



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

County CASCADE

May 3, 2005

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LEGISLATIVE ENVIRONMENTAL
POLICY OFFICE

To Whom It May Concern:

Subject: Cooperating Agency Environmental Documentation

As a Cooperating Agency under the provisions of 23 CFR 771.111 the Montana Department of Transportation (MDT) is providing you a copy of this project's environmental documentation.

This environmental documentation complies with the provisions of 23 CFR 771.117(a) and (d) for categorically excluding this proposed project from further National Environmental Policy Act (NEPA) (42 U.S.C. 4321, et seq.) documentation requirements. The attached also complies with the provisions of 75-1-103 and 75-1-201, MCA (see ARM 18.2.237 and 18.2.261, MEPA "Actions that qualify for a Categorical Exclusion" as applicable to the MDT).

If you have any questions concerning the attached environmental documentation please call the MDT Environmental Services Division at (406) 444-7228.

Sincerely,

Jean A. Riley, P.E.
Engineering Bureau Chief
Environmental Services Division

S:\ADMIN\48_GEN_CORRESP\MAILINGS\COOP AGENCY LTR.DOC\2001TURNBAYS_VAUGHNFRONTAGE_CN5024

Attachment

Cascade



Montana Department of Transportation

2701 Prospect Avenue
PO Box 201001
Helena MT 59620-1001

Jim Lynch, Director
Brian Schweitzer, Governor

April 14, 2005

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MAY 02 2005

ENVIRONMENTAL

MASTER FILE COPY

Janice W. Brown
Division Administrator
Federal Highway Administration
2880 Skyway Drive
Helena, MT 59602-1230

Subject: STPHS 07611(1)
2001 - Turn Bays - Vaughn Frontage Road
CN 5024

This is to request approval of this proposed project as a Categorical Exclusion (CE) under the provisions of 23 CFR 771.117(d), and the Programmatic Agreement as signed by the MONTANA DEPARTMENT OF TRANSPORTATION (MDT) and the FHWA on April 12, 2001. Copies of its Preliminary Field Review Report (7/21/04) and Project Location Map are attached. This proposed action also qualifies as a CE under ARM 18.2.261 (Sections 75-1-103 and 75-1-201, MCA).

The following form provides the documentation required to demonstrate that all of the conditions are satisfied to qualify for a Programmatic Categorical Exclusion Approval (PCE) as initially agreed by the (former) MONTANA DEPARTMENT OF HIGHWAYS (MDOH) and the FHWA on December 6, 1989. (Note: An "X" in the "N/A" column is "Not Applicable" to, while one in the "UNK" column is "Unknown" at the present time for this proposed project.)

NOTE: A response in a box will require additional documentation for a Categorical Exclusion request in accordance with 23 CFR 771.117(d).

Table with 5 columns: YES, NO, N/A, UNK. Rows include questions about environmental impact, unusual circumstances, and Right-of-Way requirements.

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
5. There are parks, recreational, or other properties acquired/improved under <i>Section 6(f)</i> of the <i>1965 National Land & Water Conservation Fund Act (16 USC 460L, et seq.)</i> on or adjacent to proposed the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The use of such <i>Section 6(f)</i> sites would be documented and compensated with the appropriate agencies. (e.g.: MDFWP, local entities, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Are there any sites either on, or eligible for the National Register of Historic Places with concurrence in determination of eligibility or effect under <i>Section 106</i> of the <i>National Historic Preservation Act (16 USC 470, et seq.)</i> by the State Historic Preservation Office (SHPO), which would be affected by this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. There are parks, recreation sites, school grounds, wildlife refuges, historic sites, historic bridges, or irrigation that might be considered under <i>Section 4(f)</i> of the <i>1966 US DEPARTMENT OF TRANSPORTATION Act (49 USC 303)</i> on or adjacent to the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a. "Nationwide" Programmatic <i>Section 4(f)</i> Evaluation forms for these sites are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. This proposed project requires a full (i.e.: DRAFT & FINAL) <i>Section 4(f)</i> Evaluation.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. The activity would involve work in a streambed, wetland, and/or other waterbody(ies) considered as "waters of the United States" or similar (e.g.: "state waters").	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. Conditions set forth in <i>Section 10</i> of the <i>Rivers and Harbors Act (33 USC 403)</i> and/or <i>Section 404</i> under <u>33 CFR Parts 320-330</u> of the <i>Clean Water Act (33 USC 1251-1376)</i> would be met.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Impacts in wetlands, including but not limited to those referenced under Executive Order (EO) #11990, and their proposed mitigation would be coordinated with the Montana Inter-Agency Wetland Group.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. A 124SPA Stream Protection permit would be obtained from the MDFWP?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. There is a delineated floodplain in the proposed project area under FEMA's Floodplain Management criteria.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The water surface at the 100-year flood limit elevation would exceed floodplain management criteria due to an encroachment by the proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Tribal Water Permit would be required.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Work would be required in, across, and/or adjacent to a river which is a component of, or proposed for inclusion in Montana's Wild and/or Scenic Rivers system as published by the US Department of Agriculture, or the US Department of the Interior.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

