



APPENDIX 6 – Table of Contents – Traffic Control Plans

6.0 Traffic Control Plan

6.1 Highway Traffic Control Plans

- 6.1.1 Clear Traffic Plan (1 lane open)
- 6.1.2 Clear on Shoulder Traffic Plan (1 lanes open)
- 6.1.3 Park Traffic Plan (2 lane open)
- 6.1.4 3 Lane Clear (1 lanes open)
- 6.1.5 4 Lane Clear (2 lanes open)
- 6.1.6 Typical Advanced Signing Detail
- 6.1.7 Traffic Control Procedure
- 6.1.8 a) Dupuyer Rest Area Detour (MP 76.0 Hwy 89)
b) Hwy 358 - MP 3.0 Detour
c) Hwy 214 – MP 16.8, Typical Clear on a Curve
- 6.1.9 Junction of Hwy 200 & 287
- 6.1.10 Junction of Hwy 287 & 408
- 6.1.11 Junction of Hwy 89 & 44
- 6.1.12 Junction of Hwy 2 & 358
- 6.1.13 Junction of Hwy 214 & Sweetgrass Road
- 6.1.14 Emergency Vehicle Clearing Procedure
- 6.1.15 Clear of Oncoming Over-Dimensional Load

6.2 City / Town Traffic Control Plans

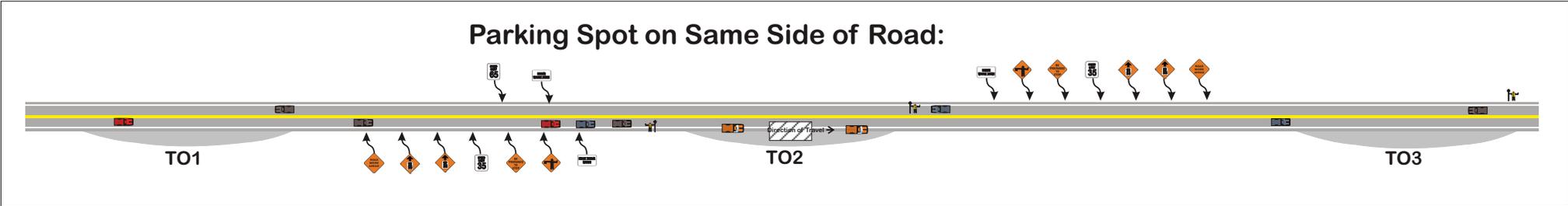
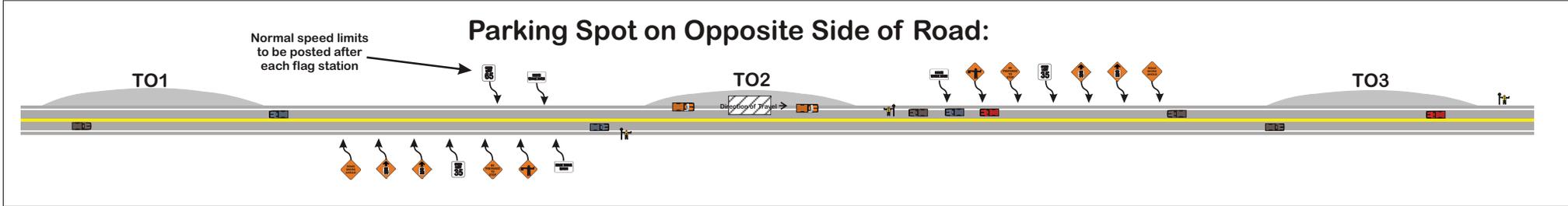
- 6.2.1 4 Lane Rotating Signal Head – Mainline Flash Yellow
- 6.2.2 4 Lane Rotating Signal Head – Signals Operational
- 6.2.3 a) Lolo – Entering Scale
b) Lolo – Exiting Scale
- 6.2.4 a) Missoula – Reserve & Brooks
b) Missoula – Reserve @ Overhead Sign (Joker's Wild)
c) Missoula – Reserve & I-90
d) Missoula – I-90 & Hwy 200
- 6.2.5 Lincoln
- 6.2.6 Augusta
- 6.2.7 a) Choteau (South)
b) Choteau (North)
c) Choteau (Truck Detour)
- 6.2.8 Valier
- 6.2.9 Cut Bank



6.1 Highway Traffic Control Plans

6.1.1 Clear Traffic Plan (1 lane open)

**Proposed Traffic Control - 2 Lane Rural Roadways
CLEAR Traffic Plan: (one lane for clearing traffic)**



Notes:

1. For details on Traffic Clearance Procedure, refer to Sheet 6.1.7 in this section.
2. Each Flagger will be certified by the American Traffic Safety Services Association (ATSSA) or equal.
3. Nighttime flag stations will be illuminated by lighting according to MDT standards.
4. Advanced warning signing will be placed so that the traffic queue does not extend beyond the flagger sign.
5. Flag station signing will be mounted in sign brackets on post mounted signs.
6. Crew traveling with module will consist of a minimum of one Certified Traffic Supervisor, three certified Traffic Control Technicians and three Certified Flaggers. All members of crew will have Flagger Certifications.
7. All members of crew will be equipped with business band radios on a common frequency to maintain communications between traffic crew and transport crew.

Key:

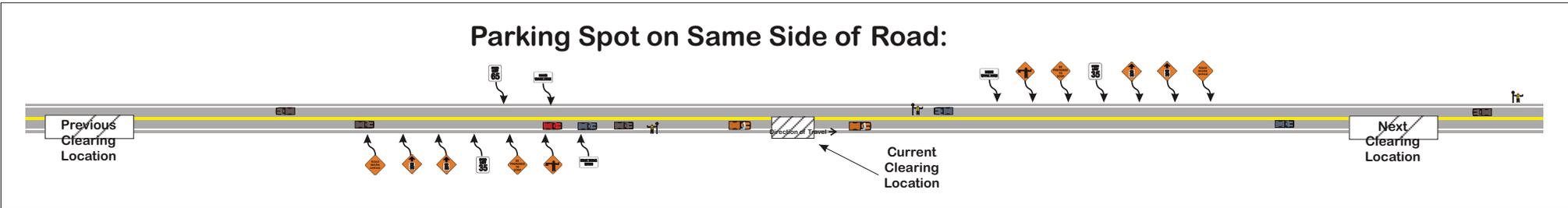
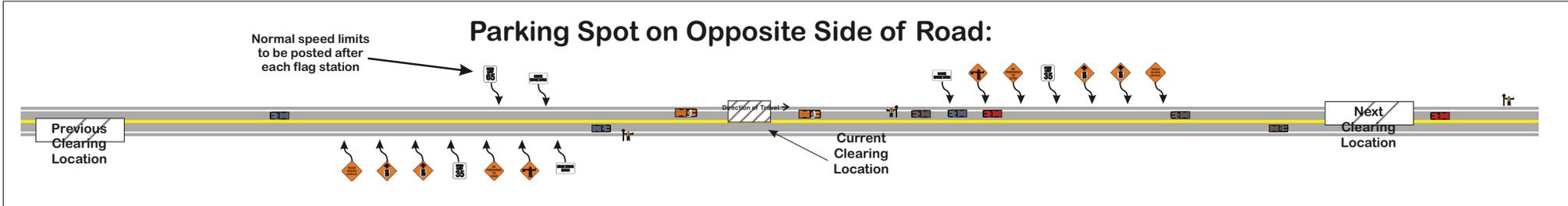
	Module
	Escort Vehicle
	Flagger

Owner		
MAMMOET		
Project Name	Project Number	
Kearl Oil Sand Project		
Prime Contractor	Traffic Control Contractor	
Western Traffic Control		
Phone	Sheet Number	Date
406-541-7610	1-WMR, Rev.5	2/12/10
Prepared By		
Jeff Hollenback		



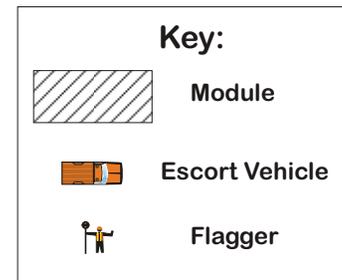
6.1.2 Clear on Shoulder Traffic Plan (1 lane open)

Proposed Traffic Control - 2 Lane Rural Roadways CLEAR on Shoulder Traffic Plan: (one lane for clearing traffic)



Notes:

1. For details on Traffic Clearance Procedure, refer to Sheet 6.1.7 in this section.
2. Each Flagger will be certified by the American Traffic Safety Services Association (ATSSA) or equal.
3. Nighttime flag stations will be illuminated by lighting according to MDT standards.
4. Advanced warning signing will be placed so that the traffic queue does not extend beyond the flagger sign.
5. Flag station signing will be mounted in sign brackets on post mounted signs.
6. Crew traveling with module will consist of a minimum of one Certified Traffic Supervisor, three certified Traffic Control Technicians and three Certified Flaggers. All members of crew will have Flagger Certifications.
7. All members of crew will be equipped with business band radios on a common frequency to maintain communications between traffic crew and transport crew.

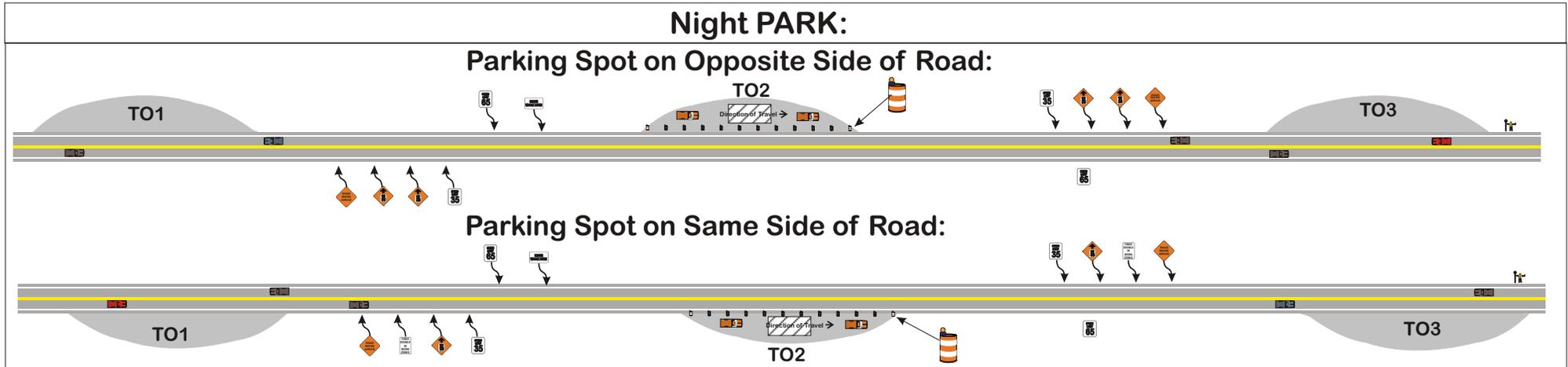
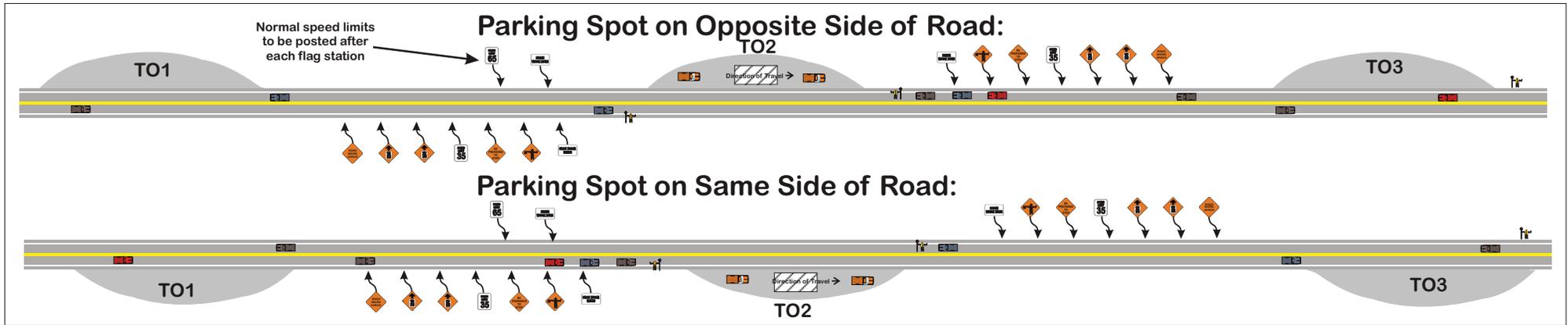


