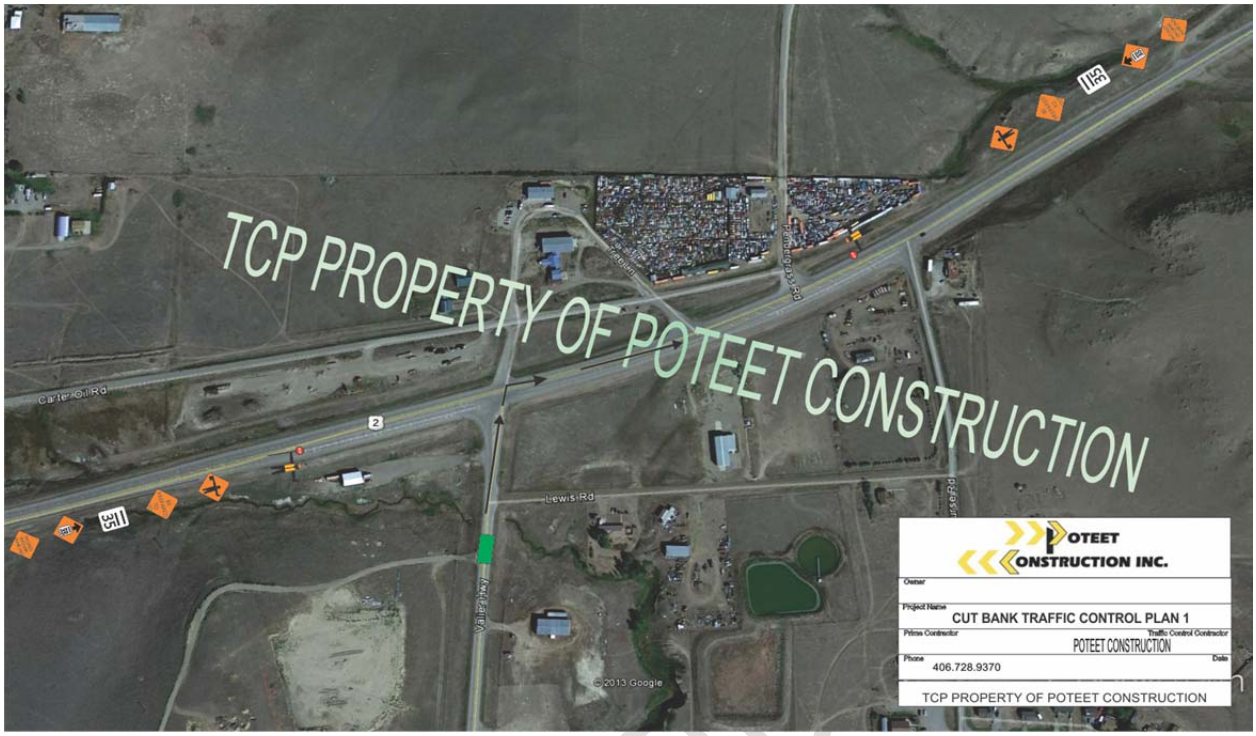


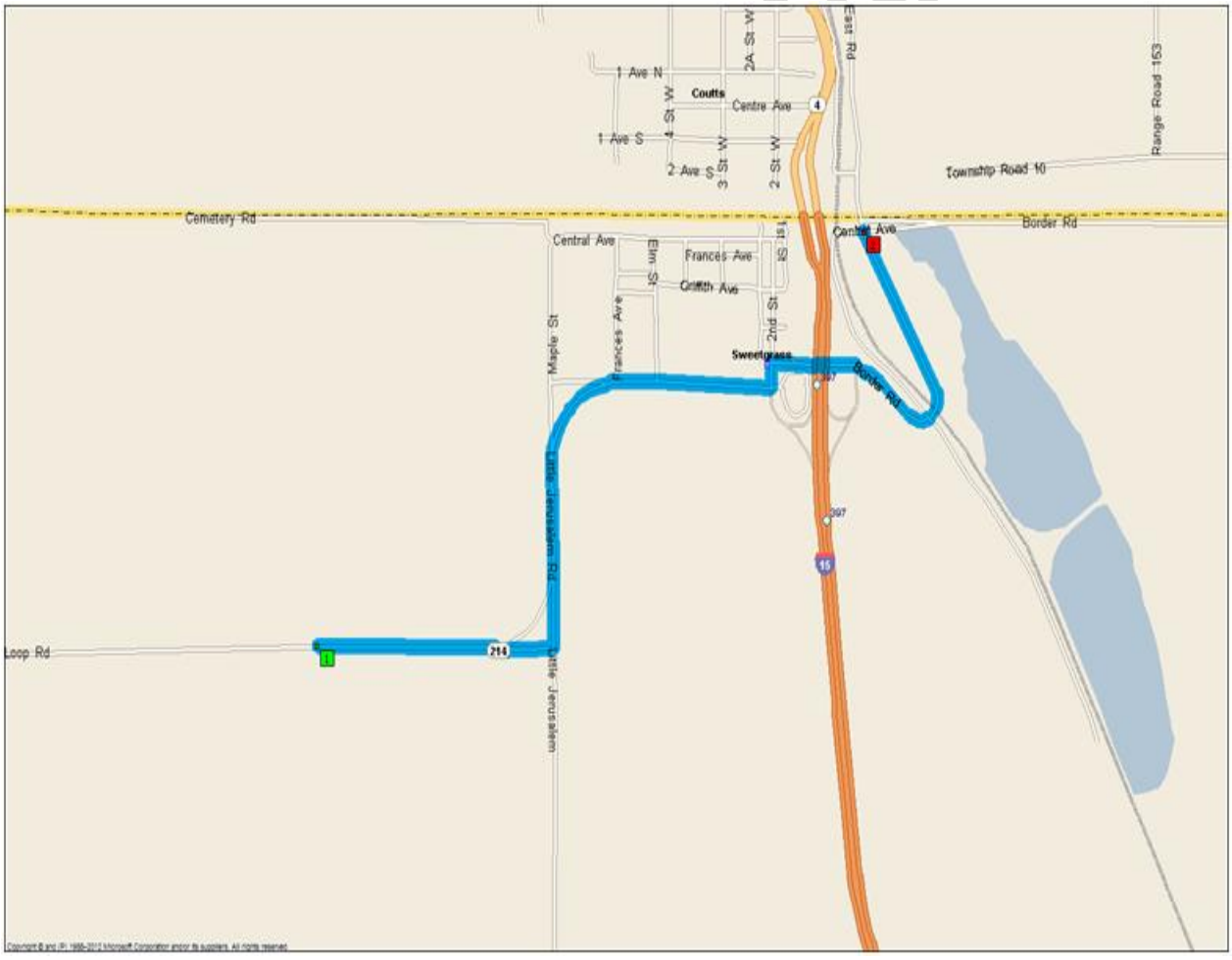
Figure 5. Traffic control plan detail, Route 358 – U.S. Highway 2 junction, Cut Bank.

Figure 6. Traffic control plan detail, U.S. Highway 2 – Route 213 junction, Cut Bank.

Sweetgrass, Montana

The Port of Entry-Sweetgrass is the terminus of the route through the state of Montana. The load will approach the town of Sweetgrass on Secondary 214 from the west. Traffic control personnel will stage at the Interstate15 interchange (the load travels over I-15) and other intersections along the route through town to briefly hold traffic as the load negotiates the winding route to the parking area near Central Avenue and Border Road.

MDT traffic count data indicates low traffic volumes in the town of Sweetgrass during proposed travel hours. Most traffic in and out of the Port is via I-15. Any traffic encountered in town will be easily controlled by traffic control personnel. Travel through the town of Sweetgrass will take approximately 15 minutes.



Detail of proposed route, Sweetgrass, Montana.

SECTION 5: OVERNIGHT AND EMERGENCY PARKING AREAS

The dimensions of the loads assumed in this document will require special consideration for planned and emergency stop-over parking along the proposed route. Many turnouts and parking areas along the route are large enough to accommodate the load and associated support vehicles. These areas are listed in the table below. Photos of the most likely planned overnight parking areas are included for reference. The load manager will carry a list of these locations at all times in the event that hazardous road conditions or other impediments to travel necessitate unscheduled stops.

Loads of the proposed dimensions and configurations should be able to complete the route in two nights, especially if all overhead utility lines have been mitigated prior to this plan being implemented. This schedule would require only one designated overnight parking area to be used by each load. The most likely candidates would be the turnouts on Highway 200 at mile post 106.5. These are two very large turnouts located just west of Bowman's Corner. Alternatively, the turnouts at mile post 98.8 are also large enough to accommodate any load that is likely to travel this route. The size and number of these turnouts should be sufficient to allow loads to park during the daytime hours without inconveniencing the travelling public and would likely require no advance closure. In the event that loads are able to continue on to Choteau in the allotted time, overnight parking is available at the parking lot adjacent to the Stage Stop Inn on the north end of Choteau (with permission of concerned parties) or at the turnout just north of town at mile post 43.3. At such time that this plan is being considered, concerns of all parties involved will be carefully considered in order to arrive at a workable solution to the challenges that may arise from daytime parking.

Table 10 below lists only turnouts and parking areas at least 240 feet in length and within the public right of way. Other parking areas on private property or within town borders may be considered with advanced approval by concerned parties but are not considered here.

Route Segment	Mile Post	Description	L x W (FT)	Landmark / Intersection	Daytime / Emergency
Hwy. 200	32	Turnout w/overhead line	N/A	Clearwater scales	Emergency (o.h. line at ~27')
	32.4	Turnout	313' X 36'		Daytime
	35.3	Turnout	340' X 18'		Emergency
	50.3	Turnout, opposite side	360' X 30'	Bob Marshall Interpretive Sign	Daytime
	65.3	Turnout	400' X 40'	On left hand corner	Daytime
	66.7	Turnout	305' X 70'	On left hand corner	Daytime
	75	Turnout, opposite side	400' X 70'	Old MDT yard	Daytime
	86.8	Double turnout, both sides of road	450' X 29'	Chain-up / removal area	Both
	89.8	Double turnout, both sides of road	420' X 25'	Top of Rogers Pass	
	90.7	Turnout	300' X 30'	East side of pass	Both
	91.3	Turnout, east-bound	480' X 70'	East side of pass	Both
		Turnout, west-bound	320' X 20'		Both
	93.1	Turnout, east-bound	340' X 56'		Both
		Turnout, west-bound	430' X 25'		Both
	93.4	Turnout	571' X 22'		Both
	94	Wide grass shoulder	N/A		Emergency
	97.5	Turnout	340' X 20'		Both
	98.8	Double turnout, both sides of road	480' X 30	Both sides of road by MDT yard	Both
	106.5	Double turnout, both sides of road	330' X 30'		Both
Hwy. 89	76	Turnout (rest area)	300' X 40'	Dupuyer rest area	Emergency
	43.3	Turnout	240' X 25'		
Hwy. 358	3	Turnout (side road)	400' X 16'	Pull in, back out on one leg of double approach.	Both

Table 10. Turnouts and parking areas, overnight and/or emergency.

SECTION 6: EMERGENCY RESPONSE PLANS

As with any over-the-road equipment transportation, the safety of the motoring public as well as that of the transportation crew is paramount. The contractors and crews identified in this document are, without exception, well-established and proven in their respective fields. This section of the proposal will outline responses to emergency scenarios that may be expected with a project of this magnitude. The purpose of the Emergency Response Plan (ERP) is to provide guidance to the transport company should an emergency situation arise during the transport of a module through the State of Montana. The plan addresses the most likely emergency situations that could occur while a module is in transit. The transport company will rely on the expertise of the Transport Supervisor and the traffic safety crews to follow steps to ensure the safety of the transport crew and the traveling public.

