THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

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In the Matter of Determination of Substantive Compliance with the Montana Major Facility Siting Act for Western Area Power Administration's Proposed Rebuild of the Havre to Rainbow 161-kV Transmission Line

CONCLUSIONS AND DETERMINATION

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DEPARTMENT CONCLUSIONS

1. The need for replacement of the Western Area Power Administration (Western) Havre-Rainbow 161-kV transmission line is based on reliability of service. For facilities for which reliability of service is the stated basis for need, the Department must first find that the reliability of the transmission line will be violated within two years of the date the proposed facility is to be placed in service if the proposed facility is not built or some other solution is not implemented pursuant to ARM 17.20.1606(1)(g)(i). The existing transmission line was placed in service in 1934. It is at the end of, or has exceeded, its useful life. Many of its transmission structure components, including poles and cross-arms, will require replacement over the next several years. Replacement hardware is difficult to obtain because the existing conductor is made of copper while most conductor presently manufactured is made of steel and aluminum. In addition, the existing transmission line does not have the protection of an overhead ground wire, and unplanned outages due to lightning strikes will become increasingly frequent because of its deteriorating condition. The average forced outage rate of 1.3 outages per 100 miles per year for the existing transmission line already exceeds the average forced outage rate for 230-kV lines in the Upper Great Plains Region of 1.24 outages per 100 miles of line per year. It is anticipated that the upgrade to the Havre-Rainbow transmission line will not be completed for ten years. Given the state of the current transmission line which has been in service for over seventy years, the Department finds that Western's reliability criteria will be violated within two years of the date the proposed upgrade is to be completed if the proposed upgrade does not take place or some other solution is not implemented.

For facilities for which reliability of service is the stated basis for need, the Department must also find that the value of savings from reduced outages plus any value for general reliability of service, over the life of the facility, is reasonably likely to exceed the cost of the

proposed facility pursuant to ARM 17.20.1606(1)(g)(ii). The cost of the upgrade to the Havre-Rainbow transmission line is estimated at $27.1 million, or $263,107 per mile. The cost would be incrementally distributed over a 10-year period. Western believes that the incremental cost to upgrade the existing transmission line would be cost-effective by preventing system losses that now occur.

While the value of savings from reduced outages has not been quantified, the Department believes that the savings would be substantial, given the age and state of the existing transmission line. In addition, the existing structures would be replaced with structures that have been improved through advanced technology and manufacturing processes, further reducing outage rates. In addition to savings from reduced outages, significant value for general reliability of service will be realized by upgrading the existing transmission line. Upgrading the existing transmission line will increase its capacity from 161-kV to 230-kV. System studies have indicated that outages on Western's 230-kV transmission lines in eastern Montana overload the existing 161-kV Havre-Rainbow transmission line by 115 to 120 percent of normal. Western has been required to restrict Fort Peck Dam generation during outage conditions because of limited line capacity. By increasing the capacity of the existing transmission line, Western would be better able to transmit and distribute hydroelectric power being generated, along with power from new sources. With increased capacity, Western would have greater transfer capability. For instance, the rebuild would allow maintenance of generation levels at Fort Peck Dam should an outage occur elsewhere in the eastern Montana transmission line system, minimizing or eliminating service interruption. Over the life of the upgraded transmission line, the Department believes that the savings from reduced outages plus the value for general reliability of service that will be realized is reasonably likely to exceed the proposed upgraded transmission line's cost of $27.1 million,

2. The nature of the probable environmental impact that would result from the proposed rebuild of the Havre-Rainbow 161-kV transmission line has been identified in the Final Environmental Assessment, Havre-Rainbow Transmission Line Rebuild Project, June 2007 (EA). The EA indicates that construction and operation of the rebuilt transmission line would not exceed state and federal air quality standards (EA, p. 50), and would not result in a significant impact to vegetation (EA, p. 59), fish (EA, p. 63), wildlife (EA, p. 73), and species listed as endangered, threatened or proposed for listing under the Endangered Species Act (EA,

pp. 76-77). Additionally, the proposed rebuild would not convert prime or unique farmland to non-agricultural uses (EA, p. 79), would not disrupt or displace recreational opportunities (EA, p. 95), and would protect all sites of archaeological, Tribal or historical value (EA, p. 102). Surface water flow characteristics of flood plains would not be altered (EA, p. 107), there would be no negative impact to wetlands (EA, p. 110), and surface water and groundwater would not be degraded (EA, pp. 115-116). The proposed rebuild of the transmission line would not significantly increase intrusion on unique viewsheds or views from sites listed or potentially eligible for listing on the National Register of Historic Places or contribute to landscape changes that would affect scenic views in the vicinity of the transmission line (EA, p. 129).