<small>Owner</small>	MAMMOET	
<small>Project Name</small>	Kearl Oil Sand Project	<small>Project Number</small>
<small>Prime Contractor</small>	<small>Traffic Control Contractor</small> Western Traffic Control	
<small>Phone</small>	<small>Sheet Number</small>	<small>Date</small>
406-541-7610	2-WMR, Rev.5	2/12/10
<small>Prepared By</small>	Jeff Hollenback	



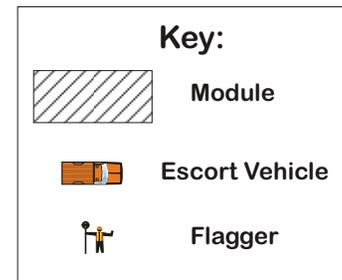
6.1.3 Park Traffic Plan (2 lanes open)

PARK Traffic Plan: (two lanes for clearing traffic)



Notes:

1. For details on Traffic Clearance Procedure, refer to Sheet 6.1.7 in this section.
2. Each Flagger will be certified by the American Traffic Safety Services Association (ATSSA) or equal.
3. Nighttime flag stations will be illuminated by lighting according to MDT standards.
4. Advanced warning signing will be placed so that the traffic queue does not extend beyond the flagger sign.
5. Flag station signing will be mounted in sign brackets on post mounted signs.
6. Crew traveling with module will consist of a minimum of one Certified Traffic Supervisor, three certified Traffic Control Technicians and three Certified Flaggers. All members of crew will have Flagger Certifications.
7. All members of crew will be equipped with business band radios on a common frequency to maintain communications between traffic crew and transport crew.

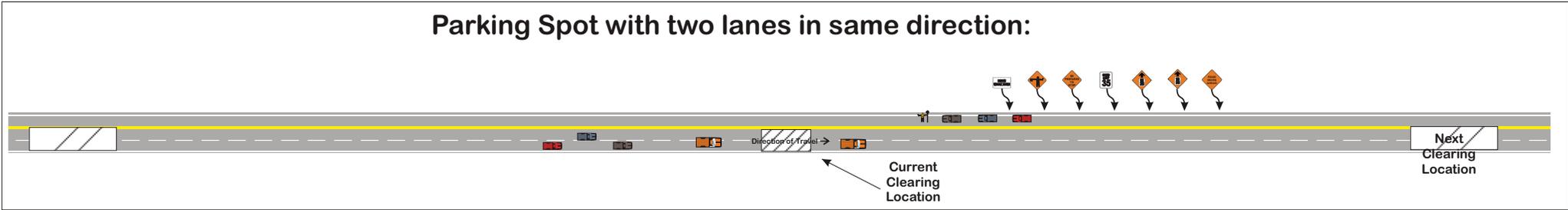
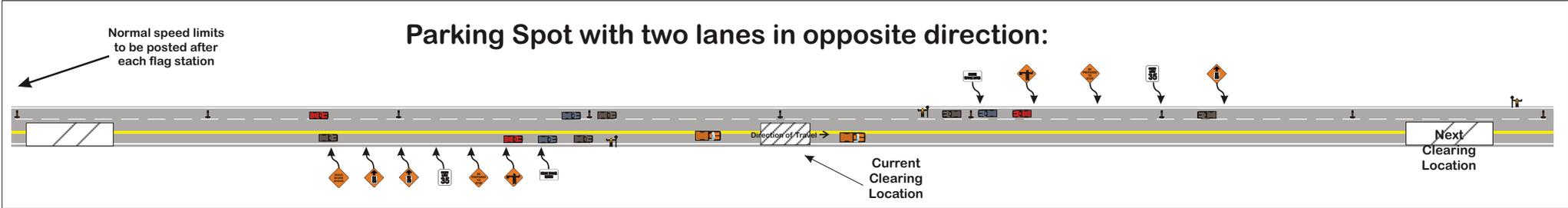


Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Sheet Number	3-WMR, Rev.5	2/12/10
Prepared By	Jeff Hollenback	



6.1.4 3 Lane Clear (1 lane open)

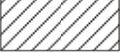
Proposed Traffic Control - 3 Lane CLEAR (one lane for clearing traffic)



Notes:

1. For details on Traffic Clearance Procedure, refer to Sheet 6.1.7 in this section.
2. Each Flagger will be certified by the American Traffic Safety Services Association (ATSSA) or equal.
3. Nighttime flag stations will be illuminated by lighting according to MDT standards.
4. Advanced warning signing will be placed so that the traffic queue does not extend beyond the flagger sign.
5. Flag station signing will be mounted in sign brackets on post mounted signs.
6. Crew traveling with module will consist of a minimum of one Certified Traffic Supervisor, three certified Traffic Control Technicians and three Certified Flaggers. All members of crew will have Flagger Certifications.
7. All members of crew will be equipped with business band radios on a common frequency to maintain communications between traffic crew and transport crew.

Key:

	Module
	Escort Vehicle
	Flagger

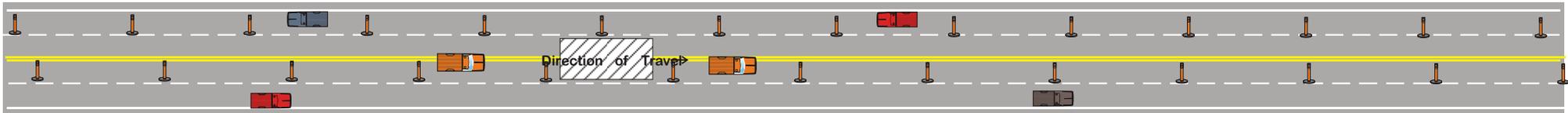
Owner		
MAMMOET		
Project Name	Project Number	
Kearl Oil Sand Project		
Prime Contractor	Traffic Control Contractor	
Western Traffic Control		
Phone	Sheet Number	Date
406-541-7610	4-WMR, Rev.5	2/12/10
Prepared By		
Jeff Hollenback		



6.1.5 4 Lane Clear (2 lanes open)

**Proposed Traffic Control - 4 Lane Rural Roadways
PARK Traffic Plan: (two lanes for clearing traffic)**

Advanced Signing
according to MDT
Detailed Drawing
#618-24 →



←
Advanced Signing
according to MDT
Detailed Drawing
#618-24

Notes:

- In these sections, the module will occupy two lanes and the other two lanes will be used to clear traffic.
- Advanced signing will be according to MDT Detailed Drawing #618-24

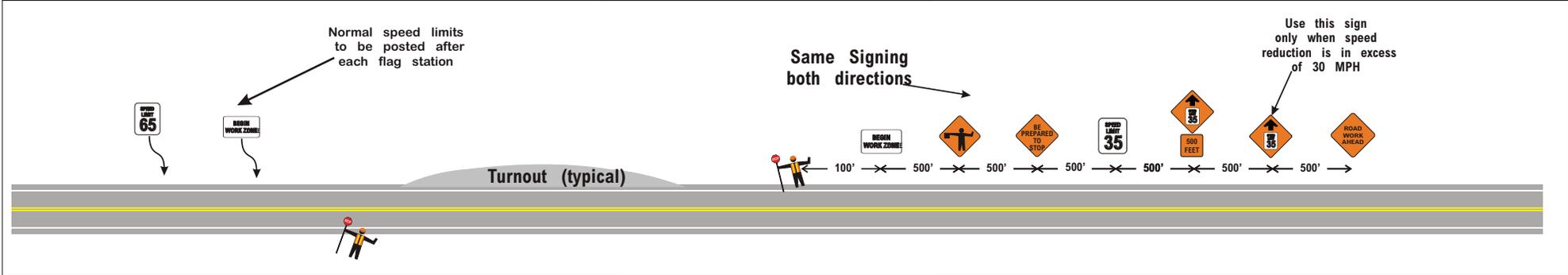
Owner			MAMMOET		
Project Name:		Kearl O'Saari Project		Project Number:	
Prime Contractor:		Western Traffic Control		Traffic Control Contractor:	
Phone:	406-541-7610	Sheet Number:	5-WMR, Rev. 55	Date:	2/12/10
Prepared By:		Jeff Holtebak			



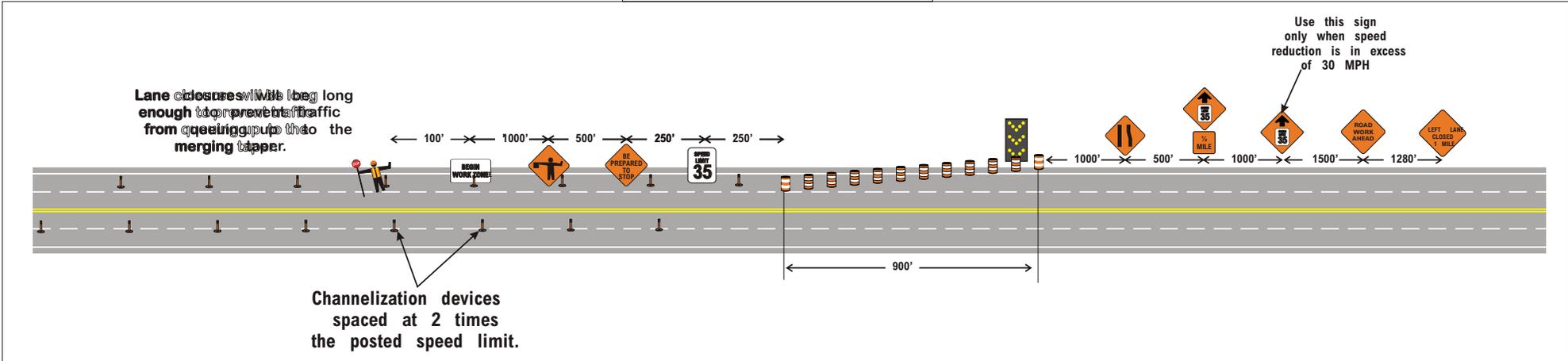
6.1.6 Typical Advanced Signing Detail

Typical Advanced Signing Detail:

2 Lane Roadways



4 Lane Roadways



Owner		MAMMOET	
Project Name:	Kearl Oilfield Project		Project Number:
Prime Contractor:	Western Traffic Control		Traffic Control Contractor:
Phone:	406-541-7610	Sheet Number:	28-WMR, Fig. 55
Prepared By:	Jeff Hollibaek		Date:
			2/12/10



6.1.7 Traffic Control Procedure

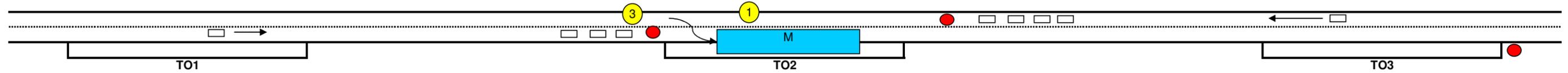
Traffic Control Plan Between 2 Clear Turnouts

Scenario: (Travel time for module trailer between TO2 and TO3 + travel time for public vehicle between TO3 and TO2 at posted highway speed - the time between successive vehicles at TO3) is < 10mins

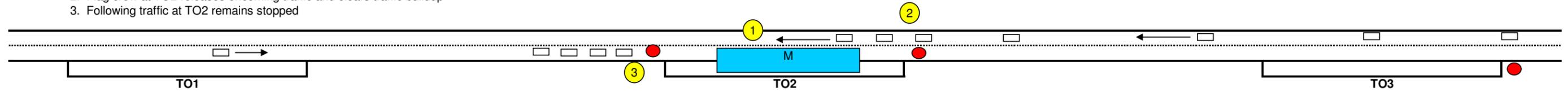
- STEP 1**
1. Module trailer is between TO1 & TO2 on highway
 2. Flag crew at TO2 have stopped oncoming traffic at TO2
 3. Following traffic follows module trailer from TO1 to TO2



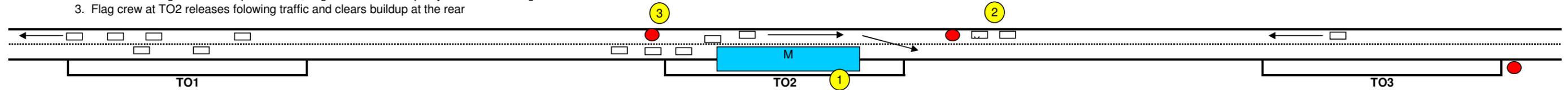
- STEP 2**
1. Module trailer parks at TO2
 2. Transport crew notifies flag crew at TO2 (oncoming and following traffic)
 3. Flag crew at TO2 stops following traffic at TO2



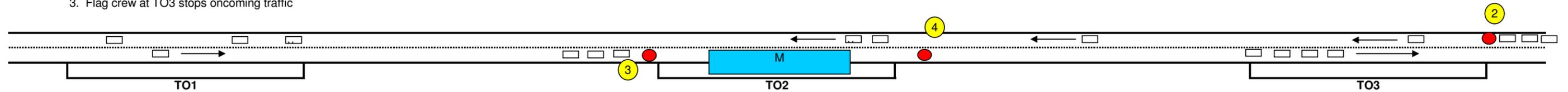
- STEP 3**
1. Module trailer is parked at TO2
 2. Flag crew at TO2 releases oncoming traffic and clears traffic buildup
 3. Following traffic at TO2 remains stopped



- STEP 4**
1. Module trailer is parked at TO2
 2. Once oncoming traffic buildup is cleared, flag crew at TO2 stop any further oncoming traffic
 3. Flag crew at TO2 releases following traffic and clears buildup at the rear



- STEP 5**
1. Module trailer is parked at TO2
 2. Flag crew at TO2 notifies flag crew at TO3 to stop oncoming traffic
 3. Flag crew at TO3 stops oncoming traffic
 4. Flag crew at TO2 stops following traffic
 5. All oncoming traffic between TO3 & TO2 is cleared by flag crew



- STEP 6**
1. Module trailer starts from TO2 towards TO3





6.1.8 a) Dupuyer Rest Area

Proposed Traffic Control for MAMMOET Module Move

Clearing traffic through the Dupuyer Rest Area

Advanced signing according to Sht. 1-WMR Rev 3

Normal speed limits to be posted after each flag station

Module

Alternating Single Lane Traffic will be detoured through the Rest Area area while the module remains stationary on US 89

Dupuyer Rest Area

Flagger will be placed in Rest Area Parking one hour before before Module arrives to make sure detour route is clear of vehicles. Flagger will be seated in place to facilitate the movements between mainline detour traffic and Rest Area traffic.



Owner		
MAMMOET		
Project Name:	Project Number:	
Kearl Oilfield Project		
Prime Contractor:	Traffic Control Contractor:	
	Western Traffic Control	
Phone:	Sheet Number:	Date:
406-541-7610	25-WMR, Rev. 5	2/12/10
Prepared By:		
Jeff Holtebaack		

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48°11'54.92" N 112°30'23.62" W

elev 4113 ft

2005

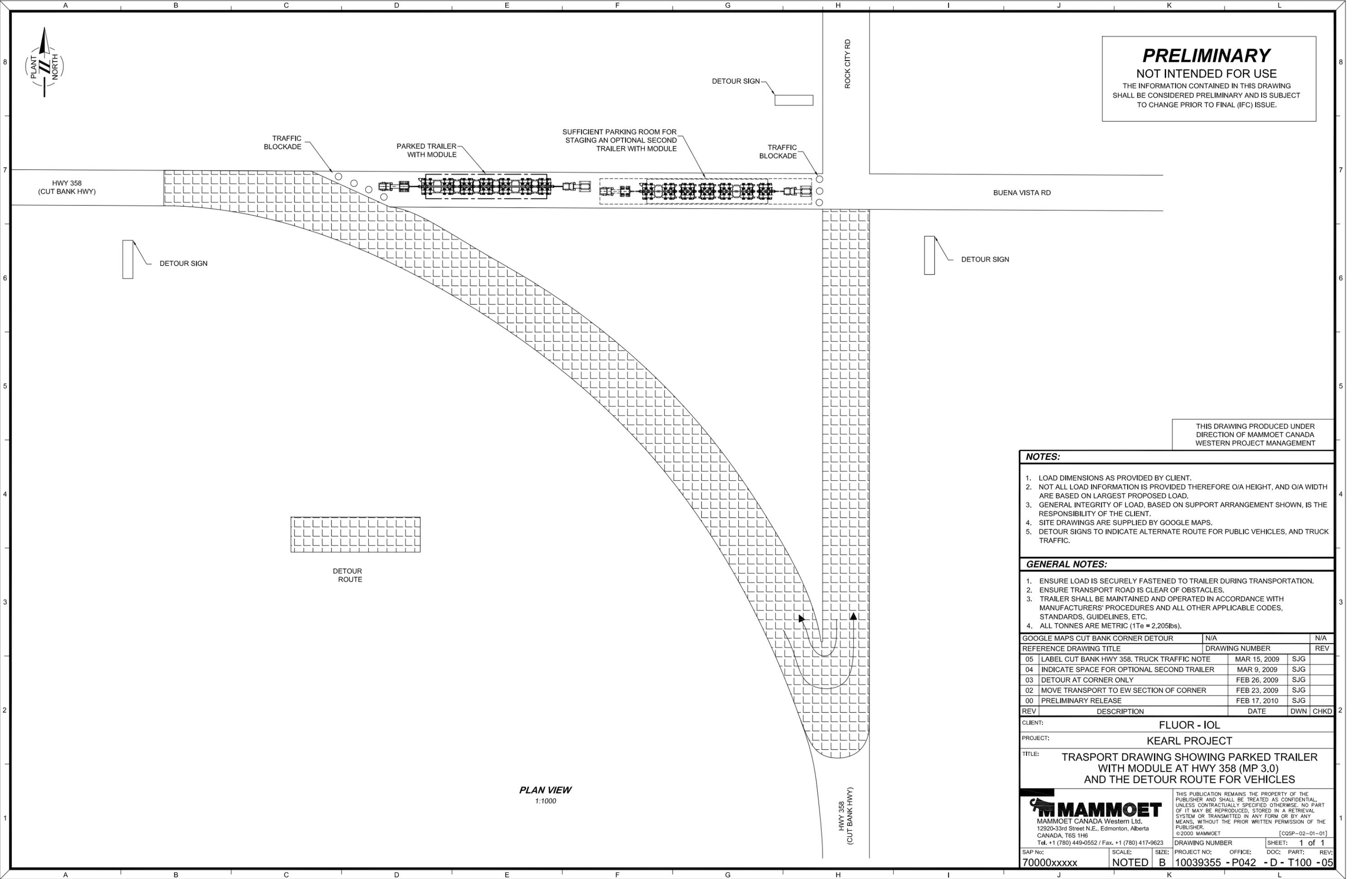
Eye alt 4703 ft



6.1.8 b) Hwy 358 – MP 3.0 Detour



PRELIMINARY
 NOT INTENDED FOR USE
 THE INFORMATION CONTAINED IN THIS DRAWING
 SHALL BE CONSIDERED PRELIMINARY AND IS SUBJECT
 TO CHANGE PRIOR TO FINAL (IFC) ISSUE.



THIS DRAWING PRODUCED UNDER
 DIRECTION OF MAMMOET CANADA
 WESTERN PROJECT MANAGEMENT

- NOTES:**
- LOAD DIMENSIONS AS PROVIDED BY CLIENT.
 - NOT ALL LOAD INFORMATION IS PROVIDED THEREFORE O/A HEIGHT, AND O/A WIDTH ARE BASED ON LARGEST PROPOSED LOAD.
 - GENERAL INTEGRITY OF LOAD, BASED ON SUPPORT ARRANGEMENT SHOWN, IS THE RESPONSIBILITY OF THE CLIENT.
 - SITE DRAWINGS ARE SUPPLIED BY GOOGLE MAPS.
 - DETOUR SIGNS TO INDICATE ALTERNATE ROUTE FOR PUBLIC VEHICLES, AND TRUCK TRAFFIC.

