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Kevin L. McLaury, Division Administrator
Federal Highway Administration (FHWA) TRANSPORTATION PLANNING
585 Shepard Way
Helena, MT 59602

Subject: JACKRABBIT LANE (N-85) RECONSTRUCTION

FOUR CORNERS-NORTH
NH 85-1 (9) 0
Control No. 4306

BELGRADE-SOUTH
NH 85-1 (14) 6
Control No. 5735

This is a request for the FHWA's concurrence that the proposed projects meet the criteria for classification as a Categorical Exclusion under the provisions of 23 CFR 771.117(d). The proposed actions also qualify as Categorical Exclusions under the provisions of ARM 18.2.261 (Sections 75-1-103 and 75-1-201, M.C.A.).

PROJECT DESCRIPTION

The Montana Department of Transportation (MDT) plans to reconstruct National Highway System (NHS) Route 85 (designated as route N-85 and locally known as Jackrabbit Lane) between Reference Post (RP) 0.00 and RP 6.09 in Gallatin County. Reconstruction would occur under separate projects designated as Four Corners-North [NH 85-1 (9) 0; CN 4306] and Belgrade-South [NH 85-1 (14) 6; CN 5735] by MDT. The Four Corners-North project may begin during 2012 or 2013 and the Belgrade-South project would be built sometime after 2013.

The proposed Four Corners-North project begins in a developed, but unincorporated area of the county known as Four Corners and extends northward toward the City of Belgrade. Specifically, the proposed reconstruction on Jackrabbit Lane would begin at RP 0.00 where the route intersects with Huffine Lane (P-50), U.S. Highway 191 (N-50) and Norris Road (P-84) and ends north of the Hulbert Lane intersection at approximately RP 3.40. Improvements would also be made to the west and south approaches at the intersection of Jackrabbit Lane with Norris Road, U.S. Highway 191 and Huffine Lane. Work would generally occur between RP 0.00 and RP 0.20 on Norris Road and between RP 81.65 and RP 81.90 on U.S. Highway 191.

The proposed Four Corners-North project would occur in Sections 1, 2, 11, 12, 13, and 14 of Township-2-South and Range-4-East, M.P.M. and Sections 25, 26, 35 and 36 of Township-1-South and Range-4-East, M.P.M.

The proposed Belgrade-South project begins where the Four Corners-North project ends and continues northward toward the City of Belgrade. Reconstruction would begin at the northern

terminus of the Four Corners-North project and extend northerly for about 2.69 miles to end at the route's intersection with Frank Road (RP 6.09), south of the I-90 Belgrade Interchange. The proposed Belgrade-South project would occur in Sections 13, 14, 23, 24, 25, and 26 of Township-1-South and Range-4-East, M.P.M.

A map showing the locations of both projects is attached.

The majority of Jackrabbit Lane between Huffine Lane/U.S. Highway 191/Norris Road and Frank Road has a two-lane configuration with a typical paved surface width of 32 feet. However, the existing highway has been widened to provide left turn lanes immediately north of the route's intersection with Huffine Lane/U.S. Highway 191/Norris Road and at the route's intersection with both Baxter Lane and Cameron Bridge Road. North of Frank Road, Jackrabbit Lane was previously reconstructed to a five-lane typical section with curbs and gutters as part of the Belgrade Interchange Project; IM HDP 9240(001) F.

The proposed projects would reconstruct the existing two-lane highway to a four-lane facility with turn lanes and a center median. The proposed reconstruction of Jackrabbit Lane would increase the roadway's typical cross-section width to 88 feet accommodating four 12-foot-wide driving lanes, a 24-foot-wide median with left turn provisions, and two 8-foot-wide shoulders. Curbs and gutters may be incorporated between the Huffine Lane/U.S. Highway 191/Norris Road intersection and Shedhorn Road and between Cameron Bridge and Frank Roads to help limit right-of-way acquisition and minimize effects to existing uses. Roadway elements associated with the new typical section(s) for the road would conform to MDT's geometric design standards for Rural Principal Arterials (NHS Non-Interstate) with design speeds of 70 miles per hour.

The median for new roadway would be configured to meet required traffic movements and access management needs along the Jackrabbit Lane corridor. The design for the reconstructed roadway would include areas with both non-traversable and traversable medians. As necessary, the final design for Jackrabbit Lane may incorporate areas with a raised median and left turn lanes, areas with a depressed median, and areas with a center two-way left turn lane.

The horizontal alignment of Jackrabbit Lane would be shifted to avoid major impacts to existing utilities along the highway. From Huffine Lane/U.S. Highway 191/Norris Road to Baxter Lane, the new road would likely be shifted toward the west. From Baxter Lane to Frank Road, the new horizontal alignment would be shifted toward the east. The new grade for the road would be similar to that of the existing facility due to substantial development along the highway and the presence of numerous approaches and intersecting roads. The vertical alignment would be designed to meet standard design speed criteria and provide adequate cover at irrigation crossings.

The Four Corners-North project includes reconstruction work at the Huffine Lane/U.S. Highway 191/Norris Road/Jackrabbit Lane intersection. At the intersection, Jackrabbit Lane would be

rebuilt to accommodate two left turn lanes, a southbound through lane, a right turn lane, and two northbound through lanes. Widening for turn lanes and constructing a transition to the existing roadway would affect about 1,300 feet of U.S. Highway 191 south of the intersection. The U.S. Highway 191 (south) approach would be widened and rebuilt to provide two northbound through lanes, a left-turn lane, a right turn lane, a painted median, and one southbound lane. Work on the Norris Road (west) approach would extend about 1,000 feet west from the intersection and involve widening to accommodate a left turn lane, an eastbound through lane, a combined through and right-turn lane, and one westbound through lane. No work would be required on the Huffine Lane (east) approach to the intersection.

Other activities associated with the reconstruction of Jackrabbit Lane include: right-of-way acquisition, relocating conflicting utilities, installing drainage improvements including storm drainage systems in areas with curbs and gutters, grading, placement of gravel, plant mix surfacing and a seal and cover, and installing new signs and pavement markings. The existing bridge over the Spain-Ferris Ditch would be replaced with a new box culvert. Box culverts would also be installed at the Beck-Border Ditch and Mammoth Fork Ditch crossings. The proposed Jackrabbit Lane projects would also include a separated path for pedestrians and bicyclists along the east side of the highway corridor.

Traffic signals may be warranted at some time in the future at major intersecting roads within the Four Corners-North or Belgrade-South project areas including: Durston Road, Baxter Lane, Hulbert Road, Valley Center Road, and Cameron Bridge Road. These signals could be installed as part of the Jackrabbit Lane reconstruction projects or as separate and localized actions by either MDT or private developers.

An Access Management Plan for the corridor has already been prepared.

## **PURPOSE AND NEED**

The purpose of the proposed reconstruction projects on Jackrabbit Lane is to enhance the operational characteristics, safety and physical conditions of the existing facility through the consideration of contemporary design practices. Reconstructing the existing two-lane highway is necessary to ensure the facility meets applicable MDT design standards and provides the desired improvements in safety and operations for the traveling public over the foreseeable future.

To accomplish this purpose, the proposed actions must:

- incorporate physical changes to the roadway and its adjoining environment so the road's design complies with MDT's geometric design standards for Rural Primary Arterials (NHS-Non-Interstate) and with its Route Segment Plan; and
- provide a transportation facility that meets current and future demands through the replacement of substandard highway infrastructure including the road's pavement and associated drainage structures.

Current problems or concerns associated with Jackrabbit Lane or that will exist without the proposed improvements are discussed below.

**Variations from Current MDT Road Design Standards.** Jackrabbit Lane was originally built in 1953. Other than minor routine maintenance and periodic overlays, few improvements have been made to the facility since that time. A project completed in 1986 widened and overlaid the roadway and abandoned railroad crossings at two locations. As indicated earlier, turn lanes have been added at two major intersections in recent years. However, most of Jackrabbit Lane between Huffine Lane/U.S. Highway 191/Norris Road and Frank Road remains a two-lane highway with a paved top width of 32 feet as originally constructed in 1953.

According to the STP Route Segment Plan for Rural Principal Arterials (NHS-Non Interstate) in MDT's Road Design Manual, the minimum paved roadway top width for this NHS route should be 40 feet or greater. Therefore, the existing roadway does not meet MDT's desirable roadway width for this route. Additionally, existing fill slopes vary from 4:1 to 6:1 along most of the roadway and some isolated areas with higher fills have 3:1 slopes. According to the geometric design criteria for Rural Principal Arterials (NHS Non-Interstate), areas immediately adjacent to the roadway should have 6:1 slopes.

**Variations from Bridge Standards.** The existing bridge over the Spain-Ferris Ditch at RP 2.6 is a 29-foot-long, two-span concrete structure built in 1953. The existing roadway across the bridge is 32 feet. According to the NHS Route Segment Plan and current Bridge Design Standards, the structure should accommodate at least a 40-foot-wide roadway. The bridge over the Spain Ferris Ditch does not meet MDT's current Bridge Design Standards for live loads.

**Existing and Future LOS.** The Jackrabbit Lane area, as well as other portions of Gallatin County, is experiencing high levels of new growth and development. Traffic levels on Jackrabbit Lane have increased notably due to commercial, residential, industrial and office uses at Four Corners and continued growth in the surrounding area. Just a decade ago (1996), the average daily traffic (ADT) on Jackrabbit Lane was about 4,620 vehicles per day. Currently, the ADT is estimated to be more than 11,100 vehicles per day and projections suggest the ADT may approach or exceed 30,500 vehicles per day within the Jackrabbit Lane corridor by the Design Year (2030).

Level of service (LOS) is commonly used by traffic engineers and transportation planners to assess of the operation of a roadway facility based on various performance measures. LOS for roadway segments is typically based on the level of congestion and/or travel speeds. LOS for intersections is typically based on the amount of delay. Levels of service are expressed using a scale with letter designations ranging from A to F. LOS A represents the highest level and the best operating conditions, and LOS F is the lowest level. Highway designers strive to provide the highest LOS feasible. LOS C or above is considered acceptable based on MDT guidelines for this type of facility.

With the exception of the Jackrabbit Lane/Huffine Road/U.S. Highway 191/Norris Road intersection, none of the intersections in the project areas are signalized. Jackrabbit Lane currently operates at LOS A at each of the major county road intersections along the corridor. The county road approaches to Jackrabbit Lane currently operate at LOS B or C, with the exception of Valley Center Drive and Frank Road, which operate at LOS D during either the morning or evening peak hours. Under Design Year traffic conditions, all of the major unsignalized intersections along Jackrabbit Lane would likely fail (operate at LOS D or lower) by the Design Year. This suggests the need for traffic signals and other geometric improvements in the foreseeable future to ensure all major county road intersections operate at a desirable LOS. New developments along the Jackrabbit Lane corridor could also accelerate the need for signalization at any of these major intersections.

**Accident Analysis.** MDT analyzed reported crashes from RP 0.0 to RP 6.09 on Jackrabbit Lane over a ten-year period beginning January 1, 1996 and ending December 31, 2005. The analysis identified 325 recorded accidents in the segment including 3 fatal accidents, 95 injury accidents, and 227 property damage only accidents. As a result of these accidents, a total of 3 fatalities and 166 injuries (including 24 incapacitating injuries and 24 non-incapacitating injuries) were recorded. The accident rate for all vehicles on this section of Jackrabbit Lane was 1.93 accidents per million vehicle miles traveled (mvmt) with a severity rate of 3.89. This compares to statewide averages of 1.30 accidents per mvmt and a severity rate of 3.11 for rural primary arterials.