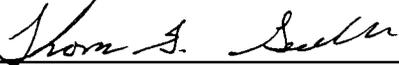
	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
The designated National Wild & Scenic River systems in Montana are:				
a. Middle Fork of the Flathead River (headwaters to South Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. North Fork of the Flathead River (Canadian Border to Middle Fork confluence).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. South Fork of the Flathead River (headwaters to Hungry Horse Reservoir).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Missouri River (Fort Benton to Charles M. Russell National Wildlife Refuge).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
In accordance with <i>Section 7 of the Wild and Scenic Rivers Act (16 USC 1271 – 1287)</i> , this work would be coordinated and documented with either the Flathead National Forest (Flathead River), or US Bureau of Land Management (Missouri River).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. This is a "Type I" action as defined under <u>23 CFR 772.5(h)</u> , which typically consists of highway construction on a new location or the physical alteration of an existing route which substantially changes its horizontal or vertical alignments or increases the number of through-traffic lanes.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1. If yes, are there potential noise impacts?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. A Noise Analysis would be completed.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. There would be compliance with the provisions of both <u>23 CFR 772</u> for FHWA's Noise Impact analyses and MDT's Noise Policy.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. There would be substantial changes in access control involved with this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, would they result in extensive economic and/or social impacts on the affected locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. The use of a temporary road, detour, or ramp closure having the following conditions when the action(s) associated with such facilities:				
1. Provisions would be made for access by local traffic, and be posted for same.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Adverse effects to through-traffic dependant businesses would be avoided or minimized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Interference to local events(e.g.: festivals) would be minimized to all possible extent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Substantial controversy associated with this pending action would be avoided.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Hazardous wastes /substances, as defined by the US Environmental Protection Agency (EPA) and/or the Montana Department of Environmental Quality (MDEQ), and/or (a) listed "Superfund" (under CERCLA or CECRA) site(s) are currently on and/or adjacent to this proposed project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	<u>YES</u>	<u>NO</u>	<u>N/A</u>	<u>UNK</u>
All reasonable measures would be taken to avoid and/or minimize substantial impacts from same.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G. The Montana Pollutant Discharge Elimination System's conditions (<u>ARM 16.20.1314</u>), including temporary erosion control features for construction would be met.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Permanent desirable vegetation with an approved seeding mixture would be established on exposed areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Documentation of an "invasive species" review to comply with both EO #13112 and the <i>County Noxious Weed Control Act</i> (7-22-21, MCA), including directions as specified by the county(ies) wherein its intended work would be done.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. There are "Prime" or "Prime if Irrigated" Farmlands designated by the Natural Resources Conservation Service on or adjacent to the proposed project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If the proposed work would affect Important Farmlands, then an AD-1006 Farmland Conversion Impact Rating form would be completed in accordance with the <i>Farmland Protection Policy Act</i> (7 USC 4201 , <i>et seq.</i>).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
K. Features for the <i>Americans with Disabilities Act</i> (PL 101-336) compliance would be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L. A written Public Involvement Plan, would be completed in accordance with MDT's Public Involvement Handbook.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. This proposed project complies with the <i>Clean Air Act's Section 176(c)</i> (42 USC 7521(a) , as amended) under the provisions of <u>40 CFR 81.327</u> as it's either in a Montana air quality:				
A. "Unclassifiable"/attainment area. This proposed project is <u>not</u> covered under the EPA's September 15, 1997 Final Rule on air quality conformity.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
and/or				
B. "Nonattainment" area. However, this type of proposed project is either exempted from the conformity determination requirements (under EPA's September 15, 1997 Final Rule), or a conformity determination would be documented in coordination with the responsible agencies: (Metropolitan Planning Organizations, MDEQ's Air Quality Division, etc.).	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Is this proposed project in a "Class I Air Shed" (Indian Reservations) under <u>40 CFR 52.1382(c)(3)</u> ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Federally listed Threatened or Endangered (T/E) Species:				
A. There are recorded occurrences, and/or critical habitat in this proposed project's vicinity.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Would this proposed project result in a " <u>jeopardy</u> " opinion (under <u>50 CFR 402</u>) from the Fish & Wildlife Service on any Federally listed T/E Species?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The proposed project would not induce significant land use changes, nor promote unplanned growth. There would be no significant effects on access to adjacent property, nor to present traffic patterns.