The analysis set forth in the EA is amended in three areas as follows:

A. Pages 69, 74 and 75. The bald eagle (*Haliaeetus leucoephalus*) is described as being listed as a threatened species under the Endangered Species Act. In early 2007 the US Fish and Wildlife Service formally delisted the bald eagle. This species is now protected under the Bald and Golden Eagle Protection Act and under the Migratory Bird Treaty Act. In May 2007 USFWS published guidelines for protection of bald eagles under these acts.

B. Page 78, Section 3.3.3.1.1. Figure 18 indicates that much of the area between Loma and Fort Benton has high quality farmland. This is based on mapping at a scale of 1:250,000. Map resolution at this scale is not highly refined. Much of the area traversed by both the existing and proposed lines consists of fine-grained soils on steep slopes which are not suitable for farming. Areas suitable for farming are located on the high more level benches and along the lower valley floor of the Marias and Teton rivers. The proposed line would be located on relatively level areas near the edges of these benches.

C. Tables, Table 10. The length of the existing line on reroute 3 should be 3.7 miles rather than 5.4 miles.

D. Page 86, under the heading Long-term Impacts. Reroute 4 does not avoid a business and a school. It was developed to remove two turning structures from wheat fields.

3. Western's proposed upgrade of the Havre-Rainbow 161-kV transmission line minimizes adverse environmental impacts. Reasonable alternatives to Western's proposal were considered in the EA (EA, pp. 40-44). In large part, the alternatives were dismissed because they failed to reduce impacts to the extent achieved by Western's proposal. Section 75-20-301(1)(c), MCA.

Western has proposed to reroute the transmission line in eight areas to reduce costs and minimize impacts as follows:

A. Reroute 1 straightens the line and removes several turning structures. As proposed, this reroute would likely have disrupted a planned center pivot irrigation system on the Fort Assiniboine Agricultural Experiment Station, affecting about 30 acres of land. Western has committed to avoid the parcel by installing additional angle structures, modifying the irrigation system design, or compensating for lands that cannot be irrigated.

B. Reroute 2 addresses Tribal concerns about the location of the existing line crossing the Box Elder High School athletic field. The reroute would locate the line in a cultivated field to the east where a center pivot irrigation system has been constructed after an easement for the reroute was obtained. The pivot now rotates through a 270 degree arc. The sweep of the center pivot would be reduced by about 15 degrees after the line is moved.

C. Reroute 3 was developed to avoid the town of Big Sandy and to provide more clearance for an air strip located south of Big Sandy.

D. Reroute 4 was developed to shorten the transmission line by 0.3 miles, straighten the transmission line, and eliminate two structures in cultivated fields.

E. Reroutes 5 and 7 straighten the transmission line by eliminating one turning structure in each proposed reroute. Turning structures can be supported by guy wires and tend to take more land out of production than non-turning structures.

F. Reroute 6 would shift the line away from the town of Loma where the line now passes through town, would avoid the confluence of the Marias and Teton rivers which are important for recreation, avoid two crossings of Highway 87 improving safety, and eliminate structures in fields irrigated with three side roll irrigation systems and a center pivot irrigation system.

G. Reroute 8 would move the line away from an expanding gravel pit and a shed.

Attachment 1 *Land Use Totals: Proposed Reroutes vs. Existing Route* summarizes the change in the mileages of land uses affected by the reroutes.