- GENERAL NOTES:**
- ENSURE LOAD IS SECURELY FASTENED TO TRAILER DURING TRANSPORTATION.
 - ENSURE TRANSPORT ROAD IS CLEAR OF OBSTACLES.
 - TRAILER SHALL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH MANUFACTURERS' PROCEDURES AND ALL OTHER APPLICABLE CODES, STANDARDS, GUIDELINES, ETC.
 - ALL TONNES ARE METRIC (1T_e = 2,205lbs).

REV	DESCRIPTION	DATE	DWN	CHKD
05	LABEL CUT BANK HWY 358. TRUCK TRAFFIC NOTE	MAR 15, 2009	SJG	
04	INDICATE SPACE FOR OPTIONAL SECOND TRAILER	MAR 9, 2009	SJG	
03	DETOUR AT CORNER ONLY	FEB 26, 2009	SJG	
02	MOVE TRANSPORT TO EW SECTION OF CORNER	FEB 23, 2009	SJG	
00	PRELIMINARY RELEASE	FEB 17, 2010	SJG	

CLIENT: **FLUOR - IOL**
 PROJECT: **KEARL PROJECT**
 TITLE: **TRASPORT DRAWING SHOWING PARKED TRAILER WITH MODULE AT HWY 358 (MP 3.0) AND THE DETOUR ROUTE FOR VEHICLES**

MAMMOET
 MAMMOET CANADA Western Ltd.
 12920-33rd Street N.E., Edmonton, Alberta
 CANADA, T6S 1H6
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SAP No:	SCALE:	SIZE:	PROJECT NO:	OFFICE:	DOC:	PART:	REV:
70000xxxxx	NOTED	B	10039355 - P042	- D -	T100	- 05	

PLAN VIEW
 1:1000



6.1.8 c) Hwy 214 – MP 16.8, Typical Clear on a Curve

Proposed Traffic Control for MAMMOET Module move Traffic Detour MP 16.8 Santa Rita Rd

Advanced signing
according to
Sht. 1-WMR, Rev 3
East direction

Alternating Single Lane
Traffic will be directed
around module by flaggers

Module

ONE-WAY TRAFFIC

MAMMOET		
Project Name	Project Number	
Kearl Oil Sand Project		
Plan Contributor	Traffic Control Contractor	
	Western Traffic Control	
Plan	Sheet Number	Date
406-541-7810	24-WMR, Rev.3	10/27/2009
Prepared By		
Jeff Hollenback		
		Eye alt 4636 ft

48°58'30.76" N 112°18'10.50" W

© 2009 Google

elev 4031 ft

2005



6.1.9 Junction of Hwy 200 & 287

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET Jct. MT 200 & 287 (Bowman's Corner)



Normal speed limits to be posted after each flag station

Module Route

Advanced warning signing will be according to MDTMT Detailed Drawing #618-08.

Normal speed limits to be posted after each flag station

Owner			MAMMOET		
Project Name:			Project Number:		
Kearl Oil Sand Project					
Prime Contractor:			Traffic Control Contractor:		
Western Traffic Control					
Phone:	Sheet Number:	Date:			
406-541-7610	15-WMR, Rev. 55	2/12/10			
Prepared By:					
Jeff Holdenback					

© 2009 Google

47°17'23.46" N 112°09'46.68" W

elev 4185 ft

2005

Eye alt 5246 ft

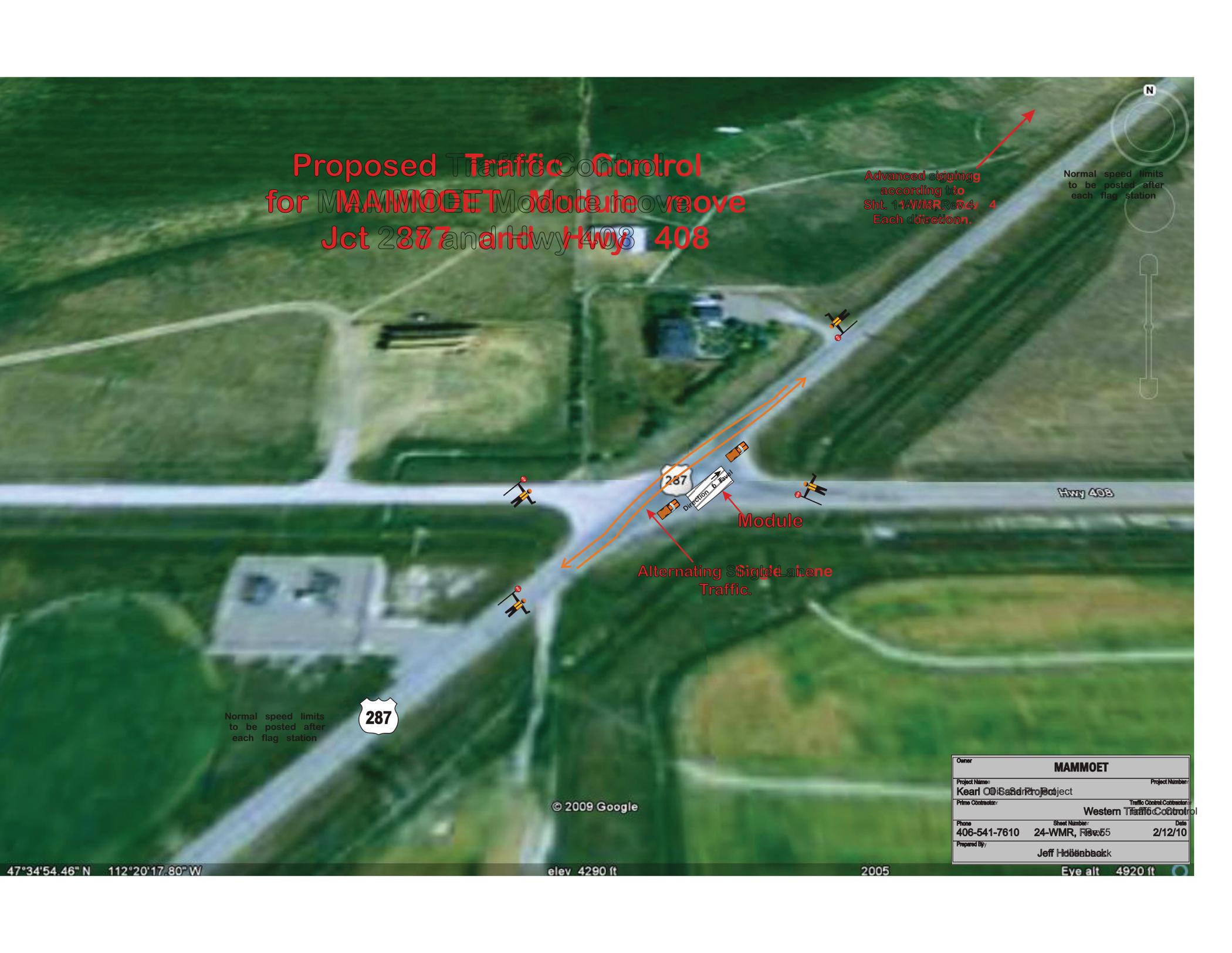


6.1.10 Junction of Hwy 287 & 408

Proposed Traffic Control for MAMMOET Module move Jct 287 and Hwy 408

Advanced signing
according to
Sht. 14-WMR Rev. 4
Each direction.

Normal speed limits
to be posted after
each flag station



Normal speed limits
to be posted after
each flag station



Alternating Single Lane
Traffic.

Module

Hwy 408

© 2009 Google

Owner MAMMOET		
Project Name: Kearl Oilfield Project	Project Number:	
Prime Contractor: 406-541-7610	Traffic Control Contractor: Western Traffic Control	Date: 2/12/10
Sheet Number: 24-WMR, File 55	Prepared By: Jeff Holtebaakk	

47°34'54.46" N 112°20'17.80" W

elev 4290 ft

2005

Eye alt 4920 ft



6.1.11 Junction of Hwy 89 & 44

Proposed Traffic Control for MAMMOET Module move Jct. MT 89 and MT 44

Advanced signing
according to
Sht. 1-WMR, Rev 3/ 3

Module

Direction of Travel →

44

Opposing Traffic will
be stopped at designated
location according to
Plan Sheets 1 & 2 & 2

89

Normal speed limits
to be posted after
each flag station

© 2009 Google

Owner			MAMMOET		
Project Name:		Project Number:			
Kearl O'Sadri Project					
Prime Contractor:		Western Traffic Control		Traffic Control Contractor:	
Phone		Sheet Number:	Rev:	Date	
406-541-7610		20-WMR, File 55	Rev. 55	2/12/10	
Prepared By:		Jeff Holmbeck			



6.1.12 Junction of Hwy 2 & 358

Proposed Traffic Control for MAMMOET Module move Jct. US 2 & M& 358

Lane closures will be long enough to prevent traffic from queuing up to the merging taper.

Lane Closure per MDT Detailed Drawings

Module

Normal speed limits to be posted after each flag station



Advanced signing according to Sht. 1-WMR, Rev 3



Owner	MAMMOET		
Project Name:	Kearl Oilfield Project	Project Number:	
Prime Contractor:	Western Traffic Control	Traffic Control Contractor:	Western Traffic Control
Phone	406-541-7610	Sheet Number:	22-WMR, Rev 55
Prepared By:	Jeff Hobbabeck	Date:	2/12/15



6.1.13 Junction of Hwy 214 & Sweetgrass Rd.

Proposed Traffic Control for MAMMOET Module move over Jct. 214 and Sweetgrass Road Road



Module



Advanced signing
according to
Sht. 1-WMR, Rev 3 / 3
Each direction

Alternating Single Lane
Traffic will be directed
around module by flaggers

State Route 214

State Highway 244

Owner MAMMOET			
Project Name: Kearl Oilfield Project	Project Number:		
Prime Contractor:	Traffic Control Contractor:		
Phone: 406-541-7610	Sheet Number: 26-WMR, Rev. 5	Date: 2/12/10	
Prepared By: Jeff Holtebaakk			