This proposed project would not create disproportionately high and/or adverse impacts on the health or environment of minority and/or low-income populations (EO #12898). It also complies with the provisions of *Title VI* of the *Civil Rights Act* of 1964 (**42 USC 2000d**) under the FHWA's regulations (23 CFR 200).

In accordance with the provisions of 23 CFR 771.117(a), this pending action would not cause any significant individual, secondary, or cumulative environmental impacts. Therefore, the FHWA's concurrence is requested that this proposed project is properly classified as a Categorical Exclusion.


_____, Date: 4/14/05
Thomas G. Gocksch P.E. – Environmental Area Engineer
MDT Environmental Services Bureau

Concur 
_____, Date: 4/15/05
Tom Hansen, P.E. - Engineering Section Supervisor
Environmental Services Bureau

Concur 
_____, Date: 4-26-05
Federal Highway Administration

TLH:tgg: S:\PROJECTS\GREAT-FALLS\5024\5024ENCED001.DOC

Attachments

cc: Michael P. Johnson - District Administrator-Great Falls
Paul R. Ferry, P.E. - Highway Engineer
John H. Horton - MDT Right-of-Way Bureau Chief
Suzy Althof - MDT Contract Plans Section Supervisor
David W. Jensen, Supervisor - MDT Fiscal Programming Section
Jean A. Riley, P.E., Chief - Environmental Services Bureau
Tom Gocksch P.E. – Environmental Services Bureau
Environmental Quality Council
File

**"ALTERNATIVE ACCESSIBLE FORMATS OF THIS DOCUMENT WILL
BE PROVIDED ON REQUEST."**



Montana Department of Transportation
 PO Box 201001
 Helena MT 59620-1001

Memorandum

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To:  Paul R. Ferry, P.E.
 Highways Engineer

NOV 29 2004

ENVIRONMENTAL

From: Damian M. Krings, P.E.
 Road Design Engineer

**MASTER FILE
 COPY**

Date: July 21, 2004

Subject: STPHS 07611(1)
 2001 Turn Bays - Vaughn Frontage Road
 UPN 5024
 Work Type 310 - Roadway and Roadside Safety Improvements

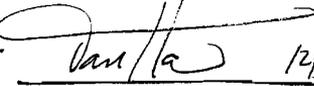
We request that you approve the **Preliminary Field Review Report** for the subject project.

Signed by Lesly Tribelhorn on August 3, 2004

Approved _____ Date _____
 Paul R. Ferry, P.E.
 Highways Engineer

We are requesting comments from those on the distribution list. We will assume their concurrences if no comments are received within **two weeks** of the Engineering Information Services Section release date: _____

DMK:JJS:MJL:server:5024RDPFR001.DOC

Required Approval  12/9/04
 w/ incorporation of note on PP 7
 ENVIRONMENTAL
 & GEOTECHNICAL SERVICES
 SUPERVISOR

- Distribution: (all with attachment)
 Mick Johnson, G.F. District Admin.
 Duane Williams, Traffic & Safety
 Mark Wissinger, Construction
 Bureau Chief, Materials Bureau
 John Horton, Right-of-Way
 Danielle Bolan, Traffic & Safety
 Mark Goodman, Hydraulics
 Pierre Jomini, Safety Management
 Jere Stoner, Road Design
 FHWA (HOP-MT)
 Dave Davis, Survey
 Drew Livesay, M.C.S.
 File