A list of high-capacity crane and/or towing companies is included at the end of this section.

Transport Equipment Breakdown or Failure Response

Even with the safest of operations, breakdowns and equipment failures are a possibility. Loads of the dimensions proposed in this document require special consideration due to the nature of the proposed route.

As mentioned in Appendix C, the Kamag K-25 hydraulic modular trailers employed by Sarens can be towed to a safe pullout, in either direction, even with moderate equipment failure. However, in the event that a catastrophic breakdown occurs and the load cannot be safely moved for a period of time, the following emergency response will be activated as outlined in the "Emergency Breakdown Response Plan" in Section 3 of this document. If necessary, repair assistance may be provided by the main transport facility in Edmonton at any hour of the day or night. In the event that the transport equipment cannot be repaired on-site, a standard high-capacity towing vehicle can be on-site within two hours at virtually any location along the route to move the transport equipment to a safe location.

Motor Vehicle Collision, Medical Emergency

In the event that a collision or medical emergency occurs during transport, similar steps as above will be implemented to ensure the safety of the transport crew and the travelling public. The load manager will be immediately notified and will decide whether to stop in place or proceed to a safe location off the road if possible. All non-essential personnel and vehicles will be cleared from the road to reduce the size and scope of the incident site. Emergency responders will be notified of the location and nature of the incident and first aid will be administered to any injured parties by trained first aid responders if possible. Appropriate traffic control measures will be implemented as necessary to ensure the safety of all involved and to minimize impacts to the travelling public.

Hazardous Material Spill

All transport support vehicles will carry "spill kits" to be implemented in the event of a hazardous material leak (i.e. hydraulic oil, fuel, anti-freeze). The module loads will contain no hazardous fluids. In

the event that a spill cannot be contained with equipment on hand, appropriate authorities will be immediately notified. As with any emergency scenario, the incident site will be minimized as much as possible and appropriate traffic control measures will be implemented immediately.

Hazardous Weather or Road Conditions

Weather and road conditions will be assessed each day prior to beginning travel. The load manager will be responsible for determining if forecasted weather conditions are sufficiently hazardous to cancel travel prior to departure. In the event that road and/or weather conditions deteriorate unexpectedly during travel, traffic control far in advance of the load and will convey information to the load manager that may necessitate suspending load travel. With loads of the proposed dimensions, it is imperative that travel be halted in a safe location under any scenario that could result in the load becoming stranded en-route. During winter months, a plow/sanding vehicle may be added to the load convoy to clear the road of ice or snow and to plow an appropriate turn-out if an unplanned stop-over is necessary.

Incident Involving Load Separating from Transport Equipment

As with any load traveling on public roadways, there exists the possibility that the transport equipment or load may become disabled to the extent that further travel is not possible without assistance from equipment and personnel not traveling with the convoy. If the load becomes unstable or detached from the trailer, a high-capacity crane and crew will be summoned as quickly as possible to stabilize the load or remove the affected equipment from the roadway. Included at the end of this proposal segment is a list of high-capacity crane operator companies that can respond to an emergency situation and an estimate of travel time to the incident site.

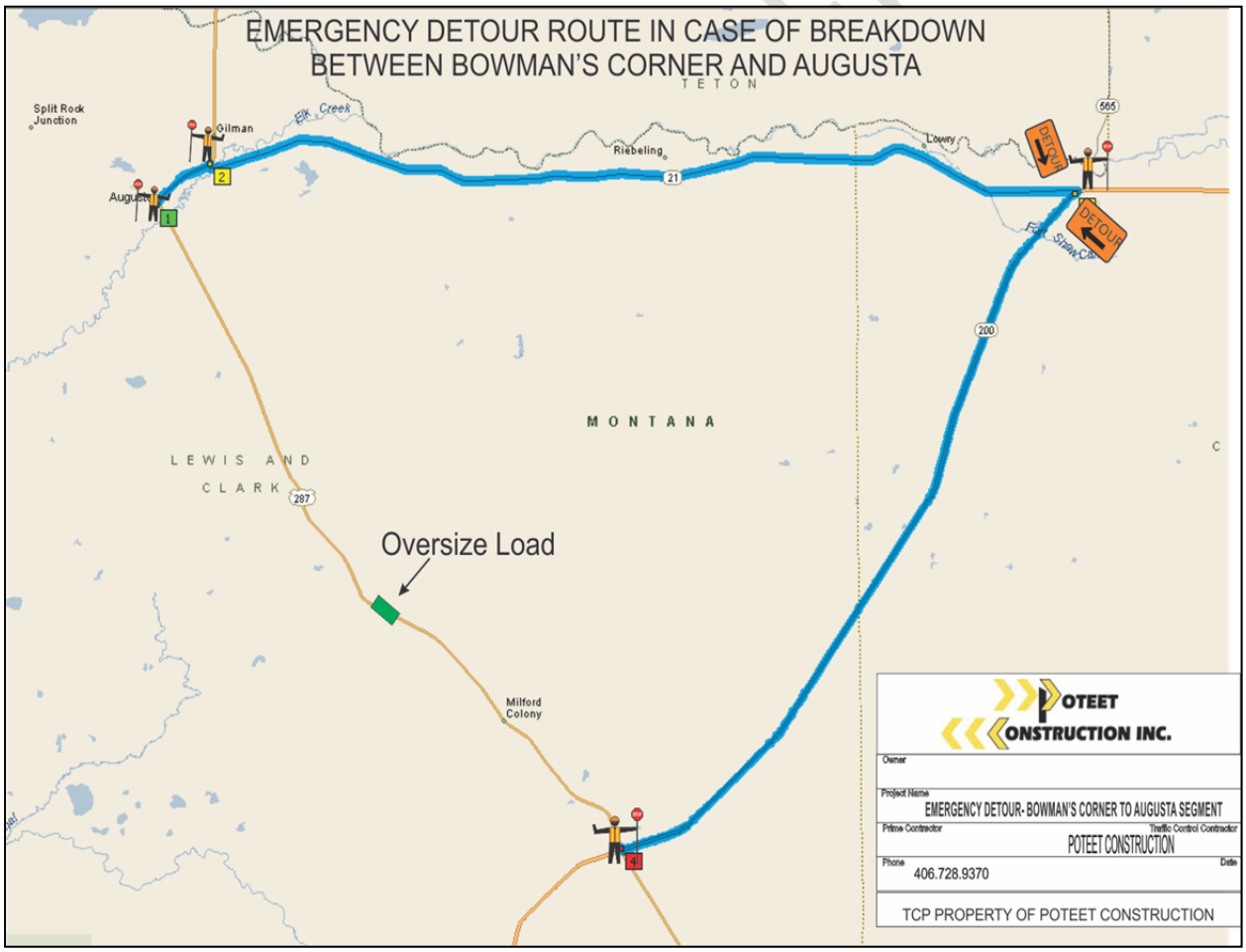
As with any emergency scenario, the safety of the crew and the travelling public will be the primary concern. Emergency traffic control measures will be implemented immediately while emergency responders are notified and injured parties tended to. Spill kits will be deployed to contain any hazardous fluid spill or leak. If possible, traffic will continue to be directed safely past the equipment on the regular route of travel. However, with loads of this size travelling on sometimes narrow roadways, road closure may become necessary. In the event that the route becomes impassable to the travelling public, traffic control personnel will set up a detour around the affected section of road.

Example

A likely segment of the proposed route to require a closure and detour is the segment of Highway 287 between Bowman's Corner and Augusta. This is a typical two lane road with little shoulder area and steeply sloping ditches on both sides. Any incident involving suspension of travel on this section of roadway would result in a road closure. As mentioned in the "Traffic Control Overview" above, before the load convoy initiates travel on Highway 287, a flagger will be dispatched to Augusta to advise the road manager of road conditions and oncoming traffic. A second flagger or pilot car will remain at Bowman's corner for the duration of the move to Augusta. In the event that a closure becomes necessary, these two flaggers will advise motorists of the detour and provide printed maps indicating

the detour route (see map below). If necessary, additional traffic control devices, signs and personnel may be dispatched to key turns along the detour route to further assist motorists. Every effort will be made by the transportation crew and traffic control personnel to minimize delays and inconvenience to the travelling public and to reopen the road as quickly and as safely as possible.

PROPOSED EMERGENCY DETOUR ROUTE, HIGHWAY 287 TO AUGUSTA



Mobile Crane Operators and Capacities for Emergency Response

Company	Mobile/All Terrain		To Sweet Grass, MT		To Missoula, MT	
	Truck/ Crane Capacities	Locations	Approximate Distance	Approximate Mob. Time	Approximate Distance	Approximate Mob. Time
Strongs Crane (406) 259-8833	40 to 250 Ton	Billings, MT	340 mi	14 hrs	350 mi	14 hrs
D & G Crane (406) 721-6389	Up to 110 ton	Missoula, MT	250 mi.	9 hrs	0 mi.	2 hrs
Montana Crane (406) 586-0909	Up to 140 ton	Bozeman, MT	300 mi.	11 hrs	200 mi.	9 hrs
H & H Crane (406) 452-4614	50 to 300 ton	Great Falls, MT	118 mi.	3 hrs	165 mi.	5 hrs
Sterling Crane Calgary #(403) 279-6585	100 to 800 ton	Edmonton, AB	380 mi.	15 hrs	560 mi.	21 hrs
		Red Deer, AB	290 mi.	12 hrs	460 mi.	18 hrs
		Calgary, AB	200 mi.	9 hrs	370 mi.	15 hrs
		Grand Junction, CO	920 mi.	33 hrs	810 mi.	29 hrs
		Elko, NV	800 mi.	29 hrs	550 mi.	21 hrs
Myshak Crane (403) 346-4329	100 to 500 ton	Edmonton, AB	380 mi.	15 hrs	550 mi.	21 hrs
Northern Crane(780) 823-2200	45 to 1200 ton	Edmonton, AB	380 mi.	15 hrs	550 mi.	21 hrs
Stampede Crane (403) 548-8117	65 to 300 ton	Calgary, AB	200 mi.	9 hrs	370 mi.	15 hrs
Ness Cranes (888) 784-1054	50 to 550 ton	Tacoma, WA	750 mi.	27 hrs	490 mi.	18 hrs
Campbell Crane (888) 784-1054	22 to 500 ton	Portland, OR	810 mi.	29 hrs	550 mi.	21 hrs
Wagstaff Crane (801) 277-3820	Up to 550 ton	Salt Lake City, UT	690 mi.	25 hrs	530 mi.	20 hrs
Hite Crane (509) 855-5025	Up to 440 ton	Spokane, WA	460 mi.	18 hrs	200 mi.	9 hrs
Mullan Cranes (208) 547-4775	Up tp 300 ton	Soda Springs, ID	580 mi	22 hrs	420 mi	16 hrs

Mobilization times are based upon 40mph speed & approx. 1.5 hr response to departure time.