© 2009 Google

48°58'18.50" N 112°14'34.00" W

elev. 3770 ft

2005

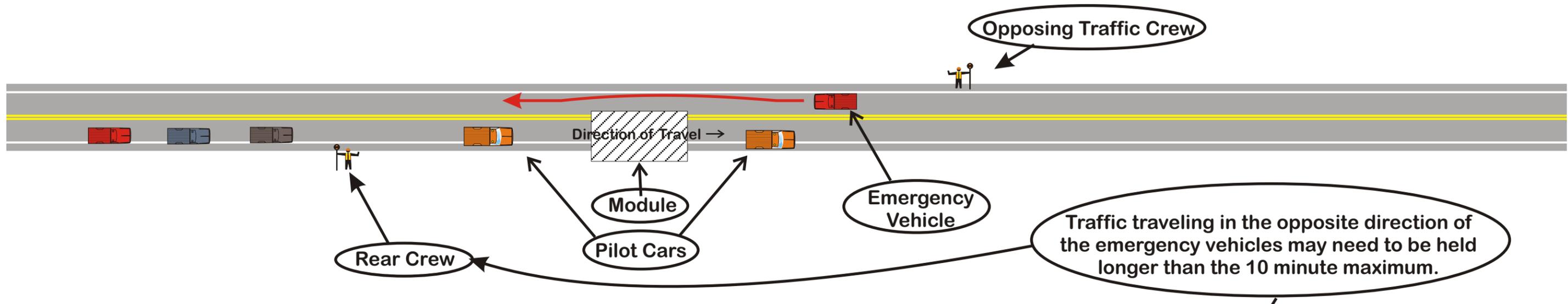
Elev. 4198 ft



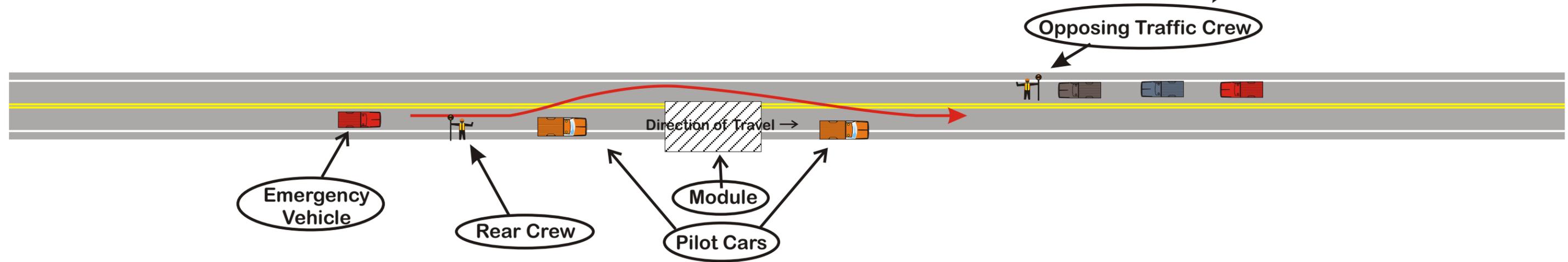
6.1.14 Emergency Vehicle Clearing Procedure

Plan for Clearing Emergency Vehicles on Two Lane Roadways:

Emergency Vehicle traveling opposite direction of load:



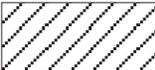
Emergency Vehicle traveling in same direction as load:



Emergency Response Narrative:

The Highway Patrol and other Emergency Response entities will be given the radio frequency of our onsite Traffic Safety Supervisor (TSS). In the event that emergency vehicles approach the Module move, they can contact our TSS with their location, direction of travel and estimated time of arrival at the Module. When the TSS receives an emergency call, he will communicate the need for the module and escort vehicles to pull over on the shoulder of the road and stop. The TSS will direct the flagger in the opposite direction of the emergency vehicle to stop their traffic until the emergency vehicles pass. Vehicles traveling in the same direction as the emergency vehicle will be directed to proceed past the Module to allow a clear path for the emergency vehicles. Prior to the start of this project, there will be a meeting between Mammoet, Western Traffic Control and the MHP to discuss and establish the best possible practice for handling emergency vehicle traffic.

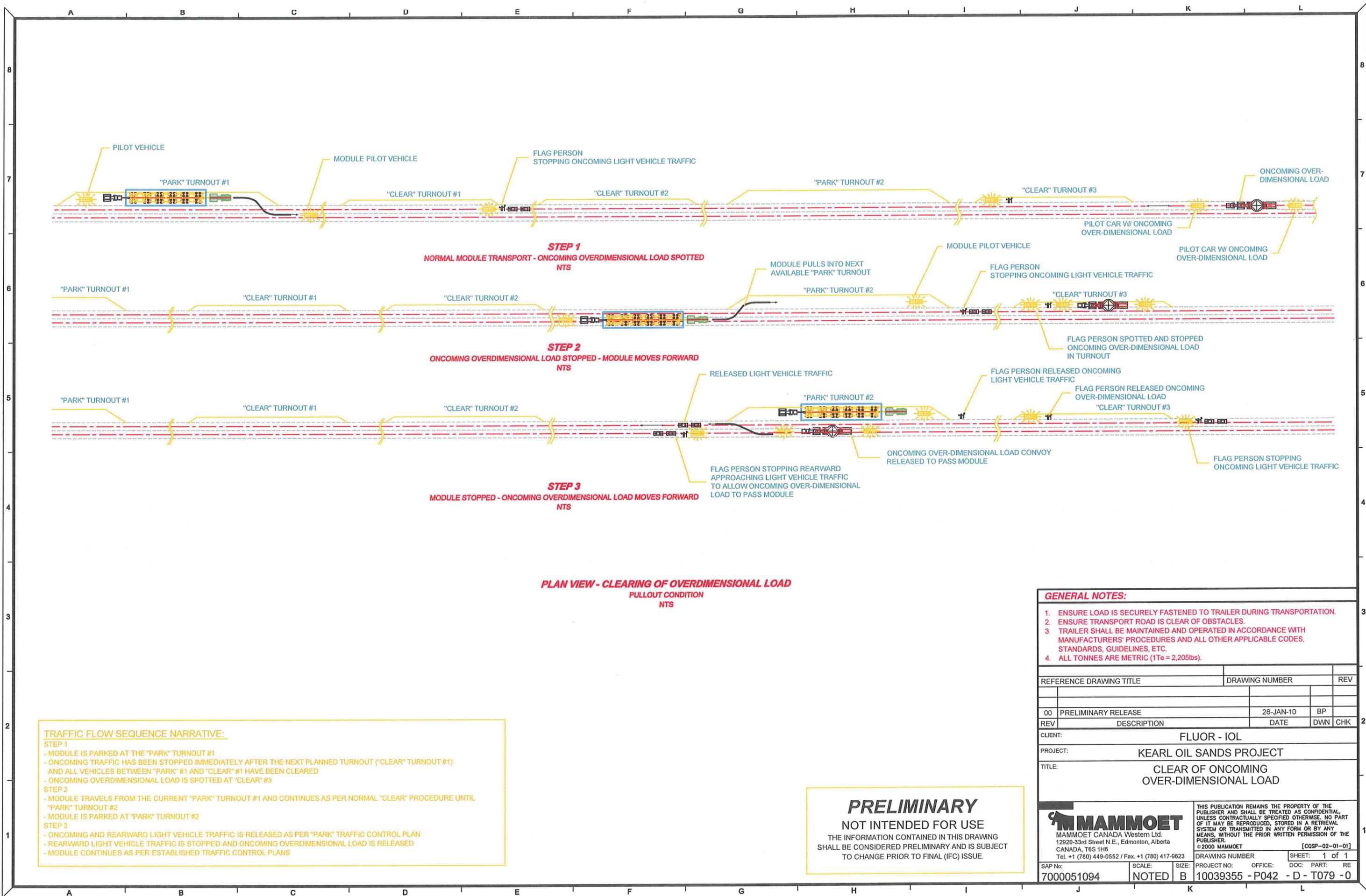
Key:

-  Module
-  Escort Vehicle
-  Flagger

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Prepared By	Jeff Hollenback	Sheet Number
		1-EVP
		1/27/10



6.1.15 Clear of Oncoming Over-Dimensional Load



TRAFFIC FLOW SEQUENCE NARRATIVE:

- STEP 1**
- MODULE IS PARKED AT THE "PARK" TURNOUT #1
 - ONCOMING TRAFFIC HAS BEEN STOPPED IMMEDIATELY AFTER THE NEXT PLANNED TURNOUT ("CLEAR" TURNOUT #1) AND ALL VEHICLES BETWEEN "PARK" #1 AND "CLEAR" #1 HAVE BEEN CLEARED
 - ONCOMING OVERDIMENSIONAL LOAD IS SPOTTED AT "CLEAR" #3
- STEP 2**
- MODULE TRAVELS FROM THE CURRENT "PARK" TURNOUT #1 AND CONTINUES AS PER NORMAL "CLEAR" PROCEDURE UNTIL "PARK" TURNOUT #2
 - MODULE IS PARKED AT "PARK" TURNOUT #2
- STEP 3**
- ONCOMING AND REARWARD LIGHT VEHICLE TRAFFIC IS RELEASED AS PER "PARK" TRAFFIC CONTROL PLAN
 - REARWARD LIGHT VEHICLE TRAFFIC IS STOPPED AND ONCOMING OVERDIMENSIONAL LOAD IS RELEASED
 - MODULE CONTINUES AS PER ESTABLISHED TRAFFIC CONTROL PLANS

PRELIMINARY
NOT INTENDED FOR USE
THE INFORMATION CONTAINED IN THIS DRAWING SHALL BE CONSIDERED PRELIMINARY AND IS SUBJECT TO CHANGE PRIOR TO FINAL (IFC) ISSUE.

GENERAL NOTES:			
1. ENSURE LOAD IS SECURELY FASTENED TO TRAILER DURING TRANSPORTATION.			
2. ENSURE TRANSPORT ROAD IS CLEAR OF OBSTACLES.			
3. TRAILER SHALL BE MAINTAINED AND OPERATED IN ACCORDANCE WITH MANUFACTURERS' PROCEDURES AND ALL OTHER APPLICABLE CODES, STANDARDS, GUIDELINES, ETC.			
4. ALL TONNES ARE METRIC (1Te = 2,205lbs).			
REFERENCE DRAWING TITLE		DRAWING NUMBER	
00 PRELIMINARY RELEASE		28-JAN-10	
REV	DESCRIPTION	DATE	DWN CHK
CLIENT:	FLUOR - IOL		
PROJECT:	KEARL OIL SANDS PROJECT		
TITLE:	CLEAR OF ONCOMING OVER-DIMENSIONAL LOAD		
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MAMMOET CANADA Western Ltd. 12920-33rd Street N.E., Edmonton, Alberta CANADA, T6S 1H6 Tel. +1 (780) 449-0552 / Fax. +1 (780) 417-9623		©2000 MAMMOET [CGSP-02-01-01]	
SAP No:	SCALE:	SIZE:	DRAWING NUMBER
7000051094	NOTED	B	10039355 - P042
PROJECT NO:	OFFICE:	DOC:	PART:
10039355 - P042	- D -	T079	- 0
SHEET: 1 of 1		RE	