- Jim Walther, Preconstruction
 Kent Barnes, Bridge
 Jean Riley, Environmental
 Sandra Straehl, Tran. Planning

- Jc
 B:
 D
 W
 G
 B:
 Iv
 A
 C:

Return to Bill When "Initial Column" Completed By DEC 12

Comments?	Y	N	Initials/Date
Biological		✓	BOG 12/12/06
Cultural	p-7 X		Jan 11/30
Haz-Mat	Joe X	X	12/12/06
Erosion Control		X	12/12/06
Engineer		X	12/12/06
Seeding		X	12/12/06

Cascade County Commissioners
 415 2nd Ave N
 Great Falls, MT. 59401-2537



Preliminary Field Review Report

STPHS 07611(1)
2001 Turn Bays – Vaughn Frontage Road
UPN 5024

I. INTRODUCTION

A field review of the subject project was held on May 30, 2003. The following individuals were present:

Jason Giard	Engineering Services Sup. (former)	MDT - Great Falls
Danielle Bolan	Traffic & Safety	MDT - Helena
Tom Hanek	Safety Management	MDT - Helena
Mike Langenfus	Project Design Manager (former)	MDT - Helena
Jere Stoner	C.E. Specialist (former)	MDT - Helena

II. PROPOSED SCOPE OF WORK

- A. The project will seek to minimize traffic conflicts and accidents on the Vaughn frontage road between North and South Manchester Roads. Conflicts have arisen in the past between through traffic along the frontage road and traffic entering and leaving the stockyards and tavern situated between the two Manchester roads.
1. An auxiliary turning lane is proposed between the two Manchester approaches. Bays may be delineated depending on local development. Access will be controlled with median curb if necessary so that ingress and egress is confined to two approaches in front of the stockyard. Really Windy's Tavern was located adjacent to the stockyards at the time of the review. We have learned that it will eventually be located across from the tavern to the west of the South Manchester Road.
- B. Benefit /Cost Analyses were performed in 2001. One analysis was to install signs, and one was to construct left-turn bays. The analysis for the signs yielded a B/C ratio of 347.64. A smaller B/C Ratio of 3.25 resulted for construction of the left-turn bays. The left-turn bays seem to be the most preferred alternative. The estimate used for the signing was \$2111, and the estimate for the turn bays was \$386,361. The District has since asked that the auxiliary lane/turn-bays be extended west of South Manchester Road because of Really Windy's Tavern relocation (see attached photo). A rough estimate of the original as well as the extended project is on the following page.
- C. Safety Management has no objection to the extension; however, they suggest that the landowners (Tavern Owners) somehow contribute in part for the widened road since no apparent accident history exists there. They suggest that as development of the project proceeds, overruns be accommodated by reducing this extra development completely or in part (\$510,000 is carried in the Redbook for this project).

1. The project will be designed in the District. Christie McOmer is the Project Manager. Since this project is a 2001 Safety upgrade project, it is anticipated that the soonest possible ready date should be pursued. The project schedule will be developed through the override process in OPX2.
2. The following table summarizes the estimated cost of the two scenarios:

Item	As Nominated	Extended
Construction, Mobilization, etc.	\$296,217.00	\$415,365.00
Construction Engineering (10%)	\$26,930.00	\$37,760.00
Contingencies (15%)	\$40,390.00	\$56,640.00
Subtotal	\$363,537.00	\$509,765.00
R/W	\$10,000.00	\$14,000.00
Utilities	\$5000.00	\$7000.00
Total	\$378,537.00	\$530,765.00

III. PROJECT LOCATION AND LIMITS

- A. The proposed project is located in Cascade County between Great Falls and Vaughn, on the frontage road (X-07611) just south of I-15. The project begins west of the South Manchester Road and ends east of the North Manchester Road. A project site map is attached.
 1. The approximate limits of the project relative to the TIS Image Viewer are from RP 3.15 to RP 4.30. The actual project limits will depend on the geometrics that are developed throughout the design process.
 2. Route X-07611 begins at the Vaughn Interchange (RP 0.00) and proceeds southeasterly towards Great Falls. The turn off to the Manchester Interchange is located within the project.