APPENDIX A: Overnight Parking Areas, Typical Photos

Hwy. 200, Mile Post 65, 5 miles west of Lincoln. (400’ X 40’)

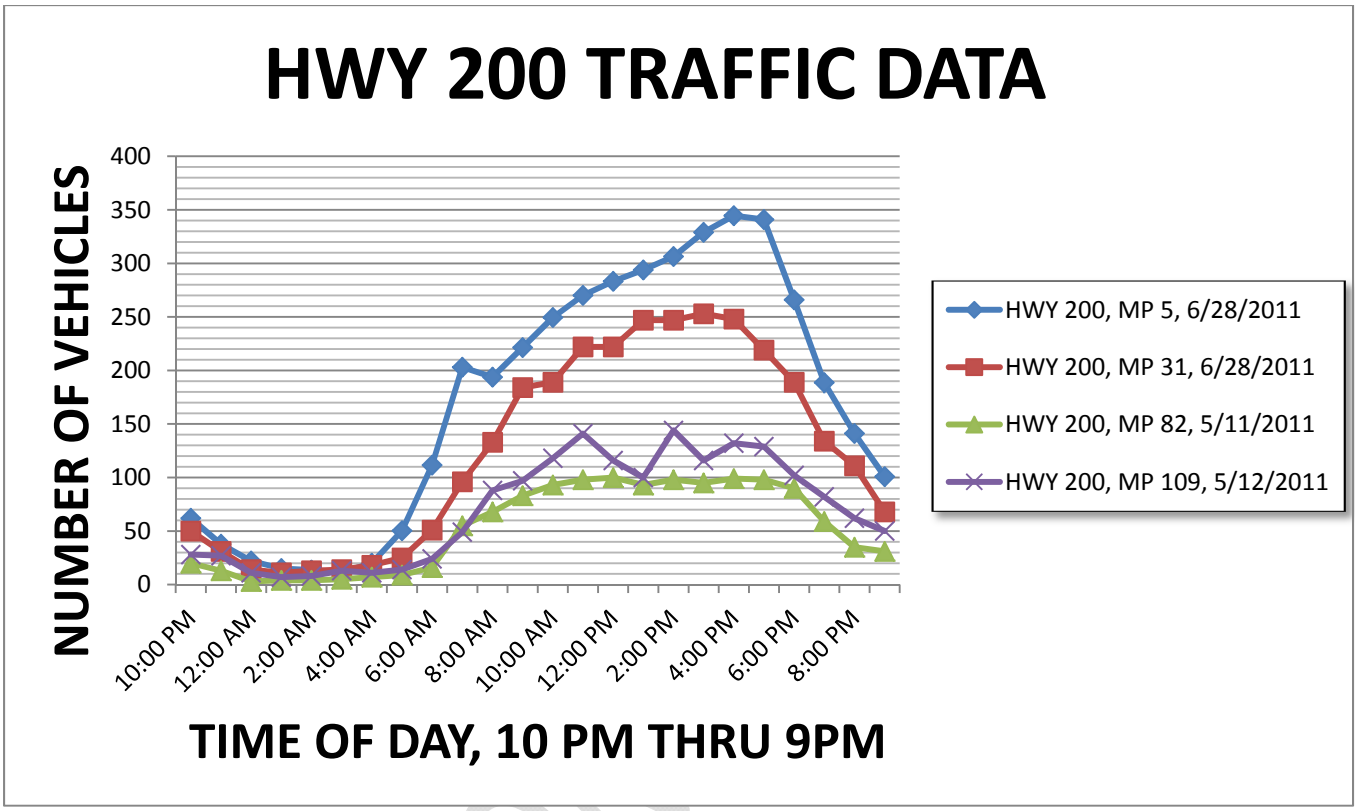
Hwy. 200, Mile Post 107, 3 miles west of Hwy 287 junction. (330’ X 30’)

Hwy. 89, Mile Post 44, 4 miles north of Choteau. (240’ X 20’)

Hwy. 89, Mile Post 76 rest area, 1 mile north of Dupuyer. (300’ X 40’)

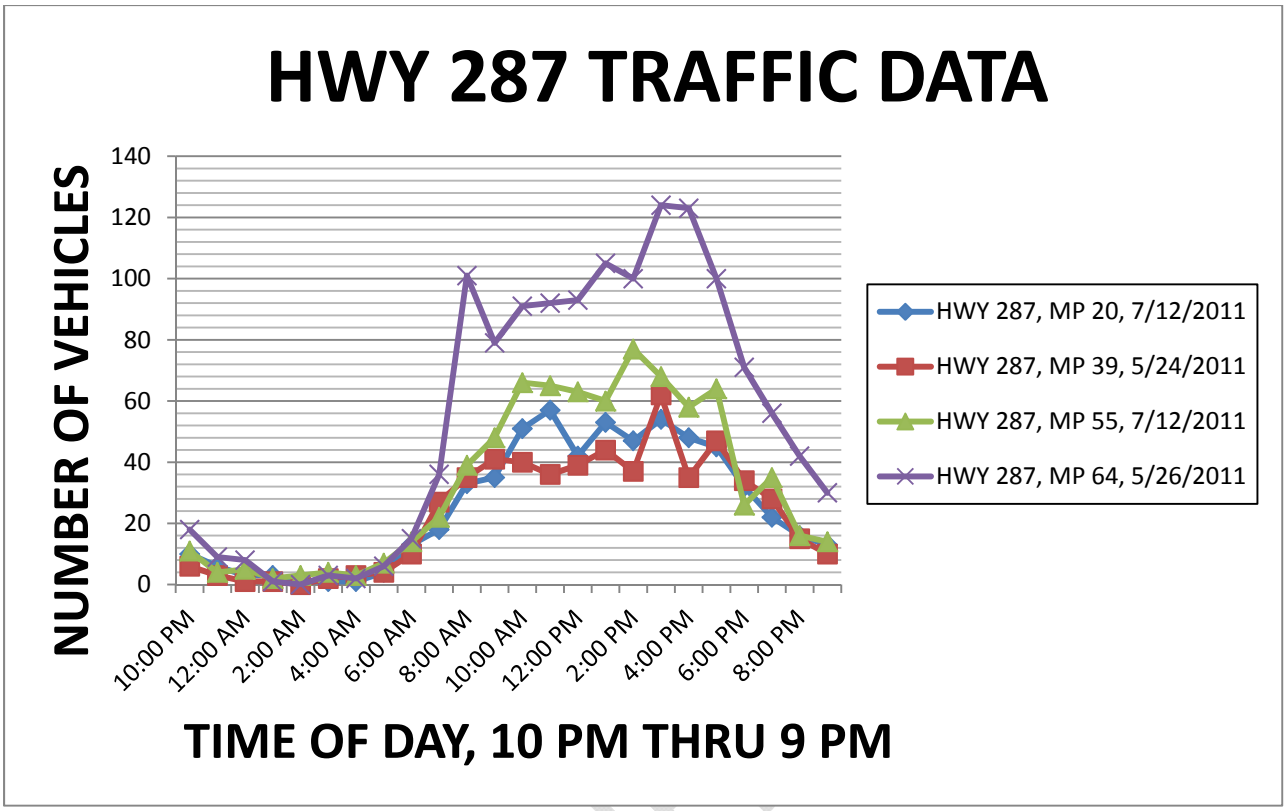
Route 358, Mile Post 3, 3 miles north of Valier, one leg of two-directional intersection. (400’ X 16’ road width)

APPENDIX B: MONTANA DEPT OF TRANSPORTATION TRAFFIC DATA

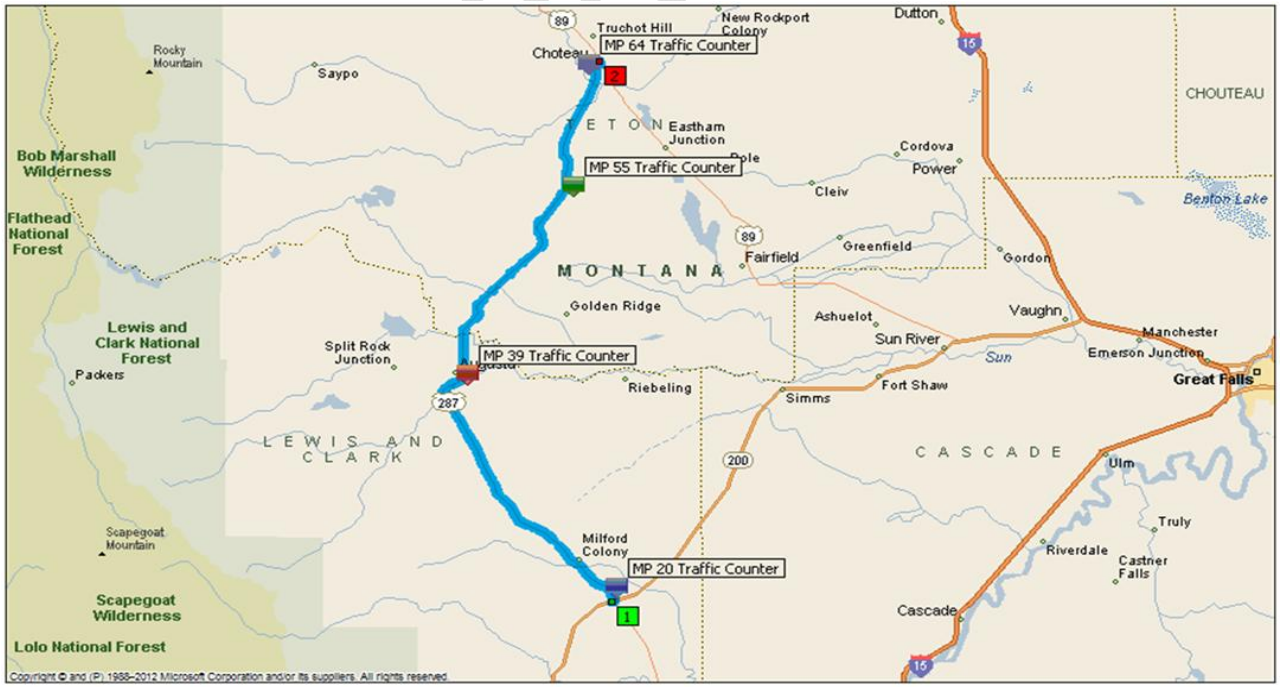


MT Hwy. 200 MDT traffic count data.

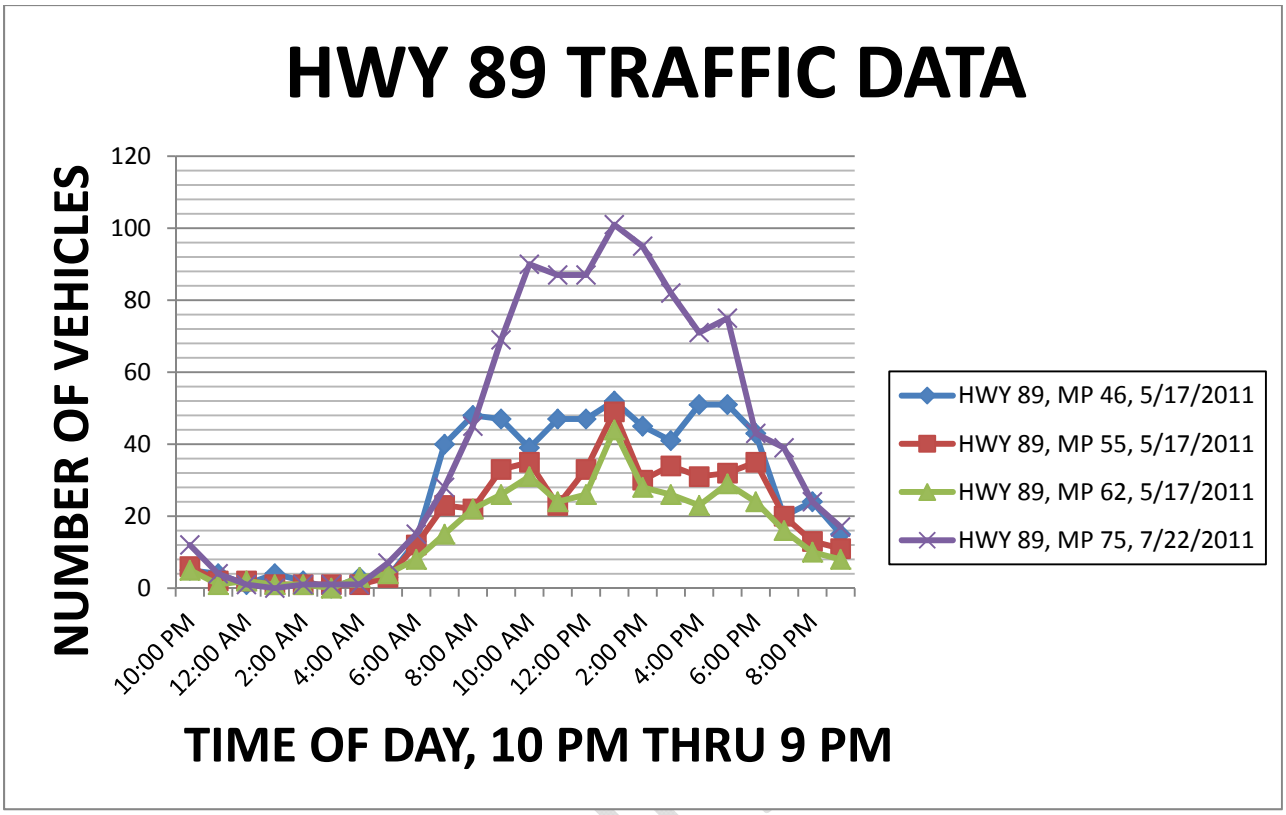
MT Hwy. 200 MDT traffic counter locations.