Except for an area between the Great Falls 230-kV Switchyard and Rainbow Substation and an area near the town of Laredo, the remainder of the line would stay in its current location but the span length would increase, decreasing the number of structures. Although the 230-kV H-frame structures would be approximately 5 feet wider and 9 feet taller than existing 161-kV structures, there would be a net reduction in impacts to farming activities.

Near Great Falls, the current transmission line connects to the Rainbow Substation. Western is seeking approval of an option to reroute the transmission line so that it connects to the Great Falls 230-kV Switchyard which is located northwest of the Rainbow Substation. If Western were to relocate the transmission line under this option, 230-kV transformers would have to be installed at the Great Falls 230-kV Switchyard.

The current transmission line and the optional relocation of the transmission line to the Great Falls 230-kV Switchyard crosses a tract of land that is subject to a conservation easement granted to the Conservation Fund by the Montana Power Company in 1999. The easement was subsequently assigned to Montana Fish, Wildlife and Parks. Language in the conservation easement indicates that the grantor, Montana Power Company, "wishes to protect and conserve the Land so as to protect and enhance the open space resources where consistent with its hydropower production and power transmission activities," and the "Grantor's wish to implement a policy to consolidate power lines and substations in certain areas to the extent practicable to reduce visual impacts when siting, constructing, replacing, and upgrading facilities" *Lewis and Clark Heritage Greenway Deed of Conservation Easement July 22, 1999*

As indicated in the EA, a significant impact could occur if the project resulted in the development of the conservation easement land that conflicted with easement stipulations. The option sought by Western would relocate the transmission line along the northern boundary of the tract subject to the easement. Attachment 2 shows the location of the optional relocation of the transmission line to connect to the Great Falls 230-kV Switchyard. Land use in the area is a mix of range, pasture, and non-irrigated cropland. No residences are present. Another transmission line connecting to the switchyard to be built by MATL is proposed to be located along a portion of the northern boundary. Transmission lines owned by PPL Montana may also be consolidated in this location as well. Montana Fish, Wildlife and Parks concurs with relocating the transmission line along the northern easement boundary.

Western also proposes a small adjustment of the transmission line near Laredo, where five residences are located just outside the existing right-of-way. Because of the wider right-of-way associated with the 230-kV line, the residences would be located within the outer 7.5 to 17.5 feet of the right-of-way if the transmission line were to be rebuilt and upgraded in its current location. While the electric field strength at the edge of the new right-of-way is predicted to be 0.944 kV per meter one meter above the ground, the electric strength at several of the five

residences may exceed Montana's electric field strength standard of 1 kV per meter. Since publication of the EA, Western has indicated that the location and/or design of the transmission line would be adjusted so that that these residences would be located outside of the right-of-way and that Montana's electric field strength standard of 1 kV per meter would be met at the edge of the right-of-way (Shulund 2007).

The proposed line and alternatives would not cross any of the following areas: wilderness areas, national primitive areas, national wildlife refuges, state wildlife management areas and wildlife habitat protection areas, national parks and monuments, state parks, national recreation areas, corridors of rivers in the national wild and scenic rivers system and rivers eligible for inclusion in the system, roadless areas greater than 5,000 acres in size managed by federal or state agencies to retain their roadless character, and specially managed buffer areas surrounding national wilderness areas and national primitive areas. The line would cross isolated areas with rugged topography on slopes greater than 30 percent. Vegetation may be destroyed during the construction process and soil would be exposed to erosion on these steep slopes. Western has proposed a plan to control erosion during project construction and would be required to implement a storm water pollution prevention plan under Montana water quality statutes. DEQ would monitor the project to ensure that areas disturbed during construction are reclaimed and revegetated.

The project would meet standards for noise and electric field strength in residential and subdivided areas. Affected landowners may waive these requirements. The project would be required to meet minimum standards set forth in the National Electric Safety Code and Federal Aviation Administration requirements for marking the line.