IV. PHYSICAL CHARACTERISTICS

- A. Generally, the project corridor is in level terrain, on a long stretch of tangent roadway. Most of the alignment is nearly flat, however there is a crest vertical curve at the end of the project. The land adjacent to the project primarily consists of agricultural and commercial properties.
 1. According to the TIS Roadlog, route X-07611 is functionally classified as a major collector.

2. According to sketchy records, the roadway was built as part of FAP 10 in and around 1935 and was paved in 1954.
 3. The entire project is a plant mix paved roadway. The width of the paved roadway appears to be in the range of 26 ft. to 28 ft (7.9 m to 8.5 m) for the majority of the project. Gravel shoulders bound the borders of the roadway.
 4. There is no sidewalk or curb along this section of roadway.
- B. Two main road approaches empty onto the frontage road. At RP 3.66+/-, the South Manchester Road enters from the south. This paved road provides access to the community of Manchester. At about RP 4.10, the North Manchester Road provides access to I-15 via the Manchester Interchange. North Manchester Road passes under I-15 and continues north of the interstate as well.
1. Between the two approaches to the south is a stockyard and Really Windy's tavern, which collectively have three approaches. The middle approach is used by both parties; trucks leaving the stockyard, and patrons entering and leaving Really Windy's. The approaches are wide and appear to be uncontrolled. Traffic enters and exits from both approaches, sometimes concurrently within that stretch of frontage road. The stockyard frontage is controlled by a fence that was installed between the easternmost approach and the middle (joint) approach mentioned above.
 2. To the west of the South Manchester approach, and on the south side of the frontage road, is another tavern with an uncontrolled approach for approximately 220 feet. Approximately 830 ft. to the west of this second tavern is a farm on the south side of the road.

V. TRAFFIC DATA

The traffic data for this project is as follows:

2003 ADT	=	3,440
2005 ADT	=	3,670
2015 ADT	=	5,080
DHV	=	550
D	=	55-45%
T	=	3.7%
18 Kip EALs	=	81.41 (Daily)
AGR	=	3.3%

VI. ACCIDENT ANALYSIS

- A. An analysis was performed for X-07611 (Vaughn Frontage Road), between reference posts 3.5 and 4.5 for the period from January 1, 1999 through December 31, 2003. Since statewide statistics are not available for off system X-Routes, this location is compared to statewide averages on the Secondary System.

1. The all vehicle accident rate was 3.93, above the statewide Secondary average of 1.71.
 2. The severity Index was 2.54, slightly above the statewide Secondary average of 2.40.
 3. The Severity Rate was 9.98, significantly above the Statewide Secondary average of 4.12.
 4. There were no truck accidents.
 5. There was one fatal injury accident, two incapacitating injury accidents, 8 non-incapacitating injury accidents, and 13 property damage only accidents.
- B. There were a total of 24 recorded accidents in the study period.
1. 10 of the accidents (41.7%) were intersection/intersection related as compared to 21.4% for statewide Secondary routes.
 2. 20 of the accidents (83.3%) occurred under dry conditions as compared to 69.4% for statewide Secondary routes.
 3. 17 of the accidents (70.8%) occurred during daylight hours as compared to 51.8% for statewide Secondary routes.
 4. Nine of the accidents (37.5%) were rear end collisions as compared to 8.9% for statewide Secondary routes.
 5. 14 of the accidents (58.3%) listed a collision with a motor vehicle in transit as the first harmful event as compared to 20.1% for statewide Secondary routes.
- C. The location was reviewed in the 2001 Safety Engineering Improvement Program (SEIP) at the request of the Great Falls District Office. The resulting recommendation from Safety Management was the installation of turn bays at the intersections with North and South Manchester Roads.
- D. The crash trend on this section of frontage road is manifested as collisions between passenger vehicles, often involving a vehicle making a turning movement at the intersection with either of the Manchester approach roads mentioned above, or a private driveway access. **Allowing separation of left turning vehicles and through vehicles utilizing turn bays should reduce the incidence of this type of crash. Access control between these two intersection is also recommended.**

VII. MAJOR DESIGN FEATURES

- A. The design speed for this project will be 70 mph.
- B. The **typical section** will transition from the width in place (26 to 28 ft.) to a three-lane 42 ft. configuration, which includes 2 ft. shoulders, 12 ft. driving lanes, and a 14 ft. middle or turn lane.