An analysis of the crash characteristics during the 1996 through 2005 period on Jackrabbit Lane between Huffine Lane/Norris Road and Frank Road showed the following:

- most accidents occur during the day under clear weather conditions and on dry roads;
- intersection-related accidents, including rear-end, right angle, sideswipes and left turning accidents account for more than 61% of the accidents in the corridor;
- rear-end collisions were the most prevalent accident type and represented nearly 38% of all reported accidents during the study period;
- the number of rear end collisions in the corridor was 23% higher than the average statewide occurrence of such collisions;
- more than 22% of all accidents in the corridor occurred between Huffine Lane/Norris Road and Durston Road (RP 0.0 to 1.0) a commercial area where numerous local roads intersect Jackrabbit Lane; and
- notable accident clusters exist at or near all major intersecting roadways in the corridor including 34 accidents recorded at Cameron Bridge Road (RP 5.0), 27 accidents at Valley Center Road (RP 4.0), and 16 accidents at Frank Road (RP 6.0).

Jackrabbit Lane's current design configuration is a factor in many of the accidents that occur on this route. The high numbers of intersection-related collisions (particularly rear-end crashes) recorded along Jackrabbit Lane can be attributed to the lack of left turn lanes at major intersections and at numerous private approaches along the roadway. Most of the existing roadway also has narrow

shoulders with relatively steep roadside slopes. This situation has contributed to overturning accidents, collisions with various types of fixed objects, head-on collisions, and run off the road accidents. These accident types comprised about 18% of the total accidents recorded in the 1996-2005 study period and suggest a need for additional roadway width, wider shoulders, and providing recoverable fill slopes.

In an effort to examine recent crash trends, MDT reviewed reported crashes from RP 0.0 to RP 6.10 on Jackrabbit Lane over a three-year period beginning January 1, 2004 and ending December 31, 2006. The analysis showed 140 recorded accidents in the segment including 0 fatal accidents, 32 injury accidents (23%), and 108 property damage only accidents (77%). As a result of these accidents, a total of 0 fatalities and 57 injuries (including 6 incapacitating injuries, 9 non-incapacitating injuries, and 17 possible injuries) were recorded. An analysis of the crash characteristics during the 2004 through 2006 period on Jackrabbit Lane showed the following:

- 63% of reported crashes were collisions involving two vehicles and 6% were collisions involving 3 or more vehicles
- The most prevalent crash types in the corridor during the study period were rear-end collisions (34%), right angle collisions (13%), sideswipes (10%), and left turn collisions (6%);
- The percentage of rear-end collisions, right angle collisions, sideswipes, and left turn collisions are all substantially higher than the statewide averages for such collisions;
- Crashes at intersections or related to intersections accounted for 54% of the reported accidents in the corridor;
- About 27% of all reported accidents in the corridor occurred between Huffine Lane/Norris Road and Durston Road (RP 0.0 to 1.0) a commercial area where numerous local roads intersect Jackrabbit Lane; and
- Accident clusters existed at or near all major intersecting roadways in the corridor during the study period including 9 accidents recorded at Hulbert Road (RP 3.0), 21 accidents at Valley Center Road (RP 4.0), 9 accidents recorded at Cameron Bridge Road (RP 5.0), and 8 accidents at Frank Road (RP 6.0).

Over the 2004 through 2006 period, 42 accidents were reported at the Jackrabbit Lane/Huffine Road/U.S. Highway 191/Norris Road intersection including 1 fatal accident, 6 injury accidents, and 35 property damage only accidents. All of the accidents at the intersection involved collisions between two or three vehicles. The most common collision types during the period were right angle collisions (38%), rear-end collisions (31%), and left turn collisions (24%). One third of the accidents occurred during darkness.

**Need for Access Management.** Jackrabbit Lane connects I-90 in Belgrade to Huffine Lane/Norris Road and U.S. Highway 191 at Four Corners. Maintaining through mobility for facility users is the primary purpose and function of Jackrabbit Lane. However, local traffic on Jackrabbit Lane has and

will continue to increase due to rapid residential and commercial development in the Belgrade and Four Corners area. Ongoing and future development will increase the demand for new local access to Jackrabbit Lane and will contribute to traffic congestion within the corridor. Therefore, in order to promote through mobility, managing access to Jackrabbit Lane is essential to preserve the capacity of the road and ensure the facility operates safely and efficiently for both local and regional traffic. To accomplish these objectives, the Access Management Plan for the Jackrabbit Lane corridor recommended the following measures:

- Developing full movement intersections at the one-mile spacings for major public road intersections and three-quarter movement intersections at one-half-mile spacings at other public access locations.
- Limiting all other existing and future access to right-in, right-out only.
- Ultimately, installing a non-traversable median separating northbound and southbound traffic to improve safety.
- Developing access roads on both sides of Jackrabbit Lane, where practicable.

## ENVIRONMENTAL IMPACTS

The proposed reconstruction of Jackrabbit Lane and the route's intersection with Huffine Lane/U.S. Highway 191/Norris Road has been evaluated for, and would have **no effects** on the following environmental areas of concern:

- **Land and Water Conservation Fund Act - Section 6(f) Impacts**
- **Wild and Scenic Rivers**
- **Floodplains**

The proposed reconstruction of Jackrabbit Lane and the route's intersection with Huffine Lane/U.S. Highway 191/Norris Road has been evaluated for, and would have **minor effects** on the following environmental areas of concern:

**Stream Modifications and Water Quality.** The Gallatin River, Dry Creek, and Hyalite Creek are north-to-south flowing surface waters located near the Jackrabbit Lane corridor. At their nearest points, the Gallatin River is about 1 mile west of the Jackrabbit Lane and Dry and Hyalite Creeks are less than 1 mile east of the route. The proposed projects do not cross these streams or any unnamed tributaries of these area streams.

Several irrigation ditches cross or parallel Jackrabbit Lane including the Beck-Border Ditch, Spain Ferris Ditch, and the Mammoth and Mammoth Fork Ditches. New box culverts would be installed at roadway crossings of the Beck-Border Ditch, Spain-Ferris Ditch, and the Mammoth Fork Ditch. The Lower Middle Creek Supply Ditch and the Barker Ditch are present along U.S. Highway 191 south of the Jackrabbit Lane/Huffine Lane/U.S. Highway 191/Norris Road intersection.

Short sections of these ditches may have to be realigned and/or reconstructed at the culvert inlets and outlets. Additionally, the proposed highway reconstruction would encroach on a portion of the Beck-Border Ditch along the east side of Jackrabbit Lane north of Durston Road. Approximately 1,050 feet of the ditch would be rebuilt about 40 feet east of its present location. Work on the U.S. Highway 191 (south) approach to the intersection would not affect the Lower Middle Creek Supply Ditch or the Barker Ditch. Impacts to irrigation facilities would be temporary and construction-related. All necessary irrigation facilities would be perpetuated and the timing of work in irrigation ditches would be coordinated with the appropriate ditch companies.

The MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) is responsible under *Section 401* of the federal *Clean Water Act* (33 U.S.C. 1251 – 1376) and the *Montana Water Quality Act* (75-5-101 M.C.A., *et seq.*) to monitor and assess the quality of Montana surface waters and to identify impaired or threatened stream segments and lakes. The MDEQ sets limits, known as Total Maximum Daily Loads (TMDLs), for each pollutant entering a body of water. TMDLs are established for streams or lakes that fail to meet certain standards for water quality and describe the amount of each pollutant a water body can receive without violating water quality standards.

The Gallatin River and Hyalite Creek are listed as “impaired waters” according to MDEQ’s 2006 *Montana Water Quality Integrated Report*. The Integrated Report combines surface water quality information that in recent years was presented in both the MDEQ’s “303(d) List” and the “305(b) Report.” The 303(d) List contains specific information relating to waters assessed as having one or more of their beneficial uses impaired or threatened by human activities. The 305(b) Report provides a more general view including waters where all applicable beneficial uses had been found to be fully supported and waters in the assessment “system” for which there was not sufficient data to make use support determinations.

The Gallatin River and Hyalite Creek are categorized as “4C” waters meaning they are impaired but do not require TMDLs because no pollutant-related use impairments were identified. Water quality impairments in these waters stem from dewatering and flow alterations associated with agriculture. The U.S. ARMY CORPS OF ENGINEERS (COE) views Headwaters, Inc. v. Talent Irrigation District, 243 F.3d 526 (9<sup>th</sup> Cir. 2001) as binding in the geographical jurisdiction of the U.S. Court of Appeals for the Ninth Circuit. In that case, the court held that irrigation canals (even those with intermittent flows) that receive water from natural streams and lakes, and divert water to streams and creeks, are connected as “tributaries” to those other waters. The Ninth Circuit further held that a stream which contributes its flow to a larger stream or other body of water is a tributary and a “Water of the U.S.”

The Lower Middle Creek Supply Ditch, Beck-Border Ditch, Spain Ferris Ditch, Mammoth Ditch, and the Mammoth Fork Ditch are likely jurisdictional because of their downstream connections to tributaries of the East Gallatin River—a “Water of the U.S.” These connections suggest a Section 404 Permit will be needed for work within these ditches. The jurisdictional status of these irrigation ditches will ultimately be determined by the COE.

The proposed road widening would increase the amount of impervious area for the highway and associated runoff from the roadway. However, the proposed highway reconstruction projects incorporate measures like storm sewer systems in areas with curbs and gutters and roadside drainage ditches to adequately accommodate storm water runoff from the highway.

The proposed highway reconstruction projects would have no long-term effect on the water quality of the area. The activities associated with the proposed projects, including clearing and grading, would increase the short-term and long-term potential for soil erosion and sediment transport. Runoff carrying sediments or other contaminants from disturbed surface areas within the work zone has a minor potential to adversely affect water quality during construction. However, measures to control erosion would be in place to minimize or avoid such temporary impacts.

The placement of any fill material in Waters of the United States would be subject to the conditions of a *Clean Water Act* Section 404 permit issued by the COE. The proposed work would also be in accordance with the *Water Quality Act* of 1987 (**P.L. 100-4**, as amended).

**Erosion Control and Seeding.** Construction activities associated with highway reconstruction, including clearing and grading, would increase the short-term and long-term potential for soil erosion and sediment transport. This potential for erosion and adverse sedimentation impacts would vary depending upon the area disturbed, the nature of the soils disturbed, the steepness of slopes, the proximity of the disturbance to wetlands and surface waters and the duration of the soil disturbances.

Because the area of soil disturbances for each project would exceed 0.4 ha (1.0 acre), a Storm Water Pollution Prevention Plan (SWPPP) and permit administered by the MDEQ would be required. MDT would design and implement a SWPPP for the projects. Best Management Practices (BMPs), including temporary and long-term erosion control measures, would be considered in the design of a SWPPP. The SWPPP would be developed using procedures and methods established in MDT's "Erosion and Sediment Control Best Management Practices: Reference Manual" whose main objective is to minimize erosion of disturbed areas during and after construction. The SWPPP and Notice of Intent (NOI) package would be submitted to the MDEQ Permitting and Compliance Division in accordance with their Montana Pollutant Discharge Elimination System Regulations (ARM 16.20.1314).

**Executive Order No. 13112** addresses the responsibilities of federal agencies with respect to invasive species. According to the University of Montana's Invaders Database, a total of 19 noxious weeds have been identified in Gallatin County. Within the project areas, six noxious weeds were found: Canada thistle, field bindweed, hound's-tongue, Dalmatian toadflax, common tansy, and spotted knapweed. Field bindweed was common along the north side of Norris Road within 500 feet of the Jackrabbit Lane/Huffine Lane/U.S. Highway 191/Norris Road intersection.

Hound's-tongue was found less frequently throughout the entire project areas and dalmatian toadflax was found in one location. Construction would disturb existing noxious weed communities and would create additional habitat suitable for noxious weed establishment within areas of newly disturbed soils.