Since publication of the EA, Western has indicated that a possible line adjustment was considered at the Teton River crossing (Attachment 3). A new location east of the proposed line location was studied in an attempt to address landowner concerns related to potential property development for recreational residences. Compared to Western's proposed location, the new location would cross an additional 2.56 miles of farmland (now enrolled in the CRP program), increasing potential impacts from having to farm around structures if CRP land is converted to farmland. The new location would also be located within 1/4 mile of two residences, increasing visual impact to those residences. Finally, the new location would be approximately 0.7 mile longer than the proposed location, increasing the line's construction cost. As such, the new

location fails to reduce impacts to the extent achieved by Western's initial proposal. Following a cultural resources survey, the Department would allow the proposed line to be located within an area at the Teton River crossing depicted on Attachment 3 to reduce impacts to potential recreational development. If significant cultural resources are discovered, mitigating measures such as adjustment of the centerline and pole locations shall be made to avoid the impact. If cultural resource impacts are unavoidable, Western shall follow the direction of the State Historic Preservation Officer.

4. Western's proposed upgrade of the Havre-Rainbow 161-kV transmission line does not locate any of the transmission line underground because the cost of underground construction can exceed the cost of overhead construction by a large factor and the duration of outages for underground lines typically exceeds that for overhead lines. Section 75-20-301(1)(d)(i), MCA. The proposed system is consistent with regional plans for expansion of the Western transmission system serving Montana. Line upgrade to 230-kV will provide flexibility for future system needs when transformers within the substations are upgraded to accommodate operation at 230 kilovolts. Section 75-20-301(1)(d)(ii), MCA. Western's rebuild of its Havre-Rainbow 161-kV transmission line will serve the interest of utility system economy and reliability. Information evaluated by the Department indicates that the value of the savings from reduced outages and reduced fires plus the value for increased reliability of service is reasonably likely to exceed to cost of the proposed project. Section 75-20-301(1)(d)(iii), MCA.

5. Western's proposed upgrade of the Havre-Rainbow 161-kV transmission line, including the location of the rerouted portions of the transmission line as discussed above, conforms to applicable state and local laws and regulations. Section 75-20-301(1)(e), MCA.

6. The need to rebuild the transmission line is discussed in Paragraph (1) and the nature of the probable environmental impacts is discussed in Paragraph (2). Rebuilding the transmission line would result in more reliable service due to reduced line outages, greater capacity for future generation, reduced fires, reduced numbers of structures in farm land, reduced interference with sporting functions at Box Elder Athletic Field, reduced interference with irrigation near Loma, reduced number of highway crossings increasing traveler safety, reduced interference with future operations at an expanding gravel pit, and a slight short-term increase in the goods and services used by Western's crews during construction.

In terms of costs, rebuilding the transmission line would result in temporary land disturbance during construction increasing the potential for soil erosion and compaction, potential spread of weeds, loss of the potential to increase irrigation at the Montana Northern Agricultural Research Center, continued interference with farming practices, continued potential for avian losses from collision with the line and new overhead ground wires, and potential disturbance of cultural resources. Mitigating measures are identified to reduce or compensate for these impacts. In addition, there would be increased visual impacts from larger structures, though the line would be relocated outside of Loma and avoid the athletic field at Box Elder. Electric and magnetic fields strengths will increase as a result of the increased capacity of the line but field strengths near residences should be below the State electric field strength standard. There would be short-term increases in local expenditures and owners of Class III agricultural lands crossed by the line may receive tax benefits. The rebuilt line would comply with state electric field strength standards and National Electric Safety Code Standards.

The proposed rebuild of the Havre-Rainbow Transmission Line Rebuild Project replaces a transmission line that has reached or exceeded the end of its useful life and, therefore, enhances reliability of electrical service for customers served by the transmission line. DEQ concludes that the proposed project serves public interest, convenience, and necessity. Section 75-20-301(1)(f), MCA.

7. The line would be rebuilt over a 10-year period. Prior to the start of each phase of reconstruction, Western shall obtain any necessary water quality decision, opinion, order, certification or permit as required by Section 75-20-216(3), MCA. Section 75-20-301(1)(g), MCA.

8. The Department evaluated the use of public land for siting of portions of the Havre-Rainbow 161-kV transmission line and determined that the use of public land was not as economically practicable as the use of private land overall. However, two of the proposed reroutes, one near Havre and one near Loma, would make better use of public lands. Little public land is available for most of the remainder of the transmission line. The use of public land for the rest of the line was not compatible with a finding of minimum adverse environmental impact for the proposed project. Section 75-20-301(1)(h), MCA.