- C. There are no **horizontal** curves in the project. A horizontal curve exists near the end of the project. Depending on the final limits, we may or may not have to make a connection to this curve.
- D. Most of the tangent is relatively flat. The steepest grade will likely be at the end of the project. There is a crest **vertical** curve at the end of the project where the three lane transitions back to a two lane.
- E. **Geotechnical:** There are no Geotechnical issues known at this time and only minor involvement is anticipated. A District soil survey is requested to look at the in-place materials in the existing roadway.
- F. **Hydraulics:** No major hydraulic concerns were noted during the field review.
- G. **Bridges:** There are no bridges within the limits of the proposed project.
- H. **Traffic:** The attached photo shows the alternate of the project being extended west of South Manchester Road. Traffic is asked to investigate the most efficient and economical application and submit their findings to Road Design who will implement those findings in the design.

Another issue brought forth in the preliminary investigations is how to stripe the auxiliary lane. There is some disagreement as to whether there should be dedicated turn-bays striped at the private approaches, or a TWLT lane for the length of the project. Traffic's recommendation on this concept is requested.

Private approaches will be narrowed to standard widths. New lighting was proposed at the review for the major intersections at North and South Manchester Roads.

VIII. DESIGN EXCEPTIONS

Design exceptions are not anticipated at this time.

IX. RIGHT-OF-WAY

- A. The existing right-of-way width was not apparent during the review. Since no known as-built plans exist, right-of-way should be located with the survey.
- B. It will be necessary for the Right-of-Way Bureau to plot the existing right-of-way on the plans.
- C. New right-of-way will most likely be required due to the widening. The District feels that perhaps the widening might be more advantageous if it is done to one side. This will be investigated during design.

X. UTILITIES / MUNICIPAL SERVICES

- A. Overhead power exists on the south side of the frontage road on both ends of the project. An overhead crossing also exists near the South Manchester Road

intersection. The distance of the poles from the PTW appears to vary. Although relatively minor, some conflicts with the poles are anticipated.

- B. Telephone pedestals were observed in front of the businesses. No fire hydrants were observed during the review.
- C. No natural gas or water services were observed, but it is not known if they exist. Survey will have to ascertain if they in fact do exist. Conflicts, if any, will be identified upon completion of the survey.
- D. No storm sewer exists within the project.
- E. No streetlights exist within the project. New lighting is proposed at the main intersections.

XI. SURVEY REQUIREMENTS

- A. Survey should begin approximately 2700 ft. west of South Manchester Road, and end about 1500 ft. east of North Manchester Road. A data collector survey is requested.
 - 1. A closed traverse should be developed for the survey to allow for accurate location of section, lot and other right-of-way monuments in the area.
 - 2. The survey should include, but not be limited to, the following items:
 - a) Survey should be done to allow cross-sections to be taken every 50 ft. (20 m) and at major breaks in the contour of the area (e.g. cut/fill transitions).
 - (1) Topography shots should extend at least 100 ft (30 meters) on both sides of centerline or to the building fronts.
 - (2) Include all major features within the right-of-way including major breaks in roadway section or any pipe sections.
 - (3) Topography should at least include the entire width of the building fronts.
 - 3. Utilities topography should include the location and approximate depth of any underground utilities and location of above ground utilities or crossings thereof that enter the roadway prism if any.
 - a) A SUE survey is not requested at this time. SUE may be requested once the initial field survey is complete and preliminary design is underway.
 - 4. Section ties and right-of-way lot ties shall be made to the control traverse to define the right-of-way corridor that exists.
- B. A survey request form is also located on DMS under the filename 5024RDREQ001.DOC.

XII. PUBLIC INVOLVEMENT

- A. The public involvement plan will generally follow Level B guidelines set forth in the MDT Public Involvement Handbook, with the addition of a public informational meeting.
 - 1. To improve public participation, mailing invitations to the informational meeting to residents and businesses within the project limits is proposed.