In accordance with **7-22-2152** and **60-2-208, M.C.A.**, MDT would re-establish a permanent desirable vegetation community along all areas disturbed by the proposed construction. A set of revegetation guidelines would be developed by MDT, which the contractor would be required to follow. The Seeding Special Provisions developed for the projects would be forwarded to the Gallatin County Weed Control Board for review. Additionally, a special provision is typically included in bid documents that remind contractors to comply with MDT Standard Specification 107.11.5 - "Noxious Weed Management." This provision requires contractors to follow the requirements of the *County Noxious Weed Management Act (7-22-2101, M.C.A.)* and all county and contract noxious weed control requirements.

**Important Farmland.** Soils information and mapping for the Jackrabbit Lane area available on U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) Internet website was reviewed to determine the presence of soils meeting the definition of farmland according to the *Farmland Protection Policy Act (FPPA - 7 U.S.C. 4201, et seq.)*. Based on this review, the proposed projects cross 9 soil map units designated as Prime farmland, farmland of local importance, or farmland of statewide importance by the NRCS. These soils (listed by map unit number and name) and their designations include:

- 407A Sudworth-Nesda loam – Farmland of local importance
- 64B Straw loam – Prime Farmland
- 249A Beaverton cobbly clay loam – Farmland of local importance
- 57B Turner loam – Farmland of local importance
- 341A Beaverell-Beavwan loams – Farmland of local importance
- 41A Beaverell loam – Farmland of local importance
- 443A Beavwan loam – Farmland of local importance
- 241A Beaverell cobbly loam – Farmland of local importance
- 43A Beavwan loam – Farmland of statewide importance

All of the soils crossed by Jackrabbit Lane within the project areas are considered farmland of statewide or local importance. Due to the planned road widening and alignment revisions, new right-of-way would be needed along one or both sides of the existing roadway corridor. Based on preliminary estimates of new right-of-way needs, the proposed reconstruction of Jackrabbit Lane would directly convert about 39 acres of soil types considered to be farmland of statewide or local importance.

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A Farmland Conservation Impact Rating form (#AD-1006) was processed for these projects in accordance with the *Farmland Protection Policy Act*. The *Total Points* for the projects' Site Assessment Criteria are 103 points. Coordination with the NRCS resulted in the completion of the attached #AD-1006 form on November 15, 2006. Since the *Total Points* is below the threshold of 260 points, no additional consideration for protection is necessary under 7 CFR 658.4(c).

**Air Quality.** Jackrabbit Lane is located in an unclassifiable/attainment area of Montana for air quality under 40 CFR 81.327, as amended. As such, the proposed Four Corners-North and Belgrade-South projects are not covered under the U.S. ENVIRONMENTAL PROTECTION AGENCY'S (EPA's) Final Rule of September 15, 1997 on Air Quality Conformity. Therefore, the proposed actions comply with *Section 176(c)* of the *Clean Air Act*, as amended (**42 U.S.C. 7521(a)**).

In addition to the National Ambient Air Quality Standards (NAAQS) pollutants addressed by Air Quality Conformity requirements, the EPA also regulates air toxics. Most air toxics originate from human-made sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners) and stationary sources (e.g., factories or refineries).

Mobile Source Air Toxics (MSATs) are a subset of the 188 air toxics defined by the Clean Air Act. MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Some toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline.

The purpose of this project is to to enhance the operational characteristics, safety and physical conditions of the existing facility and accommodate future travel demands by constructing a four-lane facility with a median and providing turn lanes to replace the existing two-lane roadway, providing wider roadway shoulders, and adding turning lanes at the intersection of Jackrabbit Lane/Huffine Lane/U.S. Highway 191/Norris Road. This project will not result in any meaningful changes in traffic volumes, vehicle mix, location of the existing facility, or any other factor that would cause an increase in emissions impacts relative to the no-build alternative. As such, FHWA has determined that this project will generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. Consequently, this effort is exempt from analysis for MSATs.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSATs to decline significantly over the next 20 years. Even after accounting for a 64% increase in VMT, FHWA predicts MSATs will decline in the range of 57% to 87%, from 2000 to 2020, based on regulations now in effect, even with a projected 64% increase in VMT. This will both reduce the background level of MSATs as well as the possibility of even minor MSAT emissions from this project.

Short-term air quality impacts would be anticipated during the reconstruction of Jackrabbit Lane due

to the disturbance of relatively large areas and operation of heavy equipment in work zones. These impacts would be minor and limited to the construction period. If necessary, such effects could also be readily mitigated by implementing measures to control dust.

**Threatened or Endangered Species.** In accordance with *Section 7(a)* of the *Endangered Species Act (16 U.S.C. 1531-1543)*, MDT's consulting biologists reviewed the U.S. FISH AND WILDLIFE SERVICE (USFWS) lists of endangered, threatened, proposed, and candidate species in Montana and range/habitat descriptions found in technical literature. Based on this review, the following listed species were considered with respect to the proposed reconstruction of Jackrabbit Lane:

- Gray wolf (*Canis lupus*) – Listed Threatened
- Warm Spring Zaitzevian Riffle Beetle (*Zaitzevia thermae*) – Candidate Species

The gray wolf is known to occur in Gallatin County. The Warm Spring Riffle Beetle is found only along Bridger Creek northeast of Bozeman in Gallatin County. Based on information from state databases and a local biologist and due to Jackrabbit Lane's location (i.e. near I-90 and within a heavily traveled corridor that lacks suitable habitat for each species), it is unlikely that these species occur in the immediate area. For these reasons, the Biological Resources Report (BRR) concluded the proposed projects would have no effect to the gray wolf or the Warm Spring Zaitzevian Riffle Beetle.

Bald eagles were formerly listed as threatened species in Gallatin County may occur infrequently within the Jackrabbit Lane project areas. However, as of August 8, 2007, the bald eagle was de-listed and the species is no longer considered as a threatened species under the *Endangered Species Act*. Bald eagles remain protected under the federal *Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c)* and the *Migratory Bird Treaty Act (16 U.S.C. 703-712)*. While there is no formal process or requirement for consultation with the USFWS under the *Bald and Golden Eagle Protection Act*, agencies and others are encouraged to follow the National Bald Eagle Management Guidelines.

Grizzly bears were also formerly listed as a threatened species within Gallatin County. Although Jackrabbit Lane generally lies within the boundaries of area inhabited by the Greater Yellowstone Area Distinct Population Segment (DPS) of grizzly bears, there have been no documented or suspected occurrences of grizzly bears in the vicinity of the project areas. On March 29, 2007, the Yellowstone DPS of grizzlies was de-listed and this recovered population is no longer managed as a threatened species under the *Endangered Species Act*. Grizzly bear management plans administered by federal and state wildlife agencies help will ensure a viable population of grizzlies remains in the Greater Yellowstone Area.

Despite delisting, bald eagles and grizzly bears are considered rare and sensitive animal species in Montana. Project-related effects to these and other rare and sensitive species are discussed below.

**Rare and Sensitive Species.** In addition to species listed by the USFWS under the *Endangered Species Act*, other species have been designated as rare, sensitive, or of special concern by the MONTANA NATURAL HERITAGE PROGRAM (MNHP) and the FWP. A search of the MNHP database showed no records of rare or sensitive animal species in the vicinity of the project area. However, bald eagles and grizzly bears were once federally listed as threatened species in Gallatin County.

Potential effects to bald eagles and their habitat would be negligible from the proposed reconstruction of Jackrabbit Lane. The nearest potential nesting and roosting habitat for bald eagles occurs along the Gallatin River, about a mile west of Jackrabbit Lane. However, no bald eagle nest sites are known to occur within 10 miles of the Four Corners-North or Belgrade-South project areas and no nesting or roosting sites have been documented in the immediate vicinity of Jackrabbit Lane. Foraging habitat in the immediate area is limited and irrigation ditches support few fish for bald eagles.

Construction activities during spring and fall could temporarily disturb or displace non-breeding eagles where the roadway is visible from foraging habitat. However, these impacts are minor because no high-quality eagle habitat would be affected; the work would take place in a currently disturbed corridor; and similar undisturbed habitat is abundant and exists nearby for any potentially displaced bald eagles.

According to state databases and information from local FWP biologists, there have been no occurrences of grizzly bears in the project areas and it is unlikely that the grizzly bear would use the project areas given the extensive human presence and lack of suitable habitat. For these reasons, the proposed projects would not impact the grizzly bear or its habitat.

A search of the MNHP database revealed historical occurrences of three rare plants—small dropseed, slender wedgrass, and dwarf purple monkeyflower—at locations within five miles of the projects. There have been no reported observations of any of these plants in the area for more than 65 years. No rare plants or their habitats were observed with the Jackrabbit Lane corridor during field visits. Due to the highly disturbed nature of the project areas and ongoing road maintenance and lack of suitable habitats for these rare plants, negative impacts to these sensitive plant species are unlikely.

No long-term negative impacts or irretrievable losses to rare and sensitive wildlife or habitat or plants are likely to occur as a result of the proposed reconstruction on Jackrabbit Lane. The cumulative impacts of these highway reconstruction projects and other developments in the area would not result in a decline of these species or populations.

**Other Wildlife Resources.** The Jackrabbit Lane area provides habitat for a wide variety of birds, mammals, reptiles and amphibians; however, adjoining lands have been subjected to human disturbance (i.e. residential development, farming, grazing, and irrigation ditch construction) since

the late 1800s. Consequently, the habitat affected by the reconstruction projects is judged to be of low overall quality and wildlife species in the area are likely habituated to human activities and noise due to the presence of the highway, agriculture, and residential and commercial development.

In general, the effects to wildlife resources and habitat in the project areas would be minor and temporary. Road construction could result in direct wildlife mortality to species with limited mobility and/or those that could conceivably occupy burrows or nests at the time of construction. More mobile species, such as adult deer, coyotes, and most adult birds, would be able to avoid direct mortality by moving into adjacent habitat. Wildlife could also be displaced from existing habitat during activities to rebuild the roadway. Similar habitat for species potentially displaced by project activities is abundant and exists nearby. Disruption of plant communities that provide habitat for wildlife will be minimized and disturbances beyond the construction zone will be avoided to the extent practicable.

Animal-vehicle collisions are a relatively common occurrence since lands adjoining Jackrabbit Lane receive year round use by deer. MDT maintenance records show a total of 180 deer mortalities along Jackrabbit Lane between Four Corners and the I-90 Belgrade interchange over the 1998-2003 period. Accident records show that most animal-vehicle collisions occur during the daylight hours. Mitigation measures to help minimize animal-vehicle collisions are limited by the flat topography and ongoing and planned developments adjoining the highway corridor. Few, if any, viable opportunities exist to facilitate wildlife passage beneath the roadway since the only structures in the corridor are shallow and associated with irrigation ditches. Measures to help reduce animal-vehicle collisions or enhance passage such as using wildlife-friendly fencing, installing additional signing, and revegetating roadsides with less palatable species for deer will be considered as the designs for the Four Corners-North and Belgrade-South projects progress.

In accordance with the *Migratory Bird Treaty Act* (16 U.S.C. 703-712 as amended) and **Executive Order No. 13186**, the Four Corners-North or Belgrade-South project areas were reviewed for evidence of nesting and roosting sites to ensure the proposed projects do not result in deaths or injuries to migratory birds. Field investigations did not identify significant nesting habitat for birds in the project areas.

**Vegetation.** Within the Jackrabbit Lane corridor, native vegetation consists primarily of wheatgrasses, fescues, and needle-and-thread grass. Large cottonwoods and various shrubs can be found along several irrigation ditches within the project areas. Native vegetation has been converted to agriculture generally dominated by smooth brome and a variety of other native and exotic shrubs and herbaceous vegetation. Adjacent to the right-of-way, cultivated fields and pasturelands dominate; although, landscaping associated with residential and commercial development is increasingly along the roadway corridor.