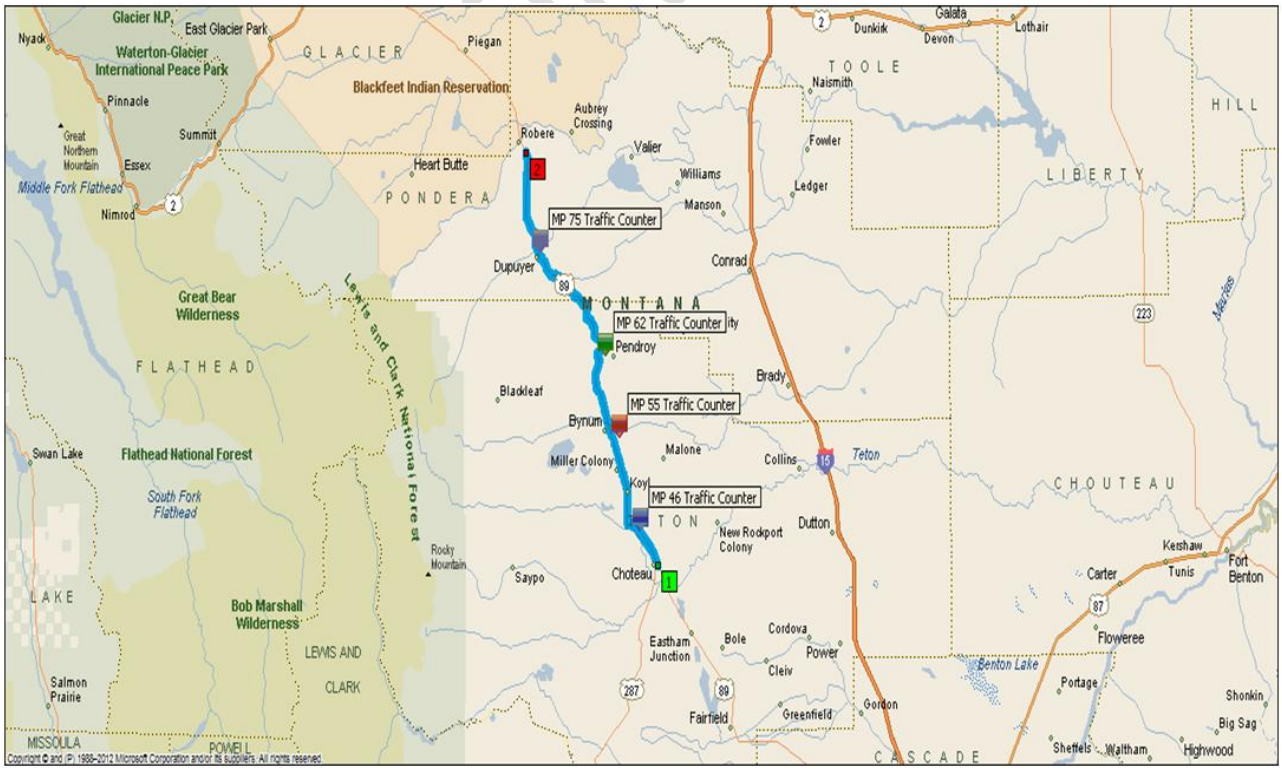
U.S. Hwy. 287 MDT traffic count data.



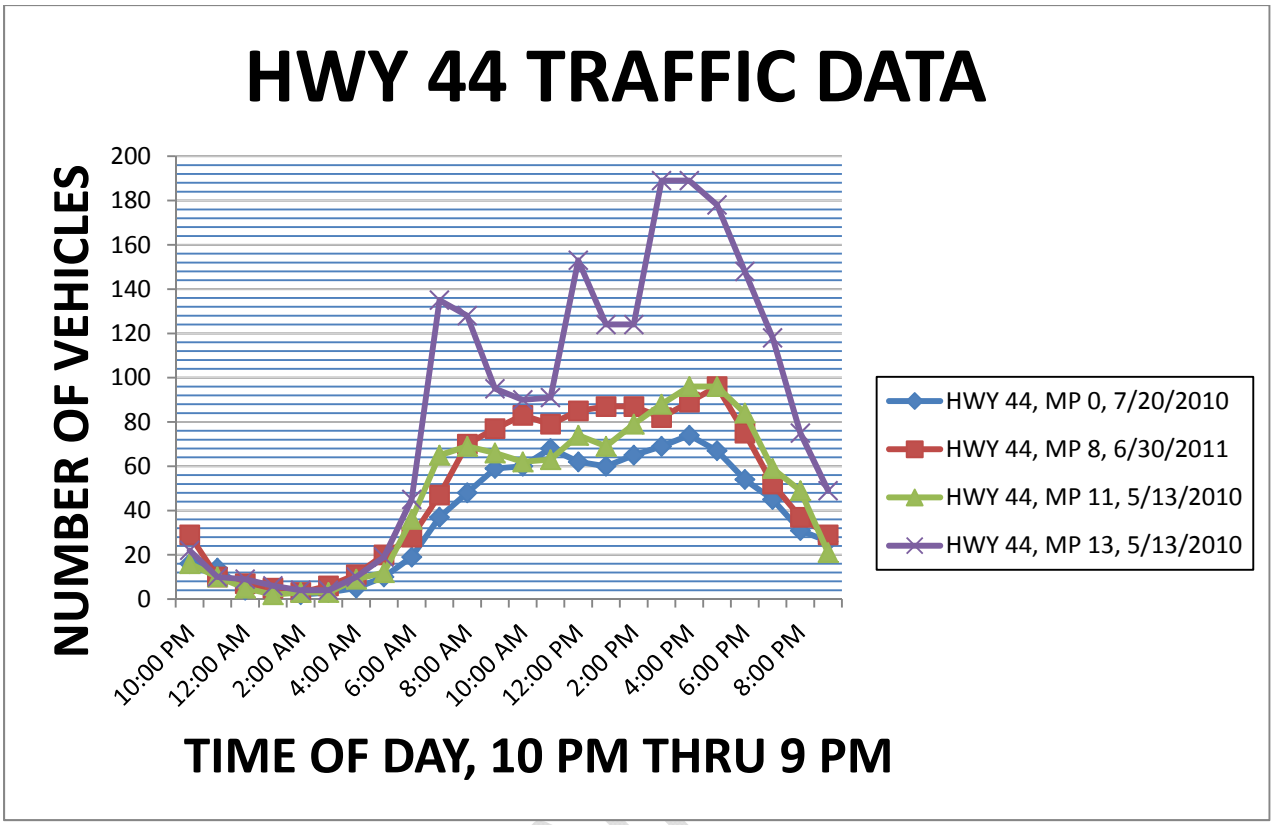
U.S. Hwy. 287 MDT traffic counter locations.



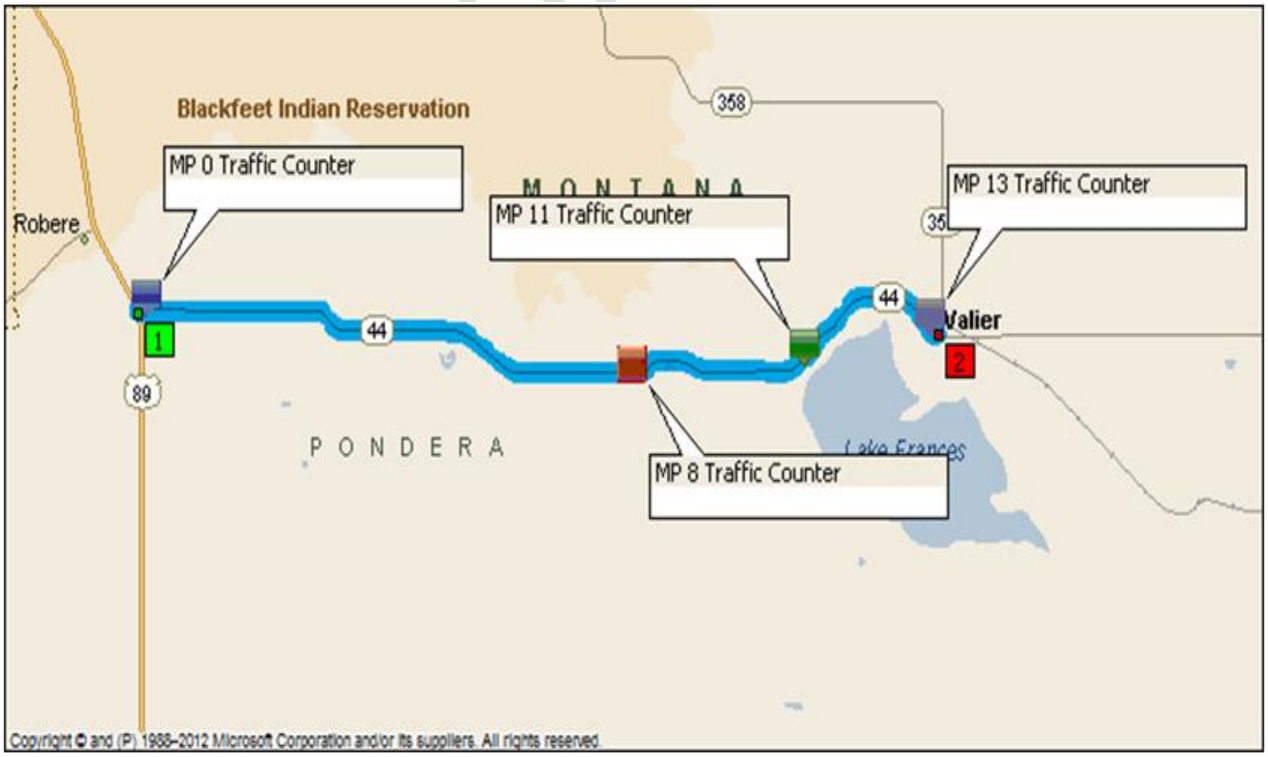
U.S Hwy. 89 MDT traffic count data.