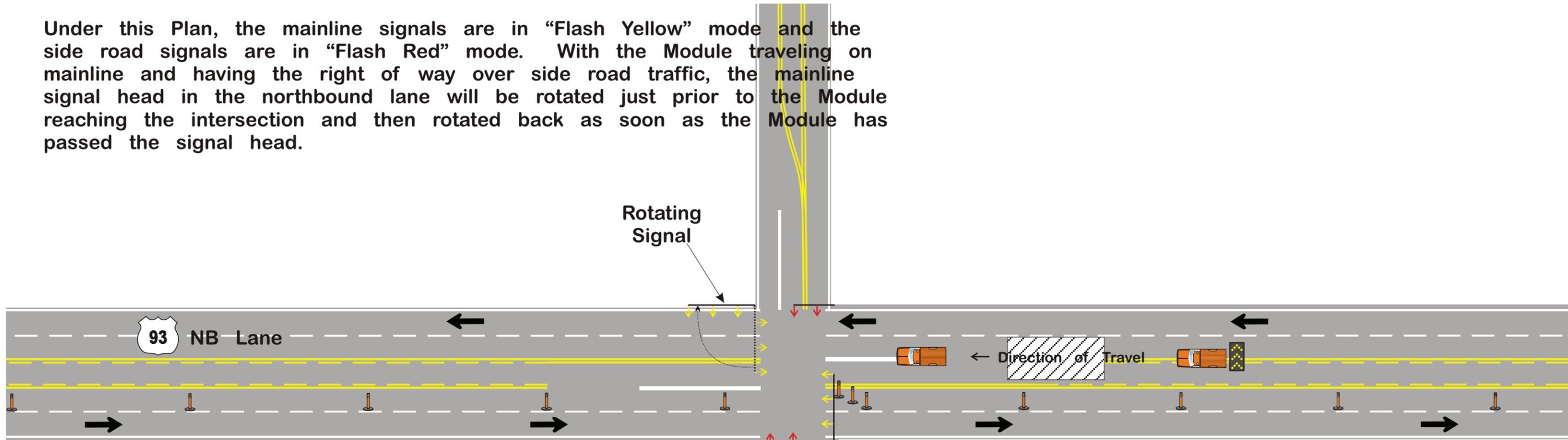


6.2 City / Town Traffic Control Plans

6.2.1 4 Lane Rotating Signal Head – Mainline Flash Yellow

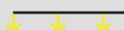
Proposed Traffic Control - 4 Lane Rotating Signal Head When Mainline is Flash Yellow and side road is Flash Red

Under this Plan, the mainline signals are in “Flash Yellow” mode and the side road signals are in “Flash Red” mode. With the Module traveling on mainline and having the right of way over side road traffic, the mainline signal head in the northbound lane will be rotated just prior to the Module reaching the intersection and then rotated back as soon as the Module has passed the signal head.



- Intersections this Plan pertains to:
- Ridgeway / US 93 - Lolo, MT
 - Tyler Way / US 93 - Lolo, MT
 - Blue Mountain Rd / US 93
 - Miller Creek Rd / US 93
 - Paxon School Crossing / US 93 (Reserve St.)
 - Mount Ave. / US 93 (Reserve St.)
 - 3rd Street / US 93 (Reserve St.)
 - Union Pacific / US 93 (Reserve St.)
 - Expressway / US 93 (Reserve St.)

Key:

-  Signal - Flash Yellow
-  Signal - Flash Red
-  Escort Vehicle
-  Module

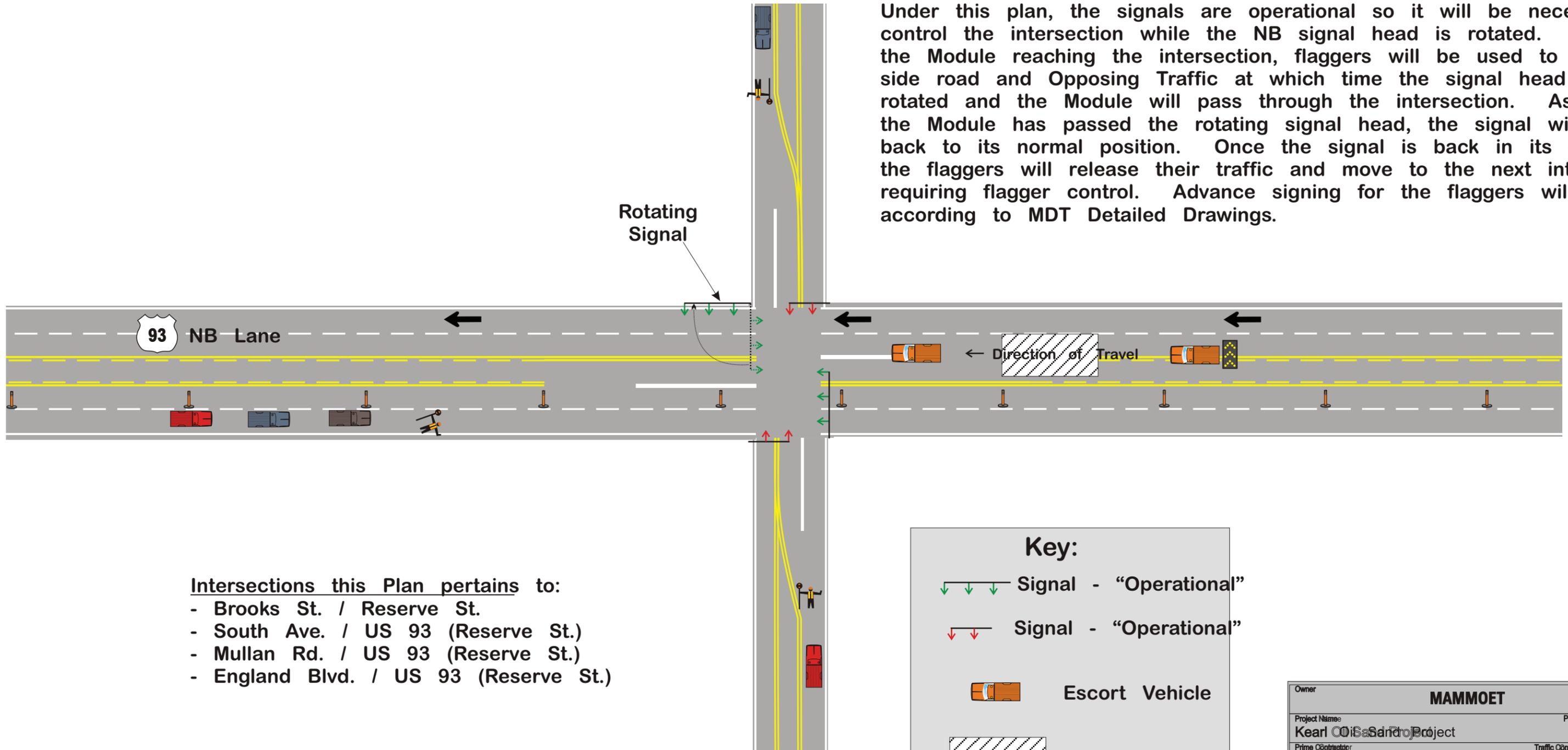
Owner	MAMMOET	
Project Name	Kearl O'Sullivan Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
	Sheet Number 6-WMR, Rev 55	2/12/10
Prepared By	Jeff Hubbard	



6.2.2 4 Lane Rotating Signal Head – Signals Operational

Proposed Traffic Control - 4 Lane Rotating Signal Head Where Signals are Operational

Under this plan, the signals are operational so it will be necessary to control the intersection while the NB signal head is rotated. Just prior to the Module reaching the intersection, flaggers will be used to stop traffic on the side road and Opposing Traffic at which time the signal head will be rotated and the Module will pass through the intersection. As soon as the Module has passed the rotating signal head, the signal will be returned back to its normal position. Once the signal is back in its original position the flaggers will release their traffic and move to the next intersection requiring flagger control. Advance signing for the flaggers will be according to MDT Detailed Drawings.



- Intersections this Plan pertains to:
- Brooks St. / Reserve St.
 - South Ave. / US 93 (Reserve St.)
 - Mullan Rd. / US 93 (Reserve St.)
 - England Blvd. / US 93 (Reserve St.)

Key:

- Signal - "Operational"
- Signal - "Operational"
- Escort Vehicle
- Module
- Flagger

Owner	MAMMOET	
Project Name	Kearl O'Sa... Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
	Sheet Number 7-WMR, Rev 55	2/12/10
Prepared By	Jeff Hubbard	



6.2.3 a) Lolo – Entering Scale

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET Entering Scale off Hwy 12 at Lolo



Normal speed limits to be posted after each flag station

Lane closures will be long enough to prevent traffic from queuing up to the merging taper.



WB
12
Flaggers

Mainline
93
Flaggers



Prior to passing the last opposing traffic checkpoint west of Jct. 93, westbound 12 traffic will be stopped and held in the closed lanes on US 93 until the module has entered the scale. Mainline 93 traffic will be allowed to flow until the module crosses 93 and enters the scale.

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	
Prime Contractor	Western Traffic Control	
Phone	406-541-7610	Date
Sheet Number	8-WMR, Rev 55	2/12/10
Prepared By	Jeff Hebback	

KEY

- Overhead being rotated
- Overhead remaining in place
- Traffic Flow
- Module Flow
- Flagger

Advanced signing to be according to MDT Detail Drawings #68-08 & 6618244

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Google



6.2.3 b) Lolo – Exiting Scale

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET Exiting Scale at Lolo Hwy 93



Normal speed limits
to be posted after
each flag station

Lane closures will be long long
enough to prevent traffic
from queuing up to the
merging taper.



Lolo Scale

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Sheet Number	9-WMR, Rev 55	2/12/10
Prepared By	Jeff Hebback	

KEY	
	Overhead being rotated
	Overhead remaining in place
	Traffic Flow
	Module Flow
	Flagger

Advanced signing to be according
to MDT Detail Drawings #68-08 & 6618244

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6.2.4 a) Missoula – Reserve & Brooks

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET



Lane closures will be long enough to prevent traffic from queuing up to the merging taper.

Brooks Street

Reserve Street

Advanced signing to be according to MUTCD Detail Drawings #618 & #614

Normal speed limits to be posted after each flag station



Owner	MAMMOET		
Project Name	Kearl Oil Sand Project	Project Number	
Prime Contractor	Western Traffic Control	Traffic Control Contractor	
Phone	406-541-7610	Sheet Number	10-WMR, Rev 5
Prepared By	Jeff Hubbard	Date	2/12/10

KEY	
	Overhead being raised
	Overhead remaining in place
	Traffic Flow
	Oversize Load Flow
	Flagger

Google



6.2.4 b) Missoula – Reserve @ Overhead Sign (Joker's Wild)

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET

Joker's
Wild

Rowdy's

Reserve Street

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	Project Number
Prime Contractor		Traffic Control Contractor
		Western Traffic Control
Phone	Sheet Number	Date
406-541-7610	11-WMR, Rev.5	2/12/10
Prepared By	Jeff Hollenback	

KEY	
	Overhead being rotated
	Overhead remaining in place
	Traffic Flow
	Module Flow
	Flagger



6.2.4 c) Missoula – Reserve& I-90

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET Entering I-90 at Reserve St. Interch

Reserve Street

Advanced Signing
according to MDTDT
Detailed Drawing
#618-24

**Module
Route**

Lane closures will be long long
enough to prevent traffic
from queuing up to the
merging taper.