The proposed highway improvements would result in the permanent loss of some vegetation adjoining the roadway due to minor alignment changes, road widening, and the addition of a

separated pedestrian/bicyclist path. The vegetation loss would include the removal of numerous mature cottonwoods along irrigation ditches adjacent to the east side of Jackrabbit Lane north of Durston Road. Temporary disturbances would occur where vegetation is cleared from the right-of-way and at staging areas or borrow sites.

**Aquatic Resources.** The Gallatin River, located a mile or more west of Jackrabbit Lane, is the nearest natural stream. There are no crossings of the Gallatin River or any of its tributary streams within the project areas. However, water from the Gallatin River is conveyed to the northeast through irrigation ditches crossed by the roadway. Each main irrigation ditch crossed by Jackrabbit Lane connects to tributaries of the East Gallatin River and ultimately with the Gallatin River.

Coordination with the FWP indicates fish use the irrigation ditches in the area. In general, fish present in the Gallatin River (including rainbow trout, mountain whitefish, brown trout, mottled sculpin, and long-nosed dace) could also be found in the Lower Middle Creek Supply Ditch, and the Mammoth, Mammoth Fork, Spain-Ferris, and Beck-Border Ditches. Although fish may be present, irrigation ditches represent low quality fish habitat due to shallow and warm water conditions and because flows cease during the winter months trapping and often killing fish. No rare fish species are expected to occur in project area irrigation ditches.

The bridge over the Spain-Ferris Ditch would be replaced with a new box culvert designed to maintain fish passage within the irrigation canal. The new culvert for the Mammoth Fork Ditch would also be designed to maintain fish passage. Both new box culverts would be depressed about 1 foot to provide for fish passage and maintain a natural bottom in within the ditches. There are no plans to replace the existing bridge that crosses the Lower Middle Creek Supply Ditch or the existing culvert for the Beck-Border Ditch located on Norris Road.

Vegetation clearing, highway fill placement, the removal of existing structures at road crossings, minor ditch realignments, and the installation of new culverts could affect water quality in irrigation ditches and result in minor indirect impacts to aquatic resources. However, impacts to aquatic resources in irrigation ditches would be avoided or minimized by implementing best management practices for erosion control and storm water management. Temporary erosion controls will be installed and maintained within the project areas to minimize the possibility of sediments entering irrigation ditches and downstream surface waters. As necessary, MDT will obtain and comply with conditions associated with water quality permits to help safeguard aquatic resources.

**Wetlands.** A biological resources consultant delineated wetlands in the Jackrabbit Lane corridor according to criteria and methods outlined in the U.S. ARMY CORPS OF ENGINEERS (COE) *1987 Wetlands Delineation Manual* and the *MDT Montana Wetland Assessment Method*. The COE manual and MDT method provide guidance for determining the presence of jurisdictional wetlands based on observations of vegetation, soils and hydrology. Wetland location maps, found plant species lists, COE Routine Wetland Determination forms and MDT Montana Wetland Assessment

forms were completed for wetland sites identified within the project areas. The BRR contains these materials and discusses potential impacts to wetland sites.

Wetlands are relatively extensive and found on both sides of the existing highway corridor. Twenty-four (24) wetland areas were delineated within the Four Corners-North and Belgrade-South project areas. Of the 24 delineated wetlands, 11 are connected directly to a major irrigation ditch and 13 connect to an ephemeral, linear roadside ditch. All wetlands, except one, are dominated by emergent vegetation, although several wetlands also have a scrub-shrub component. All wetlands are dominated by emergent vegetation including Baltic rush, Canada thistle, curly dock, meadow foxtail, Nebraska sedge, reedtop, reed canarygrass, tall manna grass. Several wetlands sites also contain scrub-shrub species like willows and cottonwood. Hydrology at most sites is supplied by a combination of surface runoff and sub-surface seepage from the main irrigation canals. All wetlands were rated as either Category III or IV using the 1999 MDT *Montana Wetland Assessment Method* and almost all sites were highly disturbed due to grazing, farming, or proximity to roads.

Highway reconstruction would impact 18 of the 24 delineated wetlands within the Jackrabbit Lane project areas. Preliminary investigations suggest that proposed reconstruction projects would result in the loss of approximately 4.90 acres of wetland including 0.08 acres considered likely jurisdictional under the *Clean Water Act*, 4.77 acres considered likely non-jurisdictional, and 0.05 acres of undetermined jurisdiction. Jurisdiction will ultimately be decided by the COE for each of the wetlands identified within the project area. Based on the functional assessments for impacted wetlands, 9 Category III wetlands totaling 2.28 acres and 7 Category IV wetlands totaling 2.62 acres would be impacted.

The proposed Four Corners-North project would impact an estimated 0.29 acres of wetland including 0.21 acres of Category III and 0.08 acres of Category IV wetland.

The proposed Belgrade-South project would impact an estimated 4.61 acres of wetland including 2.07 acres of Category III and 2.54 acres of Category IV wetland. The anticipated impacts would primarily be the result of fill placement in wetland sites.

Reconstructing Jackrabbit Lane would result in unavoidable encroachments into some roadside ditch wetlands due to the proposed alignment shifts and roadway widening. Opportunities to avoid or minimize wetland impacts will continue to be investigated as design activities for the proposed projects continue.

Compensatory mitigation for wetland impacts will be developed in compliance with the COE regulations and guidelines as stipulated in Regulatory Guidance Letter 02-02, dated December 24, 2002 "*Guidance on Compensatory Mitigation Projects for Aquatic Resource Impacts Under the Corps Regulatory Program Pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbor Act of 1899*", as well as the EPA/COE joint Memorandum to the Field issued on

November 7, 2003 “*Model Compensatory Mitigation Plan Checklist for Aquatic Resource Impacts Under the Corps Regulatory Program*”.

**Land Use.** The Four Corners-North and Belgrade-South projects are situated between the developed area at Four Corners and the southern outskirts of the City of Belgrade. Four Corners, encompassing an area of about 10 square miles surrounding the intersection of Jackrabbit Lane, Huffine Lane/Norris Road, and U.S. Highway 191, is an unincorporated but rapidly growing commercial and residential area in the county. Numerous commercial uses and residences adjoin Jackrabbit Lane in the urbanized area north of Frank Road at the southern edge of the City of Belgrade.

Scattered farms and ranches and rural residences access Jackrabbit Lane between Huffine Lane/Norris Road and Frank Road. The principal agricultural land uses in the highway corridor are cattle ranching and cultivation of irrigated hay and small grains. Lands adjoining this section of Jackrabbit Lane are all privately owned. Public recreational opportunities exist at the Shed’s Bridge and Cameron Bridge Fishing Access Sites located on the Gallatin River west of Jackrabbit Lane and accessed via Norris Road and Cameron Bridge Road. Gallatin County also operates a maintenance facility west of Jackrabbit Lane accessed from Baxter Lane.

Agricultural uses in the project area are being displaced by new subdivisions and residential development. Seven existing major subdivisions and six additional large subdivisions currently proposed or in the initial stages of development are located within two miles of Jackrabbit Lane. Several of these subdivisions, including the approved Northstar and Gallactic Park, Gallatin Heights, and Kennedy Subdivisions, are located directly adjacent to Jackrabbit Lane. The North Star/Galactic Park Subdivisions, located northwest of the Huffine Lane/U.S. Highway 191/Norris Road/Jackrabbit Lane intersection, consists of lots for more than 500 residential dwelling units and more than 70 lots for light industrial and commercial/office uses. The Gallatin Heights Subdivision is a proposed 340-plus lot subdivision located west of Jackrabbit Lane between Hulbert and Valley Center Road. The Kennedy Subdivision is located west of Jackrabbit Lane between Durston Road and Baxter Lane.

Dykstra Farms, a 446-lot proposed subdivision located along the east side of Jackrabbit Lane between Cameron Bridge Road and Valley Center Road along Jackrabbit Lane south of Belgrade, is currently seeking preliminary plat approval. If approved, the 298-acre property could be developed with 445 single-family homes with one commercial lot featuring up to eight businesses.

**Planning Jurisdictions/Land Use Plans.** The area adjoining Jackrabbit Lane between Huffine Lane/Norris Road to Hulbert Road falls under Gallatin County’s planning jurisdiction. Land use and development in this portion of the corridor is generally guided by the *Gallatin County Growth Policy* adopted by Gallatin County in April 2003. Overall, the document elaborates long-range goals and specific policies to ensure that growth and development in the county occurs in a coordinated, environmentally-sound, and cost-effective manner. Specific to transportation, the *Growth Policy*

lists a primary goal of providing a safe and efficient transportation system by promoting multimodal opportunities including development consistent with the countywide trails plan.

The Four Corners-North project area falls within planning area boundary of the *Four Corners Community Plan*, a “neighborhood plan” developed under the umbrella of the *Gallatin County Growth Policy*. The Gallatin County Commission adopted the *Four Corners Community Plan* on April 11, 2006 as a Neighborhood Plan.

The area north of Hulbert Road falls within the City of Belgrade’s planning jurisdiction. Land use and development in this area is guided by the *Belgrade Area Growth Policy* adopted by the Belgrade City-County Planning Board on October 30, 2006. The primary goal of the *Belgrade Area Growth Policy* is to improve the efficiency of land use in the planning jurisdiction by concentrating development within and adjacent to the community. Outside the City of Belgrade, the *Growth Policy* encourages the preservation of farmland, open space, and protection of the East and West Gallatin Rivers.

Land Use Regulations. The Gallatin County Commission has the authority to zone areas of its planning jurisdiction outside the City of Belgrade’s jurisdictional area. Land uses are managed through compliance with Gallatin County’s planning statutes and subdivision regulations. However, the County has not established zoning on any lands adjacent to Jackrabbit Lane (including lands within the recently established planning boundary for the *Four Corners Community Plan*).

The City of Belgrade’s zoning jurisdiction extends 1 mile beyond the city limits. For this reason, the only lands presently zoned by the City of Belgrade exist in the Belgrade-South project area. Properties north of Frank Road and west of Jackrabbit Lane are zoned Residential Suburban (R-S) or Highway Business (B-2). Properties south of Frank Road and immediately east of the highway are zoned B-2 or Commercial-Light Manufacturing (M-1). B-2 zones provide for a broad range of retail and service functions especially highway-oriented businesses. R-S zones are intended for single-family development in areas not served by central sewer and water or areas with physical limitations. M-1 accommodate wholesale trade, storage and warehousing, trucking and transportation terminals, light manufacturing and similar activities.

Overall, the land use impacts associated with reconstructing Jackrabbit Lane are considered minor. Minor amounts of land adjacent to the existing facility would be converted from their present uses to highway right-of-way. The proposed improvements to Jackrabbit Lane would facilitate access to and from adjacent lands and make travel through the corridor safer and more efficient.

The Jackrabbit Lane corridor is located in an area already transitioning from existing uses (predominately agricultural over most of the corridor) to new residential and commercial uses. Unless current economic conditions change, substantial residential and commercial subdivision activity is expected to continue in this highway corridor. The proposed highway reconstruction, in and

of itself, would not cause notable changes to adjacent land uses, encourage new or undesirable growth or development, eliminate or substantially alter access to adjacent properties, or alter property values.

**Right-of-Way and Utilities.** The existing right-of-way corridor for Jackrabbit Lane ranges from about 100 to 175 feet in width and encompasses about 100 acres. The proposed new right-of-way for the Jackrabbit Lane corridor (consisting of both existing and new right-of-way areas) would generally range from 180 to 195 feet in width. An estimated 39 acres of additional right-of-way would be required to accommodate the planned road widening, minor horizontal alignment shifts, and installation of a separated pedestrian/bicyclist path.