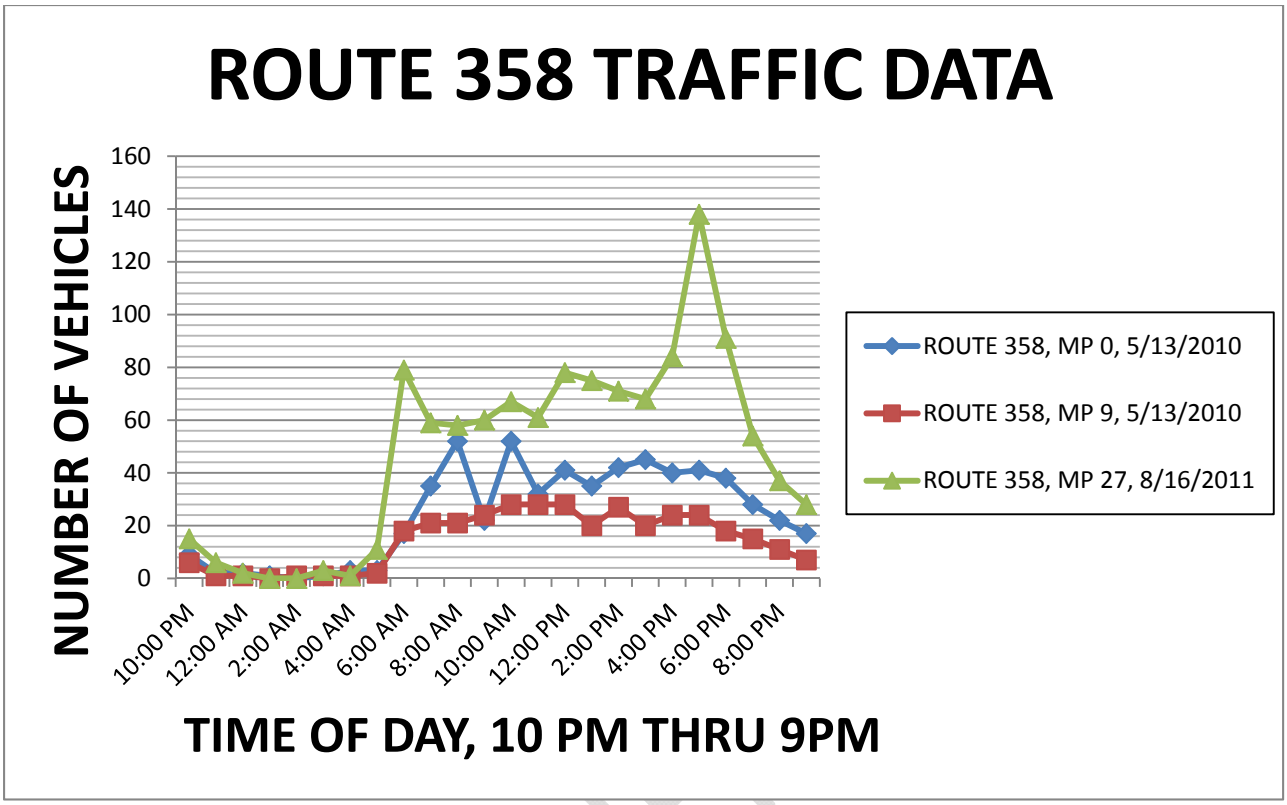
U.S. Hwy. 89 MDT traffic counter locations.



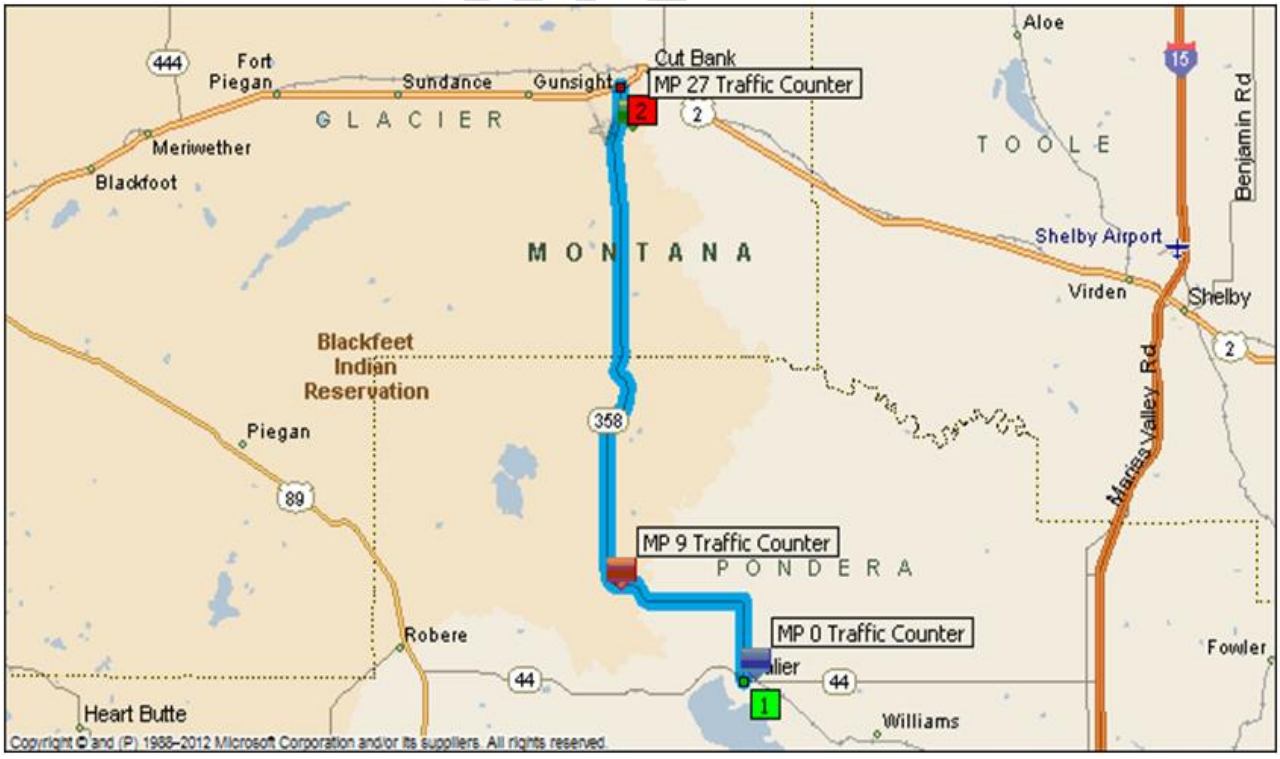
MT Hwy. 44 MDT traffic count data.



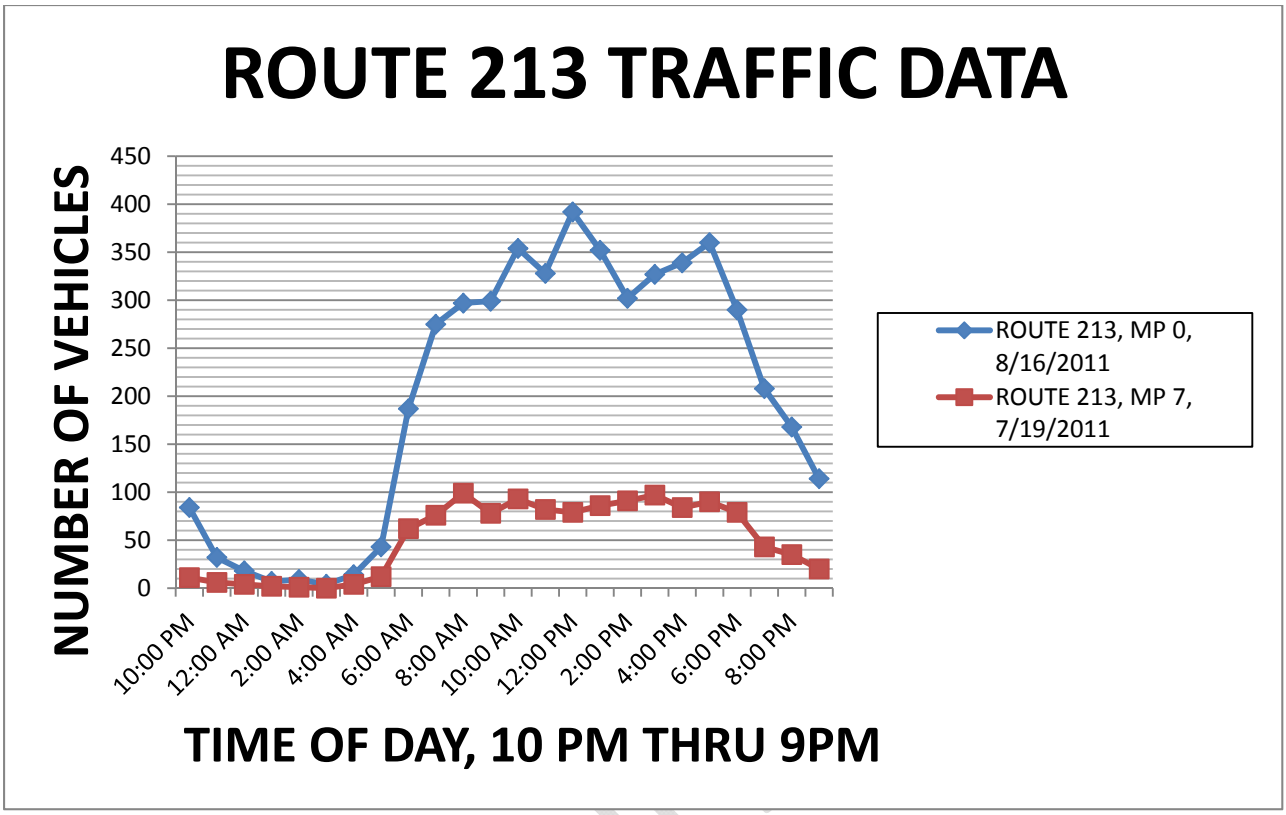
MT Hwy. 44 MDT traffic counter locations.



MT Secondary Route 358 MDT traffic count data.



MT Secondary Route 358 MDT traffic counter locations.