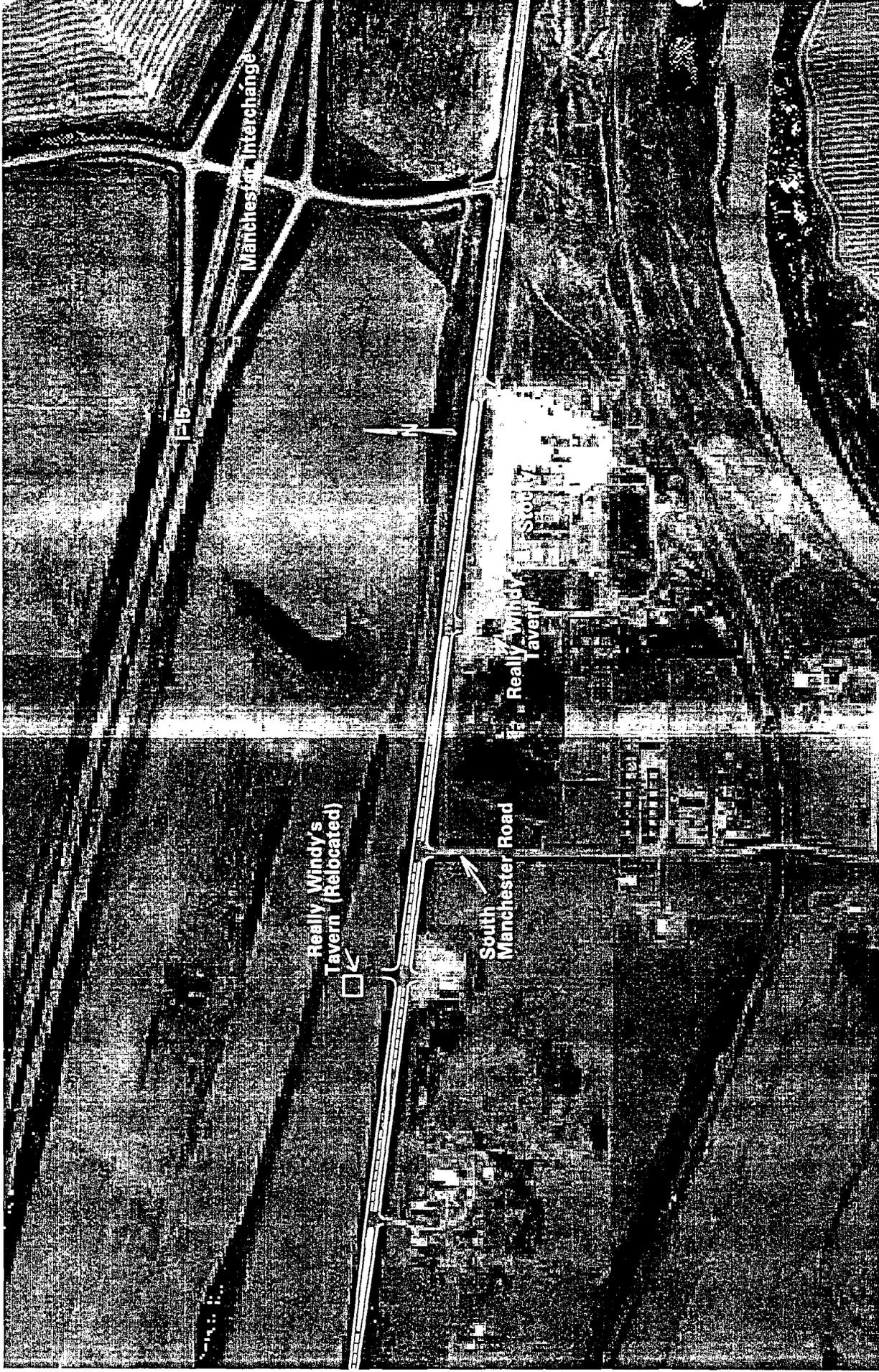
XIII. ENVIRONMENTAL CONSIDERATIONS

- A. A Biological Resources memo has been distributed for the project.
- B. The Environmental Services Bureau will prepare the appropriate level of environmental evaluation and documentation for the project.
- C. The appropriate permits will be required to dispose of any contaminated material, if encountered.

*Will need a
cultural resource
survey.*

XIV. TRAFFIC CONTROL

- A. The MUTCD will be utilized to guide the application of all traffic control plans. Where necessary, provisions will be made to provide temporary access to businesses and residences during construction.



Site Map
STPHS 07611(1)
2001 Turn bays – Vaughn Frontage Road

This Project STPHS 07611(1)

2001 Turnbays Vaughn Frontage Road