Minor amounts of additional right-of-way would be need on the south and west approaches to accommodate planned improvements at the intersection of Huffine Lane/U.S. Highway 191/Norris Road/Jackrabbit Lane. MDT intends to acquire sufficient right-of-way for the future build out of the intersection; however, only a portion of the improvements would initially be built with the Four Corners-North project.

The reconstruction of Jackrabbit Lane would not require the relocation of any households in the Four Corners-North project area. Preliminary plans indicate that a household located in the southeast quadrant of the route's intersection with Cameron Bridge Road may be displaced by the Belgrade-South project. Reconstructing Jackrabbit Lane would not require the relocation of any businesses along the highway corridor.

The acquisition of land or improvements for highway construction is governed by state and federal laws and regulations designed to protect both the landowners and taxpaying public. Landowners affected are entitled to receive fair market value for any land or buildings acquired and any damages as defined by law to remaining land due to the effects of highway construction. This action would be in accordance with the *Uniform Relocation Assistance and Real Property Act* of 1970 (**P.L. 91-646** as amended), (**42 U.S.C 4601**, et. seq.) and the *Uniform Relocation Act Amendments* of 1987 (**P.L. 100-17**).

Due to the likelihood that adjacent lands will continue to be developed, it is possible that some right-of-way may be donated and other improvements necessary for the reconstruction of Jackrabbit Lane may be installed by private developers.

Access management would be implemented with a goal of maintaining reasonable access to all residents and businesses within the corridor. Access management along Jackrabbit Lane between Four Corners and Belgrade would help address significant traffic safety concerns and enhance the operation of the roadway resulting in benefits to adjoining properties.

Overhead power and underground telephone, gas, fiber optic, and irrigation lines exist along the

Jackrabbit Lane corridor. Various utilities may be in conflict with the proposed highway improvements. Conflicting utilities would be relocated and/or replaced with the proposed projects.

A NorthWestern Energy high-pressure natural gas transmission line is located along the west side of Jackrabbit Lane between Four Corners and Baxter Lane and along the east side of the highway north of Baxter Lane. Horizontal alignment shifts may require relocating portions of the existing natural gas line. The proposed highway reconstruction would avoid impacts to an existing electrical substation located west of the highway and north of Huffine Lane/U.S. Highway 191/Norris Road (adjacent to a mobile home park).

The Four Corners County Water and Sewer District recently installed sewer lift station and may install other water and sewer lines in the vicinity of Jackrabbit Lane in the foreseeable future. Coordination with the Water and Sewer District would help minimize conflicts between these utility installations and the proposed road construction on Jackrabbit Lane.

**Traffic and Circulation Impacts.** This project is intended to enhance the capacity and level of service of the existing roadway and increase safety for roadway users. Other than restructuring access from the highway to some adjoining properties and reconfiguring public road intersections, no long-term changes to overall travel patterns would be likely due to the reconstruction of the highway. Reconstructing the roadway would not result in traffic increases above those already expected to occur on this route.

MDT prepared an Access Management Plan to enhance the traffic safety and mobility on Jackrabbit Lane by managing and spacing approaches along the route. The Access Management Plan shows the location, configuration, ownership, and land use type for each access within the corridor and establishes guidelines for the approval of new accesses by MDT. New accesses, subdivisions, or accesses with changes in use would be required to meet the guidelines. Conformance with the access management guidelines will help ensure that the function and operation of Jackrabbit Lane is preserved once the corridor becomes developed. The access control resolution for the Four Corners-North project area was approved by the Montana Transportation Commission in October 2006.

The proposed highway reconstruction projects would impact traffic on the route during construction periods. MDT would implement a traffic control plan to minimize the effects of construction on traffic circulation and to ensure work zone safety. Reasonable access to properties adjacent to the project areas would be maintained during construction.

**Pedestrian and Bicyclist Considerations.** Although counts are not available to quantify such use, Jackrabbit Lane receives only limited use by pedestrians and bicyclists. The majority of the existing facility has a typical paved surface width of 32 feet wide leaving only 4 feet of paved shoulder for travel by bicyclists. Pedestrians must also use the road's paved shoulder or unpaved roadside slopes for walking along the highway. The type and volume of traffic and travel speeds on the roadway

also limits the use of Jackrabbit Lane by pedestrians and bicyclists.

While the current demand for pedestrian-bicyclist facilities is low, future development along the Jackrabbit Lane corridor could increase the number of residences and commercial destinations in this area. With such development, the demand for pedestrian and bicyclist facilities would likely increase in the project corridor. For this reason, local pedestrian/bicycle advocates have expressed that well-designed bicycle-pedestrian facilities along Jackrabbit Lane are desirable and should be a component of this project.

A separated pedestrian/bicycle path would be provided over the length of the Four Corners-North and Belgrade-South project areas. This would substantially improve pedestrian and bicyclist facilities in the corridor and allow for a connection to planned trail facilities along East Valley Center Road (Secondary Highway 235) east of Jackrabbit Lane identified in the Draft "*Connecting Communities: Gallatin County Trails Report & Plan*" prepared for the Gallatin County Planning Board in March 2001. The provision of a pedestrian/bicyclist path along Jackrabbit Lane would be consistent with recommendations for such facilities contained in the *Greater Bozeman Area Transportation Plan Update*.

**Social Impacts/Environmental Justice.** Adverse social effects are not expected due to the implementation of the proposed Four Corners-North and Belgrade-South projects. In general, the proposed reconstruction of Jackrabbit Lane would result in positive benefits through added roadway capacity, access management, and enhanced traffic safety within this highway corridor. The proposed projects would not affect the location, distribution, density or growth rate of the population in the vicinity and would not change travel patterns. The proposed improvements would not adversely affect any social or ethnic groups nor would they isolate or divide any existing residential areas.

The proposed reconstruction projects would be in accordance with **Executive Order No. 12898**, and would not create disproportionately high and adverse human health or environmental effects on minority and/or low-income populations. This conclusion was based on data from the 2000 Census indicating the percentage of minority residents in the Jackrabbit Lane area is considerably less than that of the State of Montana and all of Gallatin County. The Census data also shows the percentage of families living below the poverty line in the Jackrabbit Lane area is lower than for the State and that the percentage of individuals 18 years and older living in poverty is well below both State and County levels.

The proposed projects would also comply with the provisions of *Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d*, as amended) under the FHWA's regulations (23 CFR 200).

**Economic Impacts.** The most apparent economic impact of this alternative is the need to acquire new right-of-way from adjacent landowners. About 39 acres of additional right-of-way would be acquired for the proposed reconstruction of Jackrabbit Lane. It is possible that some right-of-way

needed for the project could be acquired through future dedications by developers.

Right-of-way acquisition would permanently remove a minor amount of residential, commercial, and agricultural land from production and taxes paid on the land to Gallatin County would be lost. This loss in property tax revenue would be expected to have a negligible effect on County revenues.

Notable effects to the economy of Gallatin County or the City of Belgrade are not anticipated from these proposed projects. However, the local economy could see minor positive benefits if area workers and craftsmen are employed for road construction or if workers require temporary housing in the area. Road users would realize minor long-term economic benefits through the provision of a safer and more efficient travel route.

**Hazardous Materials.** During 2006 and 2007, MDT's consultant researched on-line data bases of federal, state, and local agencies for information on regulated facilities within a reasonable distance of the proposed project. The environmental records search did not identify any regulated sites or any other environmental conditions posing hazardous materials concerns within the Jackrabbit Lane project area or in the immediate vicinity of the Huffine Lane/U.S. Highway 191/Norris Road/Jackrabbit Lane intersection. Historic land uses in the area and the results of the environmental records review did not indicate the need for a Preliminary Site Investigation (PSI) or special mitigation measures for hazardous materials or substances.

Disposal of non-salvageable and leftover materials would be in accordance with all applicable laws, rules, and regulations, including the *Montana Solid Waste Management Act (75-10-203, M.C.A.)*. The Contractor(s) will be required to take precautions to minimize the effects of construction operations and to prevent leaks or spills of fluids from construction equipment.

**Noise Impacts.** The proposed reconstruction projects on Jackrabbit Lane involve adding through travel lanes and horizontal alignment shifts that would move the highway closer to receptors. For these reasons, the proposed projects qualify as Type I projects according to 23 CFR 772 and require a traffic noise impact assessment.

In October 2007, MDT's noise consultant completed a traffic noise impact assessment based on field measurements of ambient noise levels and current and projected design year traffic for the project corridor. The noise assessment was completed following guidelines from MDT's *Traffic Noise Analysis and Abatement: Policy and Procedure Manual, June 2001* and FHWA's *Procedures for Abatement of Highway Traffic Noise and Construction Noise*.

As part of the work, three ambient noise level measurements were conducted at representative receptors along the highway corridor. These measurements were used to help determine ambient noise levels and to verify that the computer model used to predict the traffic noise levels was reasonably accurate. FHWA's Traffic Noise Model (TNM) Version 2.5 software program was used to predict the existing and Design Year (2030) traffic noise levels at 49 existing sensitive receptor

locations and 68 sensitive receptor locations in planned and proposed subdivisions along Jackrabbit Lane. Existing noise-sensitive receptors along Jackrabbit Lane included single-family residences, mobile homes, apartments, and churches.

As discussed previously, several large residential developments have already been approved and others are in various stages of planning within the Jackrabbit Lane corridor. Since noise-sensitive uses are planned for these developments and could be affected by traffic noise with or without the proposed projects, 68 future receptors were identified for noise modeling. These receptors consisted of lots where single-family residences or condominiums may be constructed in planned or proposed subdivisions along Jackrabbit Lane.

23 CFR 772 and MDT's *Traffic Noise Analysis and Abatement: Policy and Procedure Manual* indicates traffic noise impacts occur for roadway projects when the predicted Leq(h) noise level at a receptor location in a project's Design Year approaches or exceeds the Noise Abatement Criteria (NAC) values for specified activity categories, or when the predicted traffic noise levels in the Design Year substantially exceed the existing ambient noise levels at a receptor. MDT defines "approach" as 1 dBA, and "substantially exceed" as 13 dBA. When traffic noise impacts are identified at noise-sensitive receptors, MDT requires that reasonable and feasible noise abatement measures be considered to reduce the traffic noise levels at the receptor.

For Activity Category B land uses, such as residences, mobile homes, churches, parks, schools, etc., the NAC is 67 dBA. Traffic noise impacts occur if the predicted traffic noise levels are 66 dBA or greater in the Design Year of a project, or if the predicted traffic noise levels are 13 dBA higher than the current noise levels. For Activity Category C land uses, including commercial properties considered less sensitive to noise, the NAC is 72 dBA. Since MDT does not typically provide noise abatement for Category C properties, only Category B receptors were analyzed in detail.

Without undertaking the proposed projects, modeling showed MDT's noise impact criterion (66 dBA) is presently met or exceeded at 6 existing Category B receptor locations within the Jackrabbit Lane corridor and would likely be exceeded at 29 of the 49 existing receptors in the Design Year (2030). The noise model predicted Design Year traffic noise levels to be 4 to 5 dBA higher than current levels due to the projected increase in traffic volumes on Jackrabbit Lane. Modeling showed existing traffic noise levels at receptors in planned and proposed subdivisions along the corridor do not approach 66dBA and noise levels would likely not meet MDT's noise impact criterion at these locations in the Design Year.