Module

Owner MAMMOET		
Project Name Kearl Oil Sand Project	Project Number	
Prime Contractor Western Traffic Control	Traffic Control Contractor	
Phone 406-541-7610	Sheet Number 12-WMR, Rev 5	Date 2/12/10
Prepared By Jeff Hubbard		

Image © 2009 DigitalGlobe

Normal speed limits
to be posted after
each flag station

Google

elev 3289 ft

Apr 20, 2006

Eve alt 4497 ft



6.2.4 d) Missoula – I-90 & Hwy 200

Proposed Traffic Control Kearl Oil Sand Project for MAMMOET



Module
Route

Traffic will
be cleared around
module according
to S&T-W-WMR, Rev.

Normal speed limits
to be posted after
each flag station

Module
Clearing
Location

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	
Prime Contractor	Western Traffic Control	
Phone	406-541-7610	
Sheet Number	13-WMR, Rev 5	Date
Prepared By	Jeff Haback	

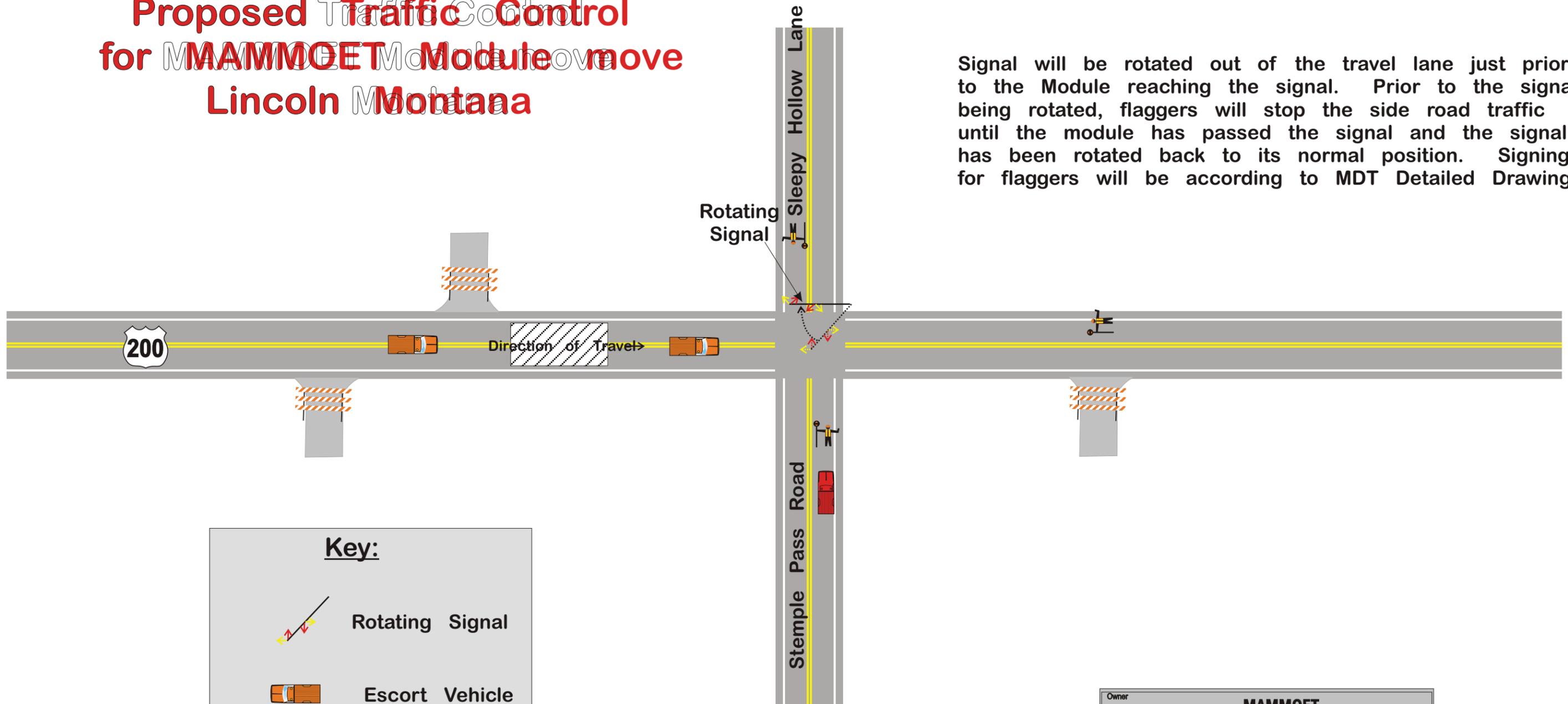
Image © 2009 DigitalGlobe

Google



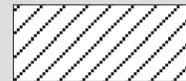
6.2.5 Lincoln

Proposed Traffic Control for MAMMOET Module move Lincoln Montana



Signal will be rotated out of the travel lane just prior to the Module reaching the signal. Prior to the signal being rotated, flaggers will stop the side road traffic until the module has passed the signal and the signal has been rotated back to its normal position. Signing for flaggers will be according to MDT Detailed Drawings.

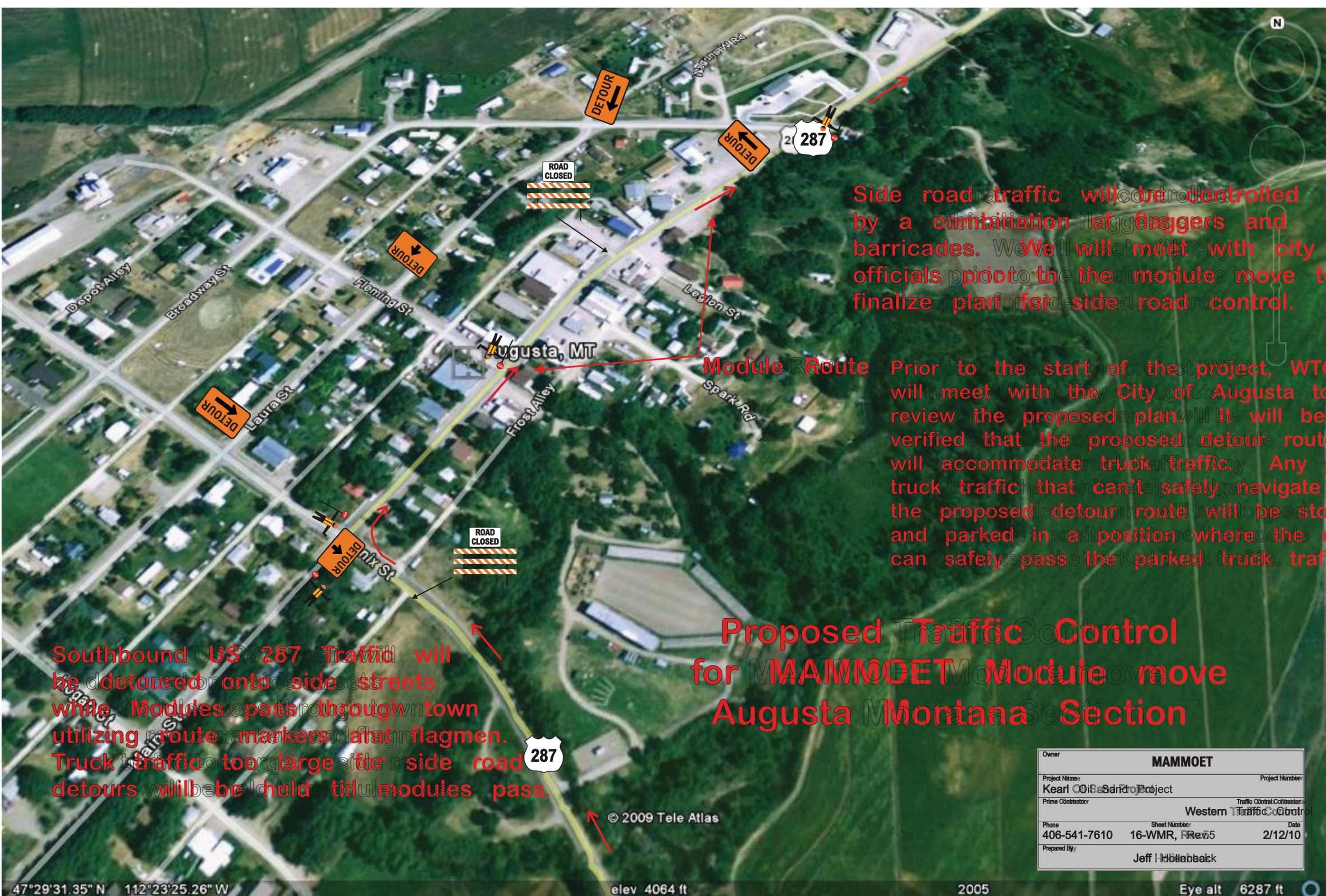
Key:

-  Rotating Signal
-  Escort Vehicle
-  Module
-  Flagger

Owner	MAMMOET	
Project Name	Kearl O'Saun Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
	Sheet Number	14-WMR, Rev 55
Prepared By	Jeff Hebback	



6.2.6 Augusta



Side road traffic will be controlled by a combination of flaggers and barricades. We will meet with city officials prior to the module move to finalize plan for side road control.

Module Route Prior to the start of the project, WTC will meet with the City of Augusta to review the proposed plan. It will be verified that the proposed detour route will accommodate truck traffic. Any truck traffic that can't safely navigate the proposed detour route will be stopped and parked in a position where the truck can safely pass the parked traffic.

Southbound US 287 traffic will be detoured on side streets while Modules pass through town utilizing route markers and flagmen. Truck traffic on large side road detours will be held until modules pass.