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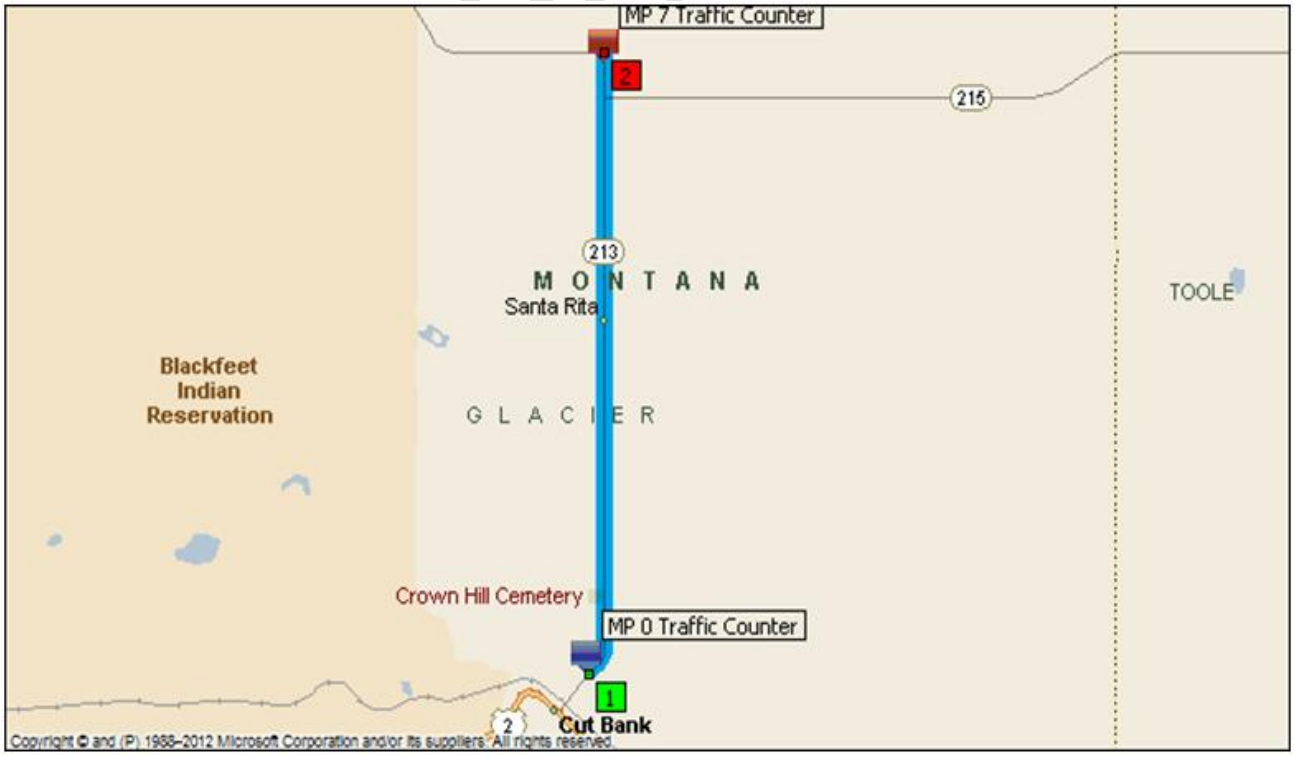
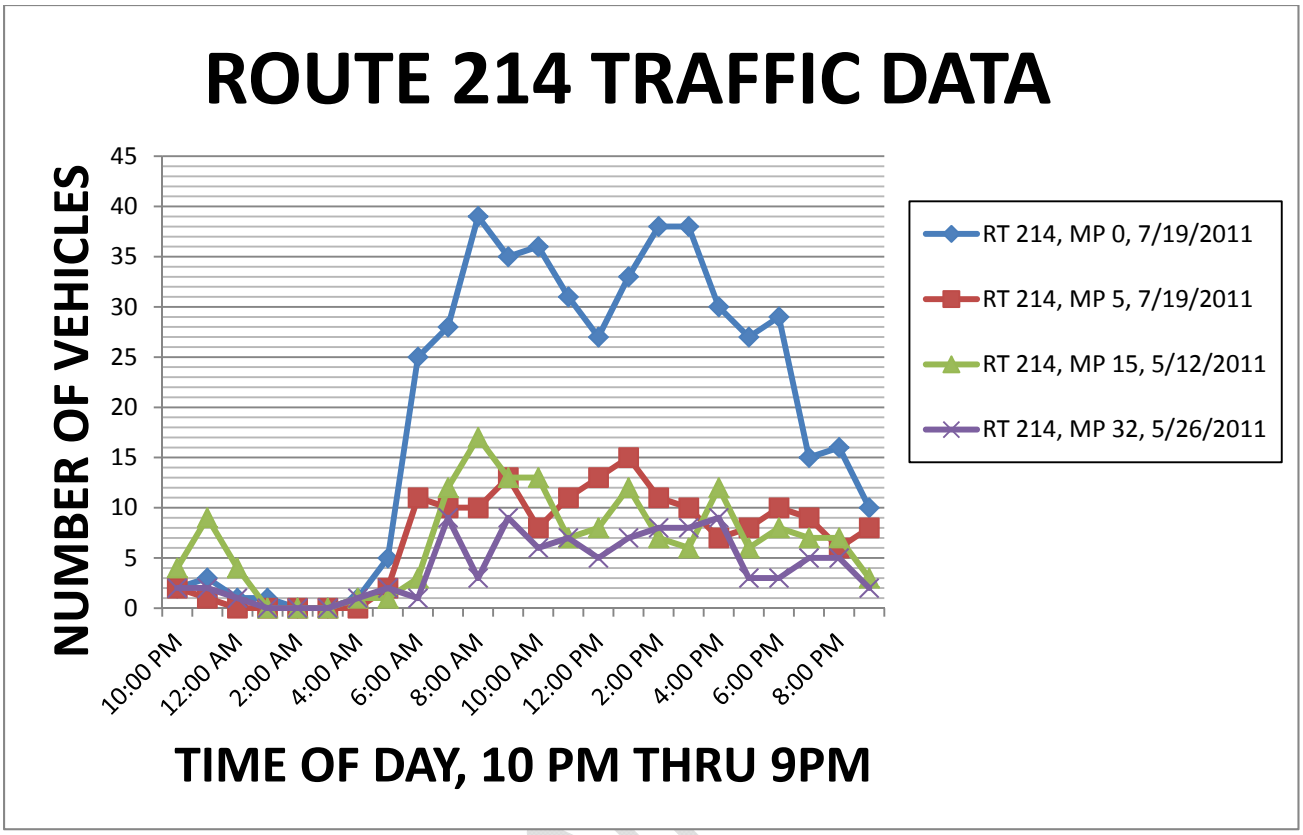
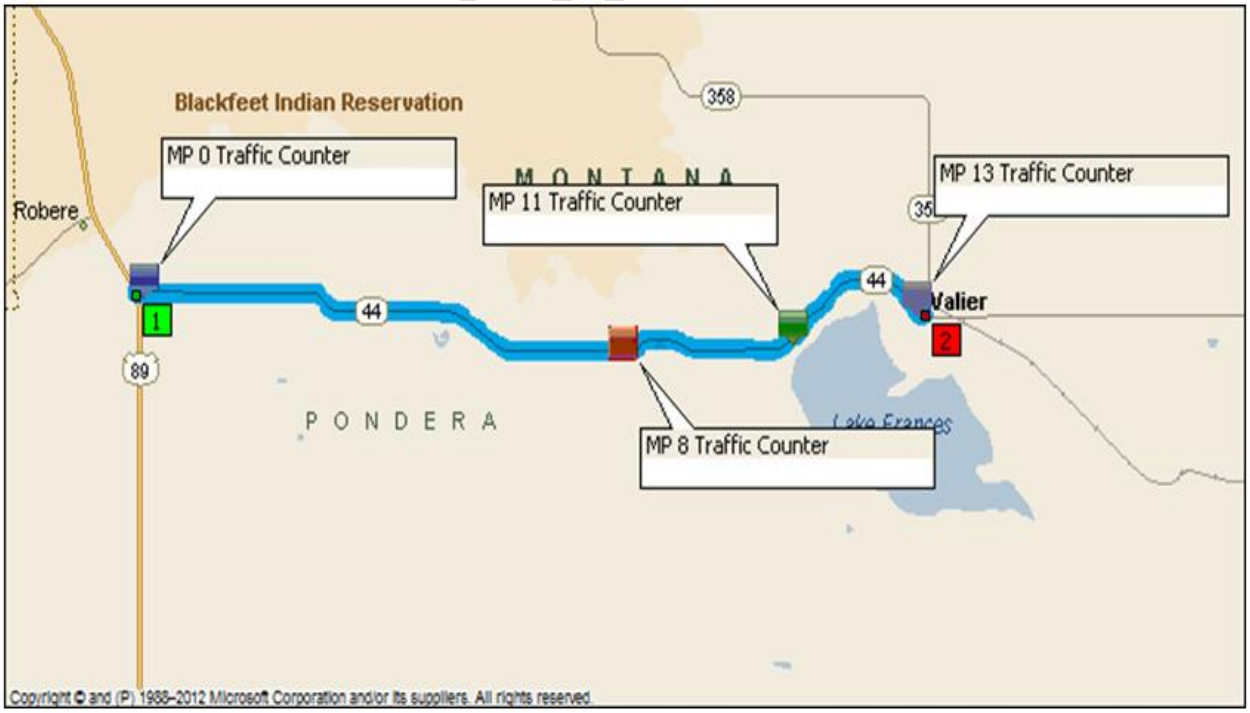


MT Secondary Route 213 MDT traffic counter locations.



MT Secondary Route 214 MDT traffic count data.



MT Secondary Route 214 MDT traffic counter locations.

APPENDIX C: LOAD AND TRANSPORT INFORMATION AND DIAGRAMS

As mentioned in Section 1 above, Sarens Group is the proposed transport contractor for these loads. Sarens is a world-wide leader in the lifting and transport of heavy loads and has provided their expertise in the preparation of this document. Sarens' Missoula personnel will be involved in the specific engineering for the load transports, with transport duties to be provided by personnel and equipment from Sarens' Edmonton, Alberta, Canada transport facility. Sarens employs rigorous safety training and certification for their crews as well as a strict and aggressive preventative maintenance schedule for their equipment. Included in this section are detailed drawings of the load and transport equipment that can be expected to travel along the proposed route.

Sarens is committed to maintaining a culture of safety during every step of their engineering and transport duties. To this end, Sarens will be utilizing the latest technology in their transport equipment. Sarens will employ the Kamag K-25 SL/3200 hydraulic modular trailer as the platform for transporting the proposed loads. The Kamag K-25 trailer is a conventional-style "pull trailer" with multiple, redundant components and axels that can be isolated and circumvented in the event of component failure, allowing for travel to continue uninterrupted to a safe pullout spot for repairs.

The Kamag K-25 is described as follows:

Highest bending moment on the market
By reinforcing the main beam, the permissible bending moment has been increased by 16 %.

Largest oil volume in its class
The K25 has an oil tank integrated into the vehicle frame. This oil tank – on the example of a 6-axle unit – holds a usable oil volume of 220 liters, the largest oil volume in its class. This enables the operation of transport combinations of up to 25 axle lines without an additional tank.

Freely accessible steering rods
Unrestricted access to the steering rods ensures easy removal and coupling, without the need for laborious threading of the steering rods. Depending on the configuration, only one end of the steering rod needs to be loosened for re-linking in a loaded state.

Reinforced lamellar coupling (40 mm)
The coupling fins on the K25 have been reinforced to 40 mm. This counters the often rapid wear of the fins, which arises from the steering movements of the vehicle combination in conjunction with a locked coupling cylinder.

Tested attachments and lashings
The K25 features attachments and lashings that have been tested and accepted by official agencies. The lashing rings can be used for load securing and also for crane loading of the vehicle. The hole pattern for the cross-coupling elements is unchanged, which facilitates use of existing equipment.