With the proposed reconstruction projects, traffic noise impacts would likely be experienced at 38 of the 49 existing Category B receptors in the project area. This total includes 29 of the same receptor locations where noise impacts were likely if no changes were made to Jackrabbit Lane. The Design Year traffic noise levels at affected receptors would likely be 5 to 10 dBA above current traffic noise levels. Additionally, traffic noise impacts were predicted at 40 of the 68 future

Category B receptors in planned and proposed subdivisions in the Design Year. The impacted receptors represent 4 condominium lots (16 receptors) in the approved Northstar Subdivision, 8 single-family lots in the approved Gallatin Heights Subdivision, and 28 single-family lots in the proposed Dykstra Farms Subdivision. The Design Year traffic noise levels are predicted to be about 7 to 10 dBA above current traffic noise levels in these subdivisions.

MDT's consultant evaluated a variety of traffic noise abatement measures to help reduce predicted noise impacts including the construction of noise barriers and/or berms, traffic management, the use of quiet pavements, and incorporating noise-compatible development concepts on planned or proposed properties adjacent to the highway. This evaluation concluded that lowering the speed limit by 10 mph to 60 mph could reduce the predicted traffic noise impacts by 16% at existing receptors and by almost 88% at receptors in planned and proposed subdivisions along the corridor. A barrier may be a cost-effective option for tightly grouped receptors along some parts of the corridor. Other noise abatement measures were unlikely to satisfy MDT's criteria for being reasonable and feasible for all receptors.

Development strategies incorporating noise-compatible design concepts are proactive and preventative in nature, and can help avoid future traffic noise impact problems. MDT's *Neighborhoods in Growing Corridors: Land Use Planning for Highway Noise* recommends locating outdoor use areas and building facades closest to the roadway in areas where traffic noise levels are 60 dBA or less. If the 60 dBA criteria can be met through site planning, then the need for many traffic noise control measures can be avoided. Noise modeling shows that to meet MDT's recommended 60 dBA noise level, areas of frequent outdoor use or building facades in future developments along the project corridor should be located no closer than 550 feet from the centerline of Jackrabbit Lane.

Local officials should encourage developers to consider and implement noise-compatible development concepts on their planned or proposed developments along Jackrabbit Lane. MDT will distribute copies of this Categorical Exclusion (and the Noise Study for these projects) to the City of Belgrade and Gallatin County and recommend local officials strongly encourage current and future developers to adhere to the 550-foot setback and incorporate other noise-compatible design concepts on their properties or in residential buildings constructed near the highway.

The date of public knowledge of a proposed roadway project is used to determine if noise abatement should be the responsibility of MDT and local government agencies or developers. After this date, MDT is no longer responsible for providing noise abatement for new developments platted along Jackrabbit Lane. FHWA's concurrence date for this Categorical Exclusion will be the date of public knowledge for the proposed Four Corners-North and Belgrade-South projects. MDT will recommend that local officials include a statement with future development approvals or building permits indicating that avoiding traffic noise abatement or providing the necessary noise abatement measures is the responsibility of the developer.

**Visual Impacts.** The Jackrabbit Lane corridor has a wide range of natural and man-made features that contribute to the visual setting of the project area. Natural features include seasonal drainages and irrigation ditches with riparian vegetation, isolated stands of trees near the roadway, grasslands, and agricultural fields. Man-made features include commercial buildings at Four Corners and at the north end of the project, isolated residences and clustered residential areas, overhead utilities and associated facilities, and agricultural buildings.

The proposed highway reconstruction would not change views of the background landscapes along Jackrabbit Lane but would cause minor changes to the foreground landscape of the highway corridor. The width of the new roadway would be greater than that of the existing facility due to its increased pavement width and revised roadside slopes. Some irrigation ditches near the roadway would be relocated. The addition of “urban” features like curb and gutter, a separated path for pedestrians and bicyclists, and the possibility of future signalized intersections with overhead lighting at some locations would be apparent visual changes. These highway modifications would be noticeable to residents and highway users familiar with the previous roadway setting.

The proposed Four Corners-North project would likely require the removal of mature cottonwoods growing along sections of the Beck-Border and Spain-Ferris Ditches east of Jackrabbit Lane. The loss of these trees is unavoidable due to their close proximity to the existing road and the need to shift the alignment eastward. The tree loss would be an apparent visual change for some residents of the corridor and frequent highway users. However, some of the cottonwood trees that would be affected by the proposed highway reconstruction have already been removed and more trees would likely be cut to accommodate new developments on adjoining private lands.

Minor, short-term visual impacts would occur during the construction period including surface disturbances and clearing until seeded areas grow in; temporary sign installations; the on-site storage of necessary equipment and material; and dust and debris from construction activities.

**Historical/Cultural Resources.** A cultural resources report was completed for the proposed projects in November 2006 by an MDT consultant. The report identified eight sites within the project areas on Jackrabbit Lane including three historic irrigation ditch systems, an abandoned railroad grade, and four historic architectural properties. The cultural resources report recommended only one of these sites, the William and Mary Stevens Farmstead (24GA1755), as eligible for the NATIONAL REGISTER OF HISTORIC PLACES (NRHP).

MDT agreed with the consultant’s eligibility determination for the Stevens Farmstead but also recommended that sections of the Mammoth Ditch (24GA741/1067), the Beck-Border Ditch (24GA742), and the Spain-Ferris Ditch (24GA743) as eligible for the NRHP. MDT received a letter from the Montana STATE HISTORIC PRESERVATION OFFICE (SHPO) on December 7, 2006 concurring with the NRHP-eligibility determinations for the Stevens Farmstead and the three historic irrigation ditches in the Jackrabbit Lane corridor. A copy of SHPO’s letter is attached.

The proposed reconstruction of Jackrabbit Lane would require minor amounts of new right-of-way from the William and Mary Stevens Farmstead and would likely eliminate an unnecessary driveway approach at this historic property. Based on consideration of the criteria of adverse effect listed in 36 CFR 800.5 (a)(1), MDT determined there would be **No Effect** to the William and Mary Stevens Farmstead (24GA1755).

The proposed highway reconstruction would affect sections of the historic Beck-Border Ditch (24GA742), Spain Ferris Ditch (24GA743), and Mammoth Ditch (24GA741/1067). New box culverts would be installed to replace an existing bridge (over the Spain-Ferris Ditch) and existing culverts where the road crosses the Beck-Border and Mammoth Fork Ditches. Portions of the ditches near the inlets and outlets of the new culverts may have to be reconstructed. Additionally, the Four Corners-North project would also impact a section of the Beck-Border Ditch that parallels the existing road and fall within the new construction limits. A new section of ditch would be constructed to replace the impacted section of the Beck-Border Ditch. MDT determined the proposed reconstruction would have **No Effect** to 24GA741/1067, 24GA742, and 24GA743.

MDT received a letter from SHPO on January 25, 2007 concurring with the determinations that the proposed highway reconstruction work would have **No Effect** to the William and Mary Stevens Farmstead (24GA1755), the Beck-Border Ditch (24GA742), the Spain Ferris Ditch (24GA743), or the Mammoth Ditch (24GA741/1067). A copy of SHPO's concurrence letter is attached.

A supplemental cultural resources report was completed during October 2007 to address proposed work at the intersection of Jackrabbit Lane with Huffine Lane, U.S. Highway 191, and Norris Road. The supplemental report identified three historic irrigation ditches—a segment of the NRHP-eligible Beck-Border Ditch (24GA742), the Lower Middle Creek Supply Ditch (24GA1627) and Barker Ditch (24GA1781)—in the vicinity of the intersection. The supplemental report recommended the Lower Middle Creek Supply Ditch and Barker Ditch as not eligible for the NRHP. However, MDT recommended the identified sections of the Beck-Border Ditch, Lower Middle Creek Supply Ditch, and Barker Ditch as eligible for the NRHP. On November 9, 2007, MDT received a letter from the Montana SHPO concurring with the determination these ditches were NRHP-eligible. A copy of SHPO's letter is attached.

The proposed reconstruction work along U.S. Highway 191 would end about 300 feet north of the Barker Ditch and nearly 900 feet north of the Lower Middle Creek Supply Ditch crossing. The project limits on Norris Road end approximately 900 feet east of the Beck-Border Ditch crossing. Consequently, the Beck-Border Ditch, the Lower Middle Creek Supply Ditch, or Barker Ditch in Four Corners would not be affected by the proposed projects.

**Section 4(f) Impacts.** *Section 4(f)* of the 1966 *Department of Transportation Act (49 U.S.C. 303)* provides for the protection of publicly-owned parks, recreation lands, historical sites, and wildlife and waterfowl refuges. There are no public parks or wildlife or waterfowl refuges within the area that would be affected by the proposed action. Two public recreation sites (Shed's Bridge and Cameron Bridge Fishing Access Sites) are located along the Gallatin River west of the highway corridor and accessed via roads connecting to Jackrabbit Lane. The proposed highway reconstruction would not eliminate these access routes or otherwise impact these FWP facilities.

As discussed earlier, eleven historic sites were identified and evaluated within the Four Corners-North project area. Of these sites, the William and Mary Stevens Farmstead (24GA1755) the Mammoth Ditch (24GA741/1067), the Spain-Ferris Ditch (24GA1755), the Beck-Border Ditch (24GA742), the Lower Middle Creek Supply Ditch (24GA1627), and Barker Ditch (24GA1781) were determined eligible for the NRHP. *Section 4(f)* evaluation forms were not prepared for the William and Mary Stevens Farmstead or the historic irrigation ditches since the proposed road reconstruction would have no effect to the historic sites.

**Indirect Effects.** Indirect (secondary) effects are those caused by the proposed highway reconstruction projects but that occur at a different time and/or place. Transportation improvements often have the potential to induce growth and change patterns of land use, population density or growth rates, social and economic conditions, accessibility, traffic volumes, noise levels. Such induced changes may in turn, affect air and water quality and other natural systems.

The indirect effects associated with the Four Corners-North and Belgrade-South projects are expected to be minor and generally beneficial. This conclusion was made because the primary purpose of the projects is to improve the safety and operational characteristics of an existing roadway through design changes and access management. The resulting facility would make travel on Jackrabbit Lane safer, more efficient, and more convenient for area residents and other highway users.

Other minor indirect impacts that would likely occur include:

- Increases in the amount of impervious surface area and runoff in the highway corridor would result from roadway widening.
- Upgrades to utilities in the project corridor may occur due to utility relocations.
- The minor loss of "Farmland of Statewide or Local Importance" would contribute to the continuing loss of farmland resources in Gallatin County.
- Pedestrian and bicyclist transportation in the corridor and this portion of the Gallatin Valley would be enhanced.

Gallatin County has been and is expected to continue to be one of Montana's fastest growing counties. From 1990 to 2000, the County's population grew by more than 34 percent to total about

68,000, an increase of more than 17,000 people in one decade. Over the same period, the State of Montana grew by about 13 percent. The County's current population is estimated to be 12,600 more than during the 2000 Census and population growth is projected to remain at high levels. According to the *Gallatin County Growth Policy*, the County's population could reach 116,000 by the year 2030 and more than 20,000 new households would be needed to accommodate the predicted growth.

The proposed reconstruction of Jackrabbit Lane may indirectly contribute to further growth and development in this portion of Gallatin County area by enhancing the efficiency and safety of a route commonly used by commuters in the Bozeman-Belgrade area. While this is a possibility, there are too many other factors that promote growth to make accurate predictions about exactly where and when such growth may occur. These factors include items such as the state of the economy, land prices, vehicle fuel prices, tax levels and the availability of public services and infrastructure.

Subdivision and development of lands adjoining Jackrabbit Lane has already occurred and would likely continue even without the proposed projects. With the exception of some small isolated residential properties within the Jackrabbit Lane corridor, the ownerships of virtually all lands adjacent to the roadway have been consolidated and subdivisions are proposed or likely on most of these lands in the foreseeable future. Reconstructing Jackrabbit Lane would not cause current property owners and developers to build faster or any differently than they would have without the proposed projects.