Proposed Traffic Control for MAMMOET Module move Augusta Montana Section

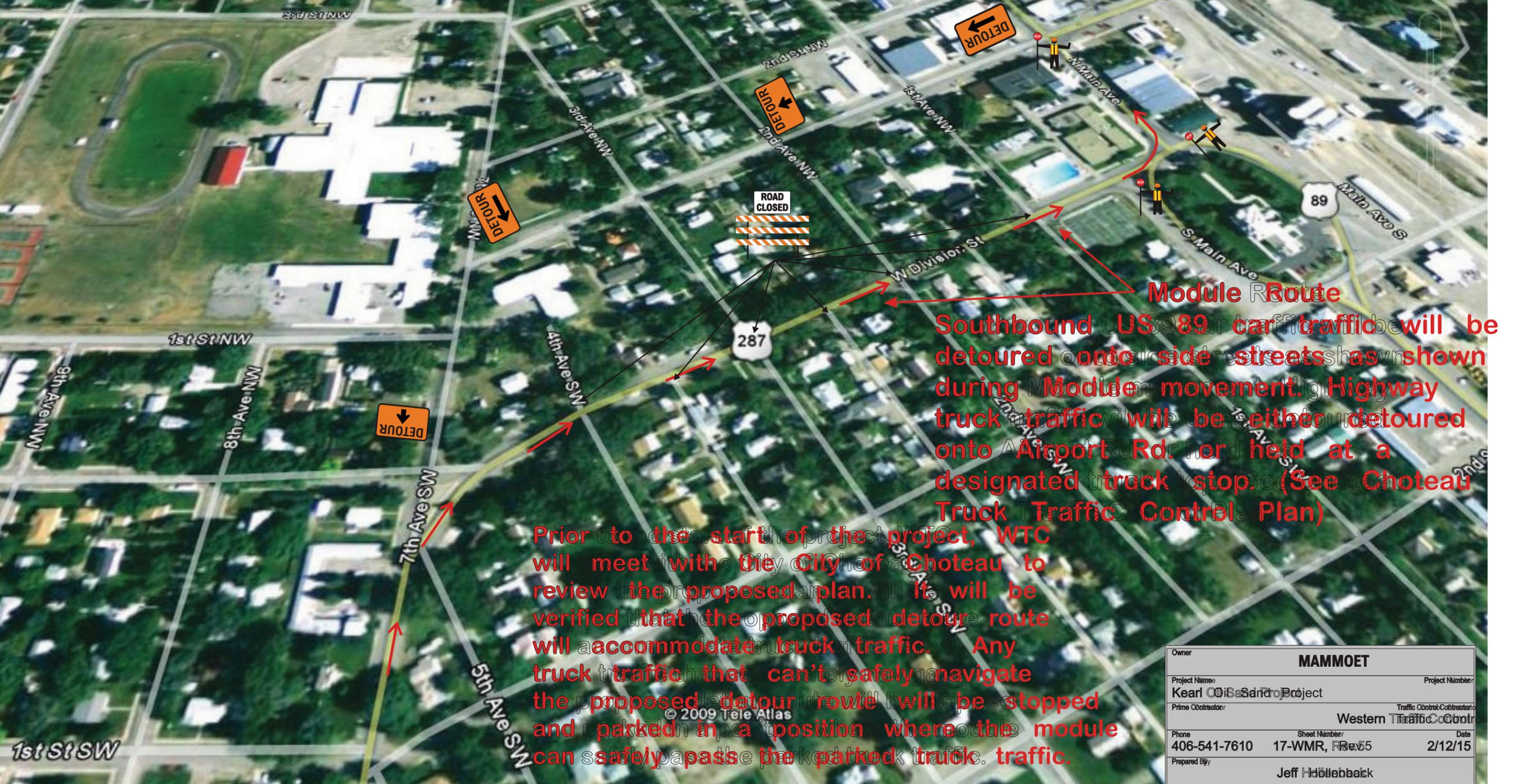
Owner	MAMMOET		
Project Name	Kearl Oil Sand Project		Project Number
Prime Contractor	Western Traffic Control		Traffic Control Contractor
Phone	406-541-7610	Sheet Number	16-WMR, Rev 55
Prepared By	Jeff Hobbback		
		Date	2/12/10



6.2.7 a) Choteau (South)

Proposed Traffic Control for MAMMOET Module move Choteau Montana - South Section

Side road traffic will be controlled by a combination of flaggers and barricades. We will meet with city officials prior to the module move to finalize plan for side road control.



Module Route

Southbound US 89 car traffic will be detoured on side streets as shown during Module movement. Highway truck traffic will be either detoured onto Airport Rd or held at a designated truck stop. (See Choteau Truck Traffic Control Plan)

Prior to the start of the project, WTC will meet with the City of Choteau to review the proposed plan. It will be verified that the proposed detour route will accommodate truck traffic. Any truck traffic that can't safely navigate the proposed detour route will be stopped and parked in a position where the module can safely pass the parked truck traffic.

Owner	MAMMOET	
Project Name	Kearl Oil Sand Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Sheet Number	17-WMR, Rev 55	2/12/15
Prepared By	Jeff Hobbback	



6.2.7 b) Choteau (North)

Owner	MAMMOET	
Project Name	Kearl Oil Sands Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Sheet Number	18-WMR, Rev 5	2/12/10
Prepared By	Jeff Hobbback	

Proposed Traffic Control for MAMMOET Module move Choteau Morana North Section

Side road traffic will be controlled by a combination of flaggers and barricades. We will meet with city officials prior to the module move to finalize plan for side road control.

Truck Traffic will be detoured onto Airport Road according to Sheet 19-WMR, Rev 5.

Southbound US 89 Traffic will be detoured onto side streets as shown during Module movement. Highway truck traffic will either be detoured onto Airport Rd. or held at a designated truck stop. (See Choteau Truck Traffic Control Plan)

Module Route





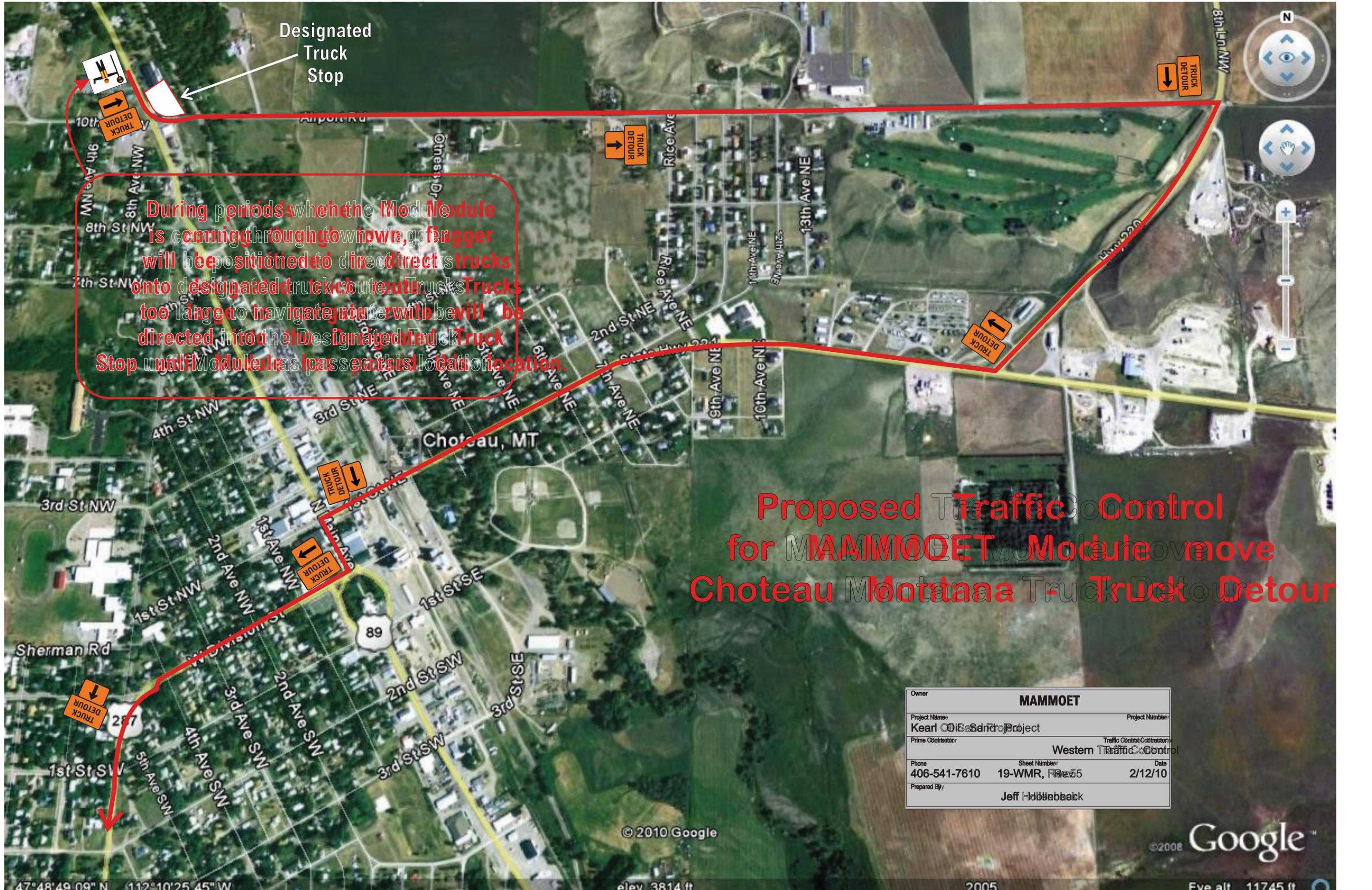
6.2.7 c) Choteau (Truck Detour)

Designated
Truck
Stop

During periods when the Module is coming through town, a flagger will be positioned to direct trucks onto designated truck route. Trucks too large to navigate route will be directed into the Designated Truck Stop until Module has passed this location.

Proposed Traffic Control
for MAMMOET Module move
Choteau Montana - Truck Detour

Owner MAMMOET		
Project Name Kearl Oil Sand Project	Project Number	
Prime Contractor	Traffic Control Contractor Western Traffic Control	
Phone 406-541-7610	Sheet Number 19-WMR, Rev 55	Date 2/12/10
Prepared By Jeff Hebback		





6.2.8 Valier

Proposed Traffic Control for MAMMOET Module Move Valier Montana Section



Side road traffic will be controlled by a combination of flaggers and barricades. We will meet with city officials prior to the module move to finalize plan for side road control.

Owner	MAMMOET	
Project Name	Kearl Co. Sand Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Prepared By	Jeff H. Hebback	2/12/10
Sheet Number	21-WMR, Rev 5	



6.2.9 Cut Bank

Proposed Traffic Control for MAMMOET Module move Cut Bank Montana Section

Side road traffic will be controlled by a combination of flagged and barricades. We will meet with city officials prior to the module move to finalize plan for side road control.

Westbound US 2 traffic will be detoured onto side streets while Modules pass through town utilizing route markers and flagmen. Truck traffic on large side road detours will be held till modules pass.

Prior to the start of the project, WTC will meet with the City of Cut Bank to review the proposed plan. The proposed detour route will accommodate truck traffic. Any truck traffic that can't safely navigate the proposed detour route will be stopped and parked in a position where the module can safely pass the parked truck traffic.

Owner	MAMMOET	
Project Name	Oil Sands Project	Project Number
Prime Contractor	Western Traffic Control	Traffic Control Contractor
Phone	406-541-7610	Date
Sheet Number	23-WMR, Rev 55	2/12/10
Prepared By	Jeff Hobbback	