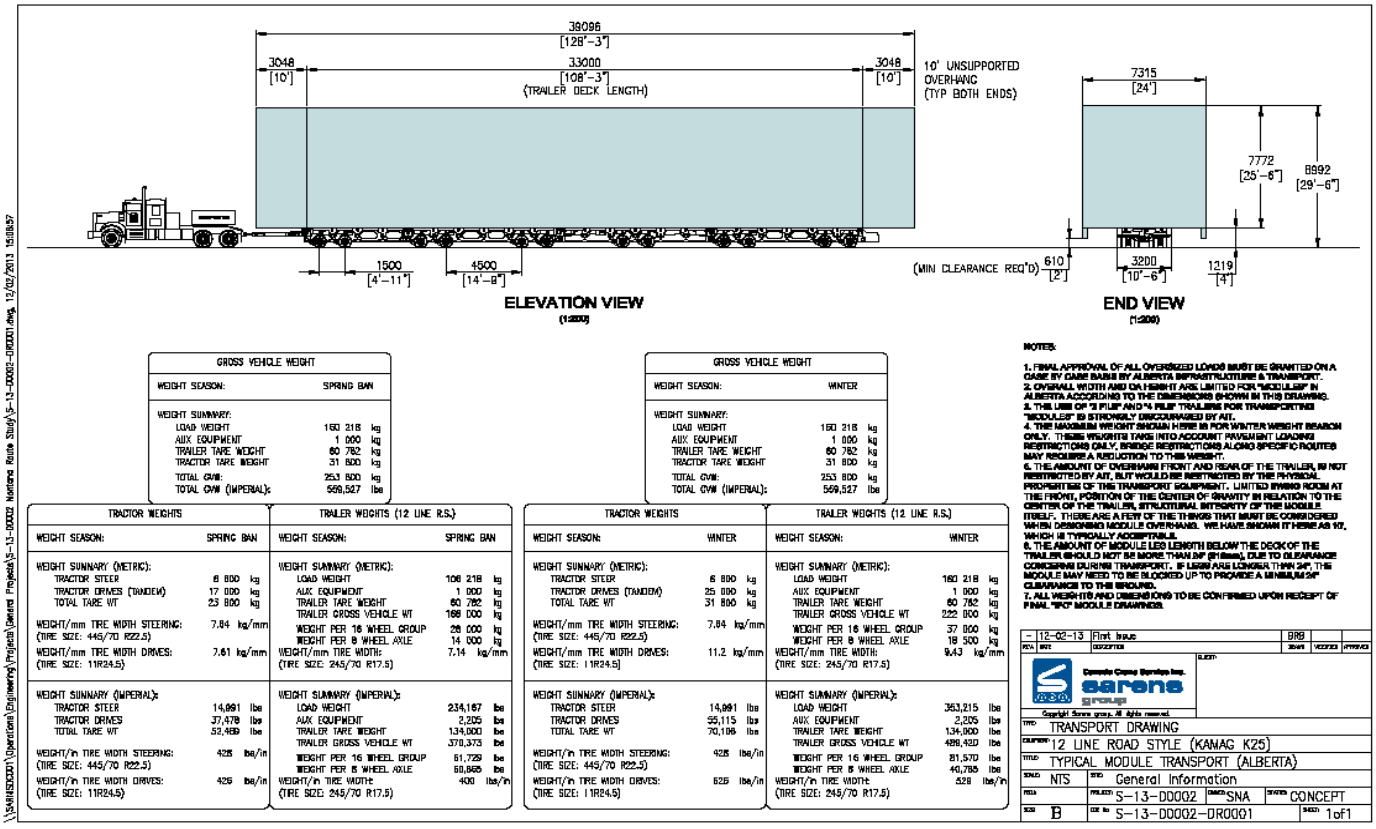
Steering technology / steering angle
The steering hydraulics are secured via a pressure-relief valve. This prevents damage when steering against resistance, e.g. a curbstone. All the wheel bogies can be aligned in one direction thanks to the

new, improved steering geometry. This eliminates the need to turn the rear chassis. The wheel bogies travel universally in the same direction, counteracting the increased wear.

Different designs complete the range

The K25 is - depending on requirements - available in diverse versions. KAMAG and SCHEUERLE offer the complete vehicle range for the special requirements of road transport, such as gradients, narrow access or loads with unusually high centers of gravity.

NOTE: The following images are for reference only. Actual load dimensions and transport equipment schematics will be provided at such time that actual 32J permit applications are initiated.



Typical drawing of transport equipment specifications. Actual load dimensions will vary from this drawing. For reference only.

Photo of typical load size and transport equipment.

Front view of typical load size and transport equipment. Conventional trailer width allows for load to overhang edge of road while keeping transport vehicle and trailer on the pavement to facilitate traffic clearing on narrow roads.

APPENDIX D: OVERHEAD UTILITY CONFLICTS AND SOLUTIONS

Overhead utility conflicts currently exist at many locations along the proposed route. The cost and manpower involved in raising or disconnecting these lines for each move are prohibitively high. Additionally, the safety of the crews working to mitigate utility conflicts during the move is of serious concern. Utility crews and equipment would be required to stage ahead of the load on sometimes narrow roads at night with little to no traffic control available.

Alternatively, a permanent mitigation plan is included in this section. The tables below list the parties responsible for overhead utility conflicts along the proposed routes, utility locations, and the cost of permanent mitigation of the conflicts. Many of these mitigation plans have been previously submitted and approved in association with past transport plans, and some conflicts have already been eliminated. While plan resubmission will be necessary, the process should be somewhat streamlined.

Missoula Electric Cooperative Utility Locations and Mitigation Costs

Mark C. Haden, General Manager 406-541-6340		
Contracted labor and equipment	Construction	$350,000.00
Contracted labor and equipment	Retirement	$75,000.00
Materials		$110,000.00
Weed control		$5,000.00
MEC administrative and misc (10%)		$54,000.00
Estimated total project cost		**$594,000.00**

Highway 200					
Crossing ID	**Height**	**Location**	**Crossing ID**	**Height**	**Location**
X2	29' 11"	MP 1+2287'	X45	24' 0"	MP 30+1769'
X6	23' 0"	MP 4+3621'	X49	25' 0"	MP 32+3679'
X7	24' 11"	MP 5+1052'	X50	24' 8"	MP 33+367'
X8	25' 8"	MP 5+2916'	X56	25' 8"	MP 40+3966'
X10	21' 2"	MP 6+208'	X57	23' 7"	MP 41 +475
X11	20' 11"	MP 6 +3381'	X59	23' 10"	MP 43+2626'
X12	27' 2"	MP 7 +316'	X60	30' 0"	MP 44+2838'
X13	24' 1"	MP 7+1103'	X61	19' 4"	MP 45+511'
X14	24' 8"	MP 7+1919'	X62	27' 0"	MP 45+3519'
X15	26' 11"	MP 7+2690'	X63	26' 0"	MP 47+5140'
X20	32' 0"	MP 9+2627'	X65	26' 0"	MP 48+2896'
X21	21' 6"	MP 9 =3219'	X66	18' 9"	MP48+4530'
X27	25' 8"	MP 12+3058'	X71	24" 0"	MP 50+3187'
X29	25' 11"	MP 13+54'	X72.5	30' 0"	MP 52+1701'
X31	23' 0"	MP 14+3893'	X73	23' 11"	MP 52+3150'
X32	29' 0"	MP 14+4247'	X74	29' 6"	MP 52+4691'
X33	22' 4"	MP 15+1076'	X75	29' 6"	MP 57+3905'
X35	25' 7"	MP 15+4999'	X76	21' 8"	MP 59+3766'
X36.5	24' 3"	MP 20+2079'	X77	27' 2"	MP 60+00'
X37	26' 3"	MP 22+1814'	X78	23" 0"	MP 61+3741'
X40	26' 8"	MP 26+1890'	X78.5	30' 0"	MP 62+5116'
X44	30' 0"	MP 30+870'	X79	20' 6"	MP 63+1162'

Northwestern Energy Utility Locations and Mitigation Costs

Helena Division Crossings, Highway 200, Bonner to Bowman's Corner

Crossing	Location	Estimated cost	Crossing	Location	Estimated cost
1	MP 68+0'	*Combined with 2*	32	MP 73+422'	$19,518.82
2	MP 68+950'	$52,810.59	33	MP 73+1214'	$17,340.20
4	MP 68+3696'	$28,330.08	34	MP 73+3168'	$16,542.75
6	MP 69+264'	$6,139.77	35	MP 73+3432'	$10,093.50
8	MP 69+1109'	$21,866.65	36	MP 73+4910'	$10,093.50
9	MP 69+2006'	$31,409.66	37	MP 74+1742'	$43,912.64
11	MP 70+581'	$25,825.16	42	MP 76+2165'	$10,809.19
14	MP 71+581'	$22,839.34	44	MP 78+264'	*Combined with 45*
21	MP 71+2482'	$24,384.03	45	MP 78+1426'	$123,852.59
22	MP 71+2587'	$9,712.28	47	MP 81+1848'	$8,363.49
23	MP 71+2693'	$12,472.74	48	MP 82+317'	$16,004.80
24	MP 71+3221'	$3,323.66	51	MP 92+1901'	$25,520.67
27	MP 71+4118'	$21,264.73	58	MP 97+3115'	$33,671.22
29	MP 72+528'	$31,632.61	59	MP 100+106'	$14,877.81
Total Estimated Cost		**$642,612.48**			

Great Falls Division Crossings, Highway 358

Crossing	Location	Estimated cost
59	MP 0 + 200'	12,173.00
Total Estimated Cost		**12,173.00**

Sun River Electric Cooperative Utility Locations and Mitigation Costs

Sun River Electric Cooperative
Robert Anderson
Operations Manager
406-467-2526

Hwy.	Location
89	MP 66.1
89	MP 70.3
44	MP 5.2
358	MP 2.9
358	MP 6.9
358	MP 8.5
358	MP 10.9
Total Estimated Cost	**$130,000.00**

Glacier Electric Cooperative Utility Locations and Mitigation Costs

Glacier Electric Cooperative
Doug Ray
406-450-2000

Highway	Crossing ID./ Pole Number	Location
44	36-26-R1	MP 1+886'
358	20-TB11	MP 27+1959'
213	5-122	MP 1+561'
213	5-127	MP 1+623'
213	5-094	MP 2+2112'
213	5-048	MP 4+2123'
213	5-027	MP 5+2023'
214	11-D36-R1	MP 7+2640'
214	55-86-L1	MP 21+2500'

Town of Cut Bank, 2 crossings

1	Alley between 4th and 5th Ave. NW, 1884' west of North Central Ave and MT 213
2	1057’ west of North Central Avenue and MT 213.

Total Estimated Mitigation Cost		**$120,000.00**

Optimum Utility Locations and Mitigation Costs

Optimum - Great Falls, MT
Henry Woloszyn
866-251-2199

Description	Location	Estimated Cost
Cable Relocate	4th-5th Ave. NW	$5,084.27
Crossing Relocate	Skyland RV Park	$6,112.20

Optimum - Helena, MT
Brent Bushnell
Engineer II – Helena District
406-441-7649

Description	Location	Estimated Cost
Aerial crossing	Hwy. 200, MP 103.6	*$9,500.00

Total Estimated Mitigation Cost	**$20,696.47**

*** Not an official quote, subject to approval by Denver office.**

Overhead Flashing Beacon Locations and Mitigation Costs

Contractor:
Montana Lines, Inc
Great Falls, Montana
James S. Bumgarner, Project Manager/Estimator
406-727-1316

A total of 4 overhead flashing beacons are located along the proposed route in the following locations:

The town of Lincoln (Highway 200)

Bowman's Corner (Highway 200)

The town of Choteau (Highway 89)

The town of Valier (Highways 44 and 358 junction)

Montana Lines, Inc. (MTL) owns the structures and plans required to remove the existing signals and re-install them on rotatable, cantilevered poles that can be swung to the side and out of the way of approaching loads. Plans have previously been submitted to, and approved buy, the Montana Department of Transportation for the installation of these devices. However, those permits have since expired and new permits must be issued prior to installation.

Description and Cost of Overhead Signal Mitigation

Item #	Location	Description	Cost
1	Lincoln, Hwy. 200	Flashing beacon rotator installation	$70,000.00
2	Bowman's Corner, Hwy. 200	Flashing beacon rotator installation	$97,000.00
3	Choteau, Hwy. 89	Flashing beacon rotator installation	$152,500.00
4	Valier, MT 44-MT 358 jct.	Flashing beacon rotator installation	$158,500.00

Total Mitigation Cost	**$478,000.00**

APPENDIX E: Proposal to Provide Environmental Review and Environmental Checklist for Bonner Transportation Plan (BTP)

April 29, 2013

Ms. Deb Poteet
Poteet Construction Inc.
9435 Summit Driver
Missoula, MT 59808

RE: Proposal to Provide Environmental Review and Environmental Checklist for Bonner Transportation Plan (BTP)

Dear Ms. Poteet,

Tetra Tech appreciates the opportunity to submit this proposal to provide an Environmental Checklist of assessments of proposed utility crossings and traffic structures which require construction modifications along the BTP route from Bonner, Montana to the Sweetgrass, Montana Port of Entry on the U.S./Canada border.