Additionally, the proposed projects would not provide new access or substantially change access to lands adjoining the highway. For these reasons, it is reasonable to conclude that reconstructing this existing roadway would not induce substantial new growth and development in the project area. It is certain that such development, should it occur, would happen independently of this MDT project. In short, the proposed reconstruction of Jackrabbit Lane is a necessary response to the ongoing and anticipated demands of population growth and new development in this area of Gallatin County.

**Cumulative Impacts.** Cumulative impacts are those effects that result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions regardless of what agency (federal or non-federal) undertakes such actions. In order to help evaluate possible cumulative effects, research was conducted to identify other known or planned projects in the vicinity of the Four Corners-North and Belgrade-South projects.

**I-90 East Belgrade Interchange.** Gallatin County, the City of Belgrade, and the Gallatin Airport Authority, in cooperation with FHWA and MDT, are considering a project that could provide a new I-90 interchange in the Belgrade area and enhance intermodal connections at Gallatin Field Airport. If implemented, the new interchange and other associated local road improvements would help reduce congestion and improve regional and local mobility.

A new interchange at East Belgrade and other associated road system improvements would affect

travel patterns and traffic volumes on the Belgrade area road system including Jackrabbit Lane. Travel demand modeling for the project suggests traffic volumes on Jackrabbit Lane north of Valley Center Road could decrease as a result of the new interchange and that traffic volumes at the existing I-90 Belgrade Interchange could be substantially reduced. The modeling results also indicate traffic volumes could increase notably on other major roads linking Jackrabbit Lane to a new East Belgrade interchange.

An Environmental Assessment (EA) is currently being prepared for the interchange proposal. The I-90 East Belgrade Interchange may be built within the next 5 to 10 years (or sooner) depending on environmental clearances and securing sufficient funding for the project from involved parties.

Other Active or Planned Projects by MDT. The following projects (identified from the 2007-2009 Final Surface Transportation Improvement Program-STIP) are active, planned or proposed projects on the state-maintained road system in the general vicinity of Jackrabbit Lane:

- Belgrade Interchange; NH 85-1(17)6; CN 6214 – This planned project would chip seal about 0.40 miles of MT Highway 85 at the I-90 Belgrade Interchange just south of the City of Belgrade. The project is scheduled for implementation in Fiscal Year 2007.
- Huffine Lane Access Management Study; STPP 50-2(46)82; CN 4864 – This active project will result in an Access Management Plan for Huffine Lane (P-50) between College Avenue and Jackrabbit Lane. The access management plan should be completed during 2007.
- Jct MT 85-East; STPS-235-1(8)0; CN 4470 – This planned project would reconstruct about 1.95 miles of Secondary Highway 235 (East Valley Center Road) beginning immediately east of Jackrabbit Lane. The project is scheduled for implementation in Fiscal Year 2009.
- Slp Fltn-Wid-Gallatin Canyon; STPHS 50-1(14) 8, CN 2544 – This planned project would provide improvements like turn lanes, shoulder widening, slope flattening, and replacing guardrails and bridges on 38 miles of U.S. Highway 191 within Gallatin Canyon. The project is scheduled for implementation during Fiscal Year 2008. The northern terminus of the project is located about 10 miles south of Four Corners.

The MDT projects described above are being undertaken in response to the demands of increasing traffic volumes and the need to upgrade outdated facilities. Substantial growth and land use changes have already occurred in this portion of Gallatin County and MDT's projects are simply an attempt to respond to that growth. The most apparent cumulative effect of implementing these projects will be a safer and more efficient road and system.

Because these projects are located considerable distances from the Four Corners-North and Belgrade-South project areas and the timing of their construction activities will not coincide, none

of these other MDT projects would have any significant cumulative environmental impacts on the proposed actions. The Four Corners-North and Belgrade-South projects would also not cause significant cumulative environmental impacts on these other MDT projects.

Active and Planned Projects by Others in the Area. As indicated previously, Jackrabbit Lane is located within a rapidly developing area of Gallatin County. Based on contacts with the City of Belgrade Planning Department, new subdivisions and developments are reasonably foreseeable for large tracts along both sides of Jackrabbit Lane between Valley Center Road and Cameron Bridge Road.

City of Bozeman and the private development community are upgrading segments of major county roads that connect to Jackrabbit Lane. Roadway improvements have recently been constructed or are planned for sections of Durston Road and Baxter Lane. These improvement projects are being completed as outlined in the *Greater Bozeman Area Transportation Plan-2001 Update* or as required off-site improvements for major new subdivisions under development west of the City of Bozeman. The improvements would provide a more efficient and safer transportation facility for pedestrians, bicycles and vehicular traffic in the area.

The City of Bozeman and Gallatin County, and MDT are in the process of revising the *Greater Bozeman Area Transportation Plan-2001 Update*. The Transportation Plan Update is intended to facilitate community goals and improve the transportation infrastructure and services within the Greater Bozeman area to meet the needs of existing and future land use. The Plan will address all modes of transportation in a balanced attempt to meet the current and future transportation needs of the Bozeman area and is scheduled for completion in August 2008. The study area for the Transportation Plan Update encompasses the Four Corners-North and Belgrade-South project areas.

Utility Solutions, a private utility company, is in the process of developing central water and wastewater systems in the Four Corners area. The company has signed a contract with the Four Corners County Water and Sewer District to provide water and sewer service to for major subdivisions and other properties in the Four Corners area. The water and sewer systems under development would accommodate existing uses and anticipated growth.

A project to construct a new water tower on the south side of I-90 is under development by the City of Belgrade.

Conclusions. Based on the review of ongoing and planned projects by MDT and others, it was concluded that the proposed reconstruction of Jackrabbit Lane would not cause significant cumulative impacts to environmental resources in the project areas.

MDT will continue to coordinate future projects with the public and other appropriate agencies, complete a review of potential impacts to the environment, and identify requirements for mitigation of any adverse effects as projects are developed and implemented. Likewise, other future federal and

state projects will be subject to reviews under NEPA and MEPA to determine if significant environmental impacts are likely and identify measures to mitigate any identified adverse effects.

The *Gallatin County Growth Policy*, *Belgrade Area Growth Policy*, and the *Four Corners Community Plan* recognize that growth and development, if not planned, could cause adverse cumulative effects like changing the “character” of the County and impacting important natural resources. Gallatin County and the City of Belgrade ultimately have the ability to control many potential cumulative effects associated with new growth and development through land use planning and environmental regulations.

**Construction Impacts.** Road reconstruction activities would cause temporary inconveniences to the traveling public and to local residents. These inconveniences may include slightly longer travel times, minor detours around work zones, and the noise and dust generated by construction equipment. These impacts could be expected to occur at various times throughout the period required to construct the proposed highway improvements and its associated features.

Runoff from disturbed surface areas has a minor potential to enter surface waters and adversely affect water quality. Temporary and permanent BMPs for erosion control will be employed to prevent sediments from reaching the area surface waters or wetlands. A SWPPP employing BMPs will be implemented throughout the project areas.

The reconstruction of Jackrabbit Lane would produce a variety of waste materials associated with the old highway including: old asphalt, culverts, and concrete associated with the bridge over the Spain-Ferris Ditch. Disposal of project waste materials will be accomplished with applicable laws, rules and regulations.

Stockpiles of materials (topsoil, gravel, old asphalt) and parked equipment needed for the construction of the new roadway may cause short-term adverse impacts for local residents and others passing through the Jackrabbit Lane corridor.

**Permits Required.** The following permits must be obtained prior to any relevant disturbances for these projects:

- **Section 402/Montana Pollutant Discharge Elimination System (MPDES) Permit.** The projects would be in compliance with the *CLEAN WATER ACT (33 U.S.C. 1251 - 1376)* - *Section 402/Montana Pollutant Discharge Elimination System*. Accordingly, MDT would submit a Notice of Intent (NOI) package to MDEQ's Permitting and Compliance Division for coverage under the MPDES “General Permit for Storm Water Discharges Associated with Construction Activity.” This permitting process would serve only as a notice of intent to discharge, rather than a submittal for agency review or approval of a SWPPP.

- Section 404 Permit. A *CLEAN WATER ACT (33 U.S.C. 1251 - 1376)* - *Section 404* permit from the COE will be required for the placement of fill or excavation in "Waters of the United States" and delineated jurisdictional wetlands. The COE will determine if these proposed projects require "Individual" permits or qualify for "Nationwide" permits under the provisions of 30 CFR 330.

## COORDINATION

A news release discussing the project and announcing a planned public information meeting was distributed on October 19, 2004. The news release was provided to television and radio stations in Bozeman and listed on MDT's website.

MDT and its consultant conducted a public information meeting on November 10, 2004 to discuss access management and future reconstruction of Jackrabbit Lane between Four Corners and Frank Road. The public meeting, held at the Monforton School, included a formal presentation about the proposed work and its schedule, an informal question and answer session with all meeting participants, and one-on-one discussion with members of the public. The meeting began at 7:00 p.m. and concluded by about 8:45 p.m. and was attended by 21 people (not including staff from MDT or its consultant).

The November 10, 2004 informational meeting served several important purposes including: 1) providing background on the project and why reconstruction is being considered; 2) summarizing notable findings and recommendations from traffic studies and access management studies for the project corridor; 3) presenting potential four-lane design configurations and median treatments for reconstruction; and 4) soliciting comments and information pertinent to access management and corridor reconstruction.

Many of the comments heard at the meeting focused on the need to address safety and traffic concerns in the corridor; reducing travel speeds on Jackrabbit Lane; prioritizing reconstruction work within the corridor; and the possibility of providing frontage roads with new developments in the corridor. Additionally, the public provided information about efforts to establish sewer service in the Four Corners area and planned utility improvements by NorthWestern Energy in the area. A detailed summary of the November 2004 public information meeting is in MDT's files.

MDT and its consultant conducted an open house on December 8, 2005 to discuss the Draft Access Management Plan for Jackrabbit Lane between Four Corners and Frank Road. The open house, held at the Monforton School, began at 1:30 p.m. and ended at 8:00 p.m. Individual contacts between members of the public and MDT staff and its consultant occurred throughout the open house. A follow-up meeting to discuss access management issues with several business owners was held on December 9, 2005. Comments from these meetings were incorporated into the Access

Kevin L. McLaury  
January 8, 2008  
Page 33

Management Plan. Most notably, landowners attending the meetings expressed their opposition to the use of a non-traversable median in the corridor and instead favored a painted median for the reconstructed roadway.

A news release was issued on May 23, 2006 indicating MDT decided to pursue a design for Jackrabbit Lane incorporating four travel lanes with a two-way, left-turn lane (TWLTL) in the center instead of a four-lane design with a non-traversable median. This decision was made in response to public concerns about the inconveniences and adverse effects on businesses along the corridor. The TWLTL design offers flexibility in the short term and can easily be converted to incorporate a non-traversable median as warranted by traffic and access management needs. The May 2006 news release also provided an update on work associated with the reconstruction of Jackrabbit Lane.

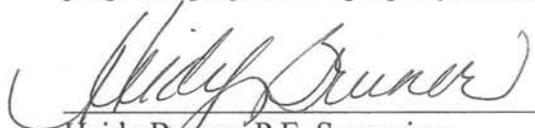
During August 2006, letters about the proposed project were distributed to various agencies and others potentially interested in the reconstruction of Jackrabbit Lane. Various federal, state, and local agencies and a number of special interest groups received the project notification letter. In some instances, the letter was also used to request information. Information obtained through these letters has been incorporated into this document as applicable.