Tetra Tech has developed the following scope of work and cost estimate to provide completion of an Environmental Checklist as required by MDT for Encroachment/Occupancy (incl. Utility) Permits.

SCOPE OF WORK

Tetra Tech will review the project record and fill out the Environmental Checklist for each site or group of sites, including reviewing maps and publically available data, and conducting field work to verify such things as locations of wetlands and the presence of nearby active eagle nests. Tetra Tech assumes that all location data will be submitted to Tetra Tech at one time so that all of the field verification can be completed in one trip. Tetra Tech also assumes that accurate GPS locations or lat/long information for each location will be provided by Poteet and/or the Client. The estimate cost to complete the checklist assessment is included as **Attachment A**. Tetra Tech anticipates that it will take approximately 2 to 3 weeks to compile all the information and submit a completed Environmental Checklist. Tetra Tech's project assumptions for each of the 18 Impact Questions on the Environmental Checklist are included as a narrative to each impact question as well as following the Checklist Conditions and Required Approvals.

Tetra Tech will provide a project manager to oversee the environmental assessment of proposed utility crossings and traffic structures which require construction as part of permitting the BTP. The project manager will be responsible for all communications with Poteet Construction and the "Client" as well as correspondence with MDT Environmental Service Bureau and/or Transportation Planning pertaining to the Environmental Checklist and its approval. The project manager will be responsible for all Environmental Checklist submittals, the project budget and timeline, and records retention.

ENVIRONMENTAL CHECKLIST

Actions that qualify for Categorical Exclusion under MEPA and/or NEPA (ARM 18.2.261 and 23 CFR 771,117) for Encroachment/Occupancy Permits are defined by answering 18 impact questions:

1. Will the proposed action impact any known historical or archaeological sites? **Tetra Tech assumes that cultural review on a similar transportation haul project (e.g. the Kearl Project) is sufficient for the Bonner Transportation Plan (BTP) put forth by Poteet Construction and the "Client". Tetra Tech will reproduce maps of the transportation route with known historical sites to provide documentation to this impact question.**
2. Will the proposed action impact any publicly owned parkland(s), recreation area(s), wildlife or waterfowl refuge(s)? **Tetra Tech will review the proposed action to assess the potential for impact on any publicly owned parkland, recreation area, or refuge**.
3. Will the proposed action impact prime farmlands? (If yes, attach a completed Farmland Conversion Impact Rating Ad-1006.) **Tetra Tech will review the proposed action to assess the potential for impact of prime farmland.**
4. A. Will the proposed action have an impact on the human environment that may result from relocations of persons or businesses, changes in traffic patterns, changes in grade, or other types of changes? **Tetra Tech assumes the BTP will address these issues and that Poteet Construction and/or the Client will supply the necessary analyses to Tetra Tech in order to document any such impacts on the human environment (i.e. traffic pattern analysis, etc.)**
4. B. Has the proposed action received any preliminary or final approval from the local land use authority? **Tetra Tech assumes that, if approval from a local land use authority is warranted, Poteet Construction and/or the Client will procure approval and will provide documentation for the Environmental Checklist**.
5. For the proposed action, is there documented controversy on environmental grounds? (For example, has the applicant received a letter of petition from an environmental organization?). **Tetra Tech is not aware of any documented controversy on environmental grounds at this time. Any consultation help required mitigating environmental concerns beyond the initial Environmental Checklist submittal or deal with permitting constraints due to environmental controversy is outside the scope of this proposal**.
6. Will the proposed action require work in, across or adjacent to a listed or proposed Wild or Scenic River? **Tech will review the proposed action to assess the potential to impact a listed or proposed Wild or Scenic River.**
7. Will the proposed action require work in a Class I Air Shed or nonattainment area? **Tech will review the proposed action to assess the potential to impact a Class I Air Shed.**
8. Will the proposed action impact air quality or increase noise, even temporarily? **Tech will review the proposed action to assess the potential to impact air quality or increase ambient noise.**
9. Will the proposed action have potential to affect water quality, wetlands, streams or other water bodies? If the answer is YES, an environment related permit or authorization may be required. **Tech will review the proposed action to assess the potential to impact a water quality, wetlands, streams or other water bodies along the proposed transportation route.**

10. Are solid or hazardous wastes or petroleum products likely to be encountered? (For example, project occurs in or adjacent to Superfund sites, known spill areas, underground storage tanks, or abandoned mines.) **Tetra Tech will however perform a radius search of each utility crossing/traffic control structure requiring modification to determine the potential for encountering any solid and hazardous waste or petroleum materials.**
11. A. Are there any listed or candidate threatened or endangered species, or critical habitat in the vicinity of the proposed action? **Based on a similar transportation haul project Tetra Tech assumes that there are listed and/or candidate T&E species in the vicinity of the proposed action. These are likely to be limited to Bull Trout (*Salvelinus confluentus*) habitat, and Bald Eagle (*Haliaeetus leucocephalus*) nesting sites. Tetra Tech will review existing T&E species data and make a determination if other species are likely to be involved. Tetra Tech will produce maps with listed or candidate species habitat shown in reference to the proposed action. Tetra Tech also anticipates that a "windshield" survey of known Bald Eagle nesting sites will need to be conducted to determine which are active within ½ mile of the proposed utility crossings/traffic structure modifications sites.**
11. B. Will the proposed action adversely affect listed or candidate threatened or endangered species, or adversely modify critical habitat? **Based on a similar transportation haul project Tetra Tech anticipates certain construction mitigation measures may be necessary.**
12. Will the proposed action require an environmental-related permit or authorization? If the answer is "yes," please list the specific permits or authorizations. **Tetra Tech doesn't anticipate any environmental-related permit authorizations will be necessary.**
13. A. Is the proposed action on or within approximately 1 mile of an Indian Reservation? **A portion of the haul route passes through the Blackfeet Indian Reservation.**
13. B. If "Yes", will a Tribal Water Permit be required? **Tetra Tech will review the proposed action to determine if a Tribal Water Permit will be necessary to complete the work.**
14. Will the proposed action result in increased traffic volumes, increased wait or delays on state highways, or have adverse impacts on other forms of transportation (rail, transit or air movements)? **Tetra Tech assumes the BTP will address these issues and that Poteet Construction and/or the Client will supply the necessary analyses to Tetra Tech in order to document any such impacts on the traffic patterns and will provide mitigations to address such impacts as necessary.**
15. Is the proposed action part of a project that may require other governmental permits, licenses or easements? If "Yes", describe the full extent of the project and any other permits, licenses or easements that may be necessary for the applicant to acquire. **Tetra Tech is not aware of any additional governmental permits, licenses, or easement that will be necessary to complete the proposed work. Any such additional permits will be the responsibility of Poteet Construction and/or the Client.**
16. Attach a brief description of the work to be performed, including any subsurface work. **Tetra Tech assumes that this description will be provided by Poteet Construction and/or the Client.**
17. Attach representative photos of the site(s) where the proposed action would be implemented. Photos are to include any structures, streams, irrigation canals, and/or potential wetlands in the project area. **Tetra Tech assumes that photographs of the utility crossings or traffic structures**

that will be modified will be provided by Poteet Construction and/or the Client. Tetra Tech will conduct site visits during the windshield survey and photograph each site location.

18. Attach map(s) showing the location(s) of the proposed action(s); Section, Township, Range; highway or route number and approximate route post(s). **Tetra Tech assumes that maps will be provided by Poteet Construction and/or the Client for each utility crossing or traffic structure modification in the proposed action.**

CHECKLIST CONDITIONS AND REQUIRED APPROVALS

C. If "Yes" is indicated on any of the items, the Applicant must explain the impacts as applicable. Appropriate mitigation measures that will be taken to avoid, minimize, and/or mitigate adverse impacts must also be described. Any proposed mitigation measures will become a condition of approval. Use attachments if necessary. If the Applicant check “no” and the District concludes there may in fact be potential impacts, the Environmental Checklist must be forwarded to Environmental Services Bureau for review and approval. **Tetra Tech assumes that any mitigation measures put forth as part of the environmental checklist and permitting phase of the project will be reviewed and approved by the client before submittal.**

D. If “Yes” is indicated in item 11 a. (threatened or endangered species), the Applicant should provide information naming the particular species and the expected location, distribution and habitat use in the proposed action area, i.e. within the immediate area of the proposed action; or, in the general area on occasion (seasonally passes through) but does not nest, den or occupy the area for more than a few days. **This condition is redundant to what is already assumed to be needed on Question 11. Tetra Tech will map and survey as needed any T&E species habitat or sensitive habitat.**

E. If the applicant checks "Yes" for any item, the approach permit, occupancy agreement or permit, along with the checklist and supporting information, including the Applicants mitigation proposal, documentation, evaluation and/or permits must be submitted to MDT Environmental Services Bureau. Electronic format is preferred. **Tetra Tech assumes that the Environmental Checklist will be submitted with the necessary Occupancy or Encroachment Permits by Poteet Construction and/or the Client (Tetra Tech will provide the Environmental Checklist to the permittee). Tetra Tech further assumes that this project will be completed in one construction phase (i.e. will be permitted through one client) and not completed piece-meal where environmental conditions might change between construction phases.**

F. When the Applicant check “Yes” to any item, the Applicant cannot be authorized to proceed with the proposed work until the MDT Environmental Services Bureau and/or Transportation Planning, as appropriate, reviews the information and signs the checklist. **Tetra Tech will not be responsible for work without authorization to proceed by MDT Environmental Service Bureau and/or Transportation Planning.**

G. Applicant must obtain all necessary permits or authorizations from other entities with jurisdiction prior to beginning the proposed action or activity. The Applicant is solely responsible for any environmental impacts incurred as a result of the project; obtaining any necessary environmental permits, notifications, and/or clearances; and ensuring compliance with environmental laws and regulations. **Tetra Tech will not be responsible for any necessary permit compliance or authorization for the proposed action or activity. This is the Applicant's responsibility.**

BUDGET

The attached time and materials cost estimate (**Attachment A**) is based on the scope of work described above and assumptions presented herein. The cost to provide the Environmental Checklist is estimated to be $6,410. All fees for this project will be incurred on time and materials basis. Only actual costs incurred will be invoiced.

If this proposal meets with your approval, please notify Tetra Tech and a Work Order will be developed for the Scope of Work specified in this proposal to authorize Tetra Tech to proceed. Again, thank you for the opportunity to submit this proposal. We appreciate our continued relationship with Poteet Construction and look forward to your reply.

Sincerely,

William Craig

Project Manager/Hydrogeologist

ATTACHMENT A
Poteet Construction
Bonner Transportation Plan
Environmental Checklist for MDT Encroachment/Occupancy Permits
Date: 05/25/2013

Cost Estimate

Staff req'd	**Est. hrs**	**Cost**
• Project Manager	16	$2,000
• Administrator	2	$110
• Environmental Scientist I	32	$1,760
• GIS Technician/CADD	20	$1,700
• subtotal		$5,570
• **Other Direct Costs**	**Units**	
• Vehicle Usage (per day)	4	$300
• Mileage (per mile)	600	$360
• Per diem (per day)	4	$120
• GPS (per day)	4	$60
• Subtotal		$840
Total Estimated Cost		**$6,410**