MDT and its engineering consultants held a joint public meeting on June 26, 2007 to discuss the proposed Four Corners-North reconstruction project and the proposed Access Management Plan for the Huffine Lane Corridor between College Avenue and Jackrabbit Lane. The meeting, held at the Monforton School, began at 6:00 p.m. and was attended by 12 people not including MDT staff or its consultants. Short presentations about each project were conducted at the meeting. The Four Corners-North presentation provided information about the proposed widening of Jackrabbit Lane and proposed work at the intersection of Jackrabbit Lane with Huffine Lane, U.S. Highway 191, and Norris Road. Public comments heard at the meeting focused primarily on the Huffine Lane Access Management Plan. There were no specific comments heard about the proposed improvements on Jackrabbit Lane.

Additional public information meetings will be held as the design for these projects progresses.

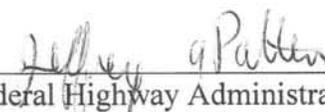
## CONCLUSION

The proposed projects would not induce significant land use changes or promote unplanned growth and would not affect existing access to adjacent property or change present traffic patterns. The proposed projects would not create disproportionately high and adverse human health or environmental effects on minority and low-income populations (**Executive Order No. 12898**) and comply with Title VI of the *Civil Rights Act of 1964 (42 U.S.C. 2000d)*. In accordance with 23 CFR 771.117(a), the proposed actions would neither individually nor cumulatively have any significant environmental impacts. Therefore, the FHWA's concurrence is requested that the proposed projects are properly classified as Categorical Exclusions.



Heidi Bruner, P.E, Supervisor  
Engineering Section  
Environmental Services Bureau

Concur

  
Federal Highway Administration

Date

1-17-08

### Attachments

cc: Jeff Ebert - MDT Butte District Administrator  
Paul Ferry, P.E. - MDT Highways Bureau Chief  
Kent Barnes, P.E. - MDT Bridge Bureau Chief  
John Horton - MDT Right-of-Way Bureau Chief  
Mike Hovan, P.E. - MDT Butte District  
David W. Jensen, Supervisor - MDT Fiscal Programming Section  
Kevin Christensen, P.E. - MDT Construction Engineer  
Suzy Price - Contract Plans Bureau Chief  
project file

MDT attempts to provide accommodation for any known disability that may interfere with a person participating in any service, program or activity of the Department. Alternative accessible formats of this information will be provided upon request. For further information, call 406-444-7228 or TTY (800-335-7592), or call Montana Relay at 711.



Not To Scale



**Belgrade-South**  
 NH 85-1(14)6  
 CN 5735

**Four Corners - North**  
 NH 85-1(9)0  
 CN 4306

**Figure 1**  
**Project Locations**

- Four Corners - North**  
 NH 85-1(9)0  
 CN 4306
- Belgrade-South**  
 NH 85-1(14)6  
 CN 5735

## FARMLAND CONVERSION IMPACT RATING

<b>PART I (To be completed by Federal Agency)</b>		Date of Land Evaluation Request <b>AUGUST 11, 2006</b>	
Name of Project <b>FOUR CORNERS-NORTH; NH 85-1(9)0; CN 4306</b> <b>BELGRADE-NORTH; NH 85-1(14)6; CN 5375</b>		Federal Agency Involved <b>FEDERAL HIGHWAY ADMINISTRATION</b>	
Proposed Land Use <b>HIGHWAY RIGHT-OF-WAY/ROAD RECONSTRUCTION</b>		County and State <b>GALLATIN COUNTY, MONTANA</b>	
<b>PART II (To be completed by NRCS)</b>		Date Request Received by NRCS	
Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply - do not complete additional parts of this form).		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Acres Irrigated <b>106,101</b> Average Farm Size <b>660 AC</b>
Major Crop(s) <b>Hay, Wheat, Barley, Potatoes</b>	Farmable Land in Govt. Jurisdiction Acres: <b>468,910</b> <b>53%</b>	Amount of Farmland As Defined in FPPA Acres: <b>395,893</b> <b>45%</b>	
Name of Land Evaluation System Used <b>LESA</b>	Name of Local Site Assessment System <b>N/A</b>	Date Land Evaluation Returned by NRCS <b>11/15/06 (see file for original)</b>	
<b>PART III (To be completed by Federal Agency) Land Evaluation Information</b>		Alternative Site Rating (REVISED 11/07)	
		<b>PROPOSED</b>	Existing
A. Total Acres To Be Converted Directly (Preliminary estimate for proposed)	<b>39.0</b>	0.0	
B. Total Acres To Be Converted Indirectly (Preliminary estimate for proposed)	<b>0.0</b>	0.0	
C. Total Acres in Site (acres of existing R/W plus estimated new R/W-11/6/07)	<b>139.0</b>	100.0	
<b>PART IV (To be completed by NRCS) Land Evaluation Information</b>			
A. Total Acres Of Prime And Unique Farmland	<b>0</b>		
B. Total Acres Of Statewide or Local Important Farmland	<b>39</b>		
C. Percentage Of Farmland in County or Local Govt. Unit To Be Converted	<b>0.0001</b>		
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	<b>83%</b>		
<b>PART V (To be completed by NRCS) Land Evaluation Criterion</b>			
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)		<b>36</b>	
<b>PART VI (To be completed by Federal Agency)</b>			
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))	Maximum Points		
1. Area in Non-urban Use	15	<b>7</b>	
2. Perimeter in Non-urban Use	10	<b>5</b>	
3. Percent of Site Being Farmed	20	<b>15</b>	
4. Protection Provided by State and Local Government	20	<b>0</b>	
5. Distance From Urban Built-up Area	N/A	<b>N/A</b>	
6. Distance to Urban Support Services	N/A	<b>N/A</b>	
7. Size of Present Farm Unit Compared to Average	10	<b>10</b>	
8. Creation of Non-farmable Farmland	25	<b>0</b>	
9. Availability of Farm Support Services	5	<b>5</b>	
10. On-Farm Investments	20	<b>20</b>	
11. Effects of Conversion on Farm Support Services	25	<b>0</b>	
12. Compatibility With Existing Agricultural Use	10	<b>5</b>	
<b>TOTAL SITE ASSESSMENT POINTS</b>	<b>160</b>	<b>67</b>	
<b>PART VI (To be completed by Federal Agency)</b>			
Relative Value Of Farmland (From Part V)	100	<b>36</b>	
Total Site Assessment (From Part VI above or a local site assessment)	160	<b>67</b>	
<b>TOTAL POINTS (Total of above 2 lines)</b>	<b>260</b>	<b>103</b>	
Site Selected: <b>Reconstruction</b>	Date of Selection	Was a Local Site Assessment Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Reason For Selection:			

**Since the Total Points is below the threshold of 260 points, no additional consideration for protection is necessary under 7 CFR 658.4(c).**

200 112006



Montana Department of Transportation

2701 Prospect Avenue  
PO Box 201001  
Helena MT 59620-1001

Jim Lynch, Director  
Brian Schweitzer, Governor

- Josef
- MDT
- Four Corners - North

November 16, 2006

Mark Baumler, Ph.D.  
State Historic Preservation Office  
1410 8<sup>th</sup> Avenue  
P O Box 201202  
Helena, MT 59620-1202

RECEIVED

DEC 11 2006

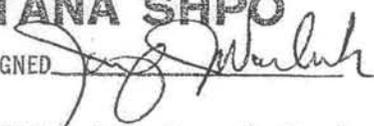
ENVIRONMENTAL

Subject: NH 85-1(9)0  
Four Corners - North  
Control No. 4306

CONCUR  
MONTANA SHPO

SHPO

Dear Mark:

DATE 7 Dec 06 SIGNED 

Enclosed is the cultural resource report, CRABS, and site forms for the above project in Gallatin County. RTI, Inc. recorded eight sites within the designated survey area north of Four Corners. Of those, it recommended only the Stevens Farmstead (24GA1755) eligible for the National Register under Criteria A and C. We agree with that recommendation and request your concurrence. Although RTI recommends segments of the Mammoth Ditch (24GA741/1067), the Spain-Ferris Ditch (24GA1755) and the Beck-Border Ditch (24GA742) as ineligible for the NRHP, we disagree with those recommendations and believe they are eligible under Criterion A. Again, we request your concurrence.

If you have any questions, please contact me at 444-6258.

  
Jon Axline, Historian  
Environmental Services

Enclosures

cc: Jeff Ebert, P.E., Butte District Administrator  
Tom Martin, P.E., Consultant Design  
Bonnie Steg, Resources Section

Consultant Design			
Action	Date	Initial	Attach
	Routing		
	Bureau Chief		
	Consultant plans Eng		
	Design Supervisor		
	CTEP Engineer		
	<i>Blair Nordberg (B2)</i>		
	<input checked="" type="checkbox"/> DAN DEUTSCH		
	RPA		
	File		

2007012501



Montana Department of Transportation

2701 Prospect Avenue  
PO Box 201001  
Helena MT 59620-1001

Jim Lynch, Director  
Brian Schweitzer, Governor

RECEIVED

JAN 31 2007

ENVIRONMENTAL  
SHPO

January 25, 2007

Mark Baumler, Ph.D.  
State Historic Preservation Office  
1410 8<sup>th</sup> Avenue  
P O Box 201202  
Helena, MT 59620-1202

CONCUR  
MONTANA SHPO

DATE 30 Jan 07 SIGNED

*Joseph MDT*

Subject: NH 85-1(9)0  
Four Corners - North  
Control No. 4306

NH 85-1(14)6  
Belgrade - South  
Control No. 5735

Gallatin Co:  
Four Corners - North  
Belgrade - South

Dear Mark:

Enclosed is the Determination of Effect for the above project in Gallatin County. We have determined that the proposed project would have No Effect to the Stevens Farmstead (24GA1755), the Mammoth Ditch (24GA741/1067), the Beck-Border Ditch (24GA742), and the Spain-Ferris Ditch (24GA7423) for the reasons specified in the document. We request your concurrence.

If you have any questions, please contact me at 444-6258.

*Jon Axline*  
Jon Axline, Historian  
Environmental Services

Enclosure

cc: Jeff Ebert, P.E., Butte District Administrator  
Tom Martin, P.E., Consultant Design  
Bonnie Steg, Resources Section

200 7102903



Montana Department of Transportation

2701 Prospect Avenue  
PO Box 201001  
Helena MT 59620-1001

Jim Lynch, Director  
Brian Schweitzer, Governor

RECEIVED

NOV 14 2007

ENVIRONMENTAL

October 26, 2007

CONCUR  
MONTANA SHPO

Mark Baumler, Ph.D.  
State Historic Preservation Office  
1410 8<sup>th</sup> Avenue  
P O Box 201202  
Helena, MT 59620-1202

DATE 9/16/07 SIGNED

*Jeff W. Winkler*

Subject: NH 85-1(9)0  
Four Corners - North  
Control No. 4306

- Joset
- MDT
- Four Corners - North  
Addendum, GALLATIN CO.

Dear Mark:

Enclosed is the addendum cultural resource report, CRABS, and site forms for the above project on US Highway 191 and Montana Highway 84 in Gallatin County. The MDT project has been expanded to encompass a section of US 191 south of the junction of Montana 84 and a short segment west of the junction on MT 84. RTI noted two previously recorded irrigation ditches within the expanded project area: the Beck-Border Ditch (24GA742) and the Lower Middle Creek Supply Ditch (24GA1627). RTI states that although the Beck-Border Ditch has previously been determined eligible for the National Register, the field ditch segment of it within the project area lacks integrity and does not contribute to the overall ditch system. The Lower Middle Creek Supply Ditch is eligible for the National Register as is the newly recorded Barker Ditch (24GA1781). We request your concurrence.

If you have any questions, please contact me at 444-6258.

*Jon Axline*  
Jon Axline, Historian  
Environmental Services

Enclosures

cc: Jeff Ebert, P.E., Butte District Administrator  
Tom Martin, P.E., Consultant Design  
Bonnie Steg, Resources Section