9. The Department shall monitor construction of the Havre-Rainbow transmission line to ensure that mitigation measures listed in the EA and the substance of environmental

specifications developed by the Department are carried out and that reclamation and revegetation efforts are successful. In addition, Western shall ensure that the standards listed in ARM 17.20.1607(2)(a)(i), (c), and (d) are met.

10. The proposed rebuild by Western of the 161-kV transmission line between Havre and Great Falls complies with the substantive standards of the Major Facility Siting Act and the Administrative Rules adopted by the Board, if Western rebuilds, maintains, and operates the transmission line in compliance with the following:

A. Prior to the start of construction, Western shall obtain any necessary water quality decision, opinion, order, certification or permit as required by Section 75-20-216(3), MCA**.**

B. Western shall rebuild the Havre-Rainbow transmission line project in Montana within a 200-foot-wide construction right-of-way and shall operate the transmission line within a 125-foot-wide right-of-way along the existing line except for eight segments proposed for relocation and the areas listed in (C) and (D) below. In addition, line location may vary from proposed locations for new structures where Montana DOT determines that adequate safety clearance along U.S. Highway 87 would not be maintained. For the eight segments proposed for relocation, the line shall be constructed at the locations depicted in Figures 3 through 11of the EA. For any structure relocations that may be necessary for adequate safety clearance along U.S. Highway 87, the structures shall be located no more than 250 feet from the existing line in a manner that minimizes impacts to existing land use, unless otherwise approved in writing by the Department.

C. Near the Teton River crossing the proposed line relocation would pass through land being marketed for recreational residential development. Following a cultural resources survey, the Department would allow the proposed line to be located within an area depicted on Attachment 4 to reduce the impacts to this development. If significant cultural resources are discovered, mitigating measures such as adjustment of the centerline and pole locations shall be made to avoid the impact. If cultural impacts are unavoidable, Western shall follow the direction of the State Historic Preservation Officer.

D. North of the Rainbow Substation, Western is considering relocating the line to connect to NorthWestern Energy's Great Falls 230-kV Switchyard. If terms of the conservation easement contain no restrictions on line location, the Department would allow the proposed line to be located along field boundaries in an area depicted on Attachment 2 after a Class III cultural resources survey is conducted. If significant cultural resources are discovered, mitigating measures such as adjustment of the centerline and pole locations shall be made to avoid the impact. If cultural impacts are unavoidable, Western shall follow the direction of the State Historic Preservation Officer.

DEPARTMENT DETERMINATION

The proposed rebuild of the Havre to Rainbow transmission line complies with the substantive standards of the Montana Major Facility Siting Act if Western rebuilds, maintains, and operates the transmission line and associated facilities in compliance with the Findings of the Department herein stated.

Dated this 20 day of March 2008.

Richard H. Opper
Director
Montana Department of Environmental Quality

Shulund, Dirk. 2007. Email from Dirk Shulund, Western Area Power Administration, December 3, 2007 to Tom Ring, Montana Department of Environmental Quality.

Attachment 1 *Land Use Totals: Proposed Reroutes vs. Existing Route*

Land Use Type	**Reroute 1** miles	**Existing Route** miles
Non-Irrigated cropland/CRP	1.44	1.67
Rangeland/Pasture	1.95	1.77
Road/Right of Way	0.01	--
Total	**3.40**	**3.44**

Land Use Type	**Reroute 2** miles	**Existing Route** miles
Non-Irrigated cropland/CRP	0.36	0.12
Rangeland/Pasture	0.04	0.09
Road/Right of Way	0.03	0.03
School Property	--	0.10
Total	**0.43**	**0.34**

Land Use Type	**Reroute 3** miles	**Existing Route** miles
Non-Irrigated cropland/CRP	2.4	2.44
Rangeland/Pasture	1.17	0.9
Road/Right of Way	0.05	0.06
Commercial/Industrial	0.04	0.33
Total	**3.66**	**3.73**

Land Use Type	**Reroute 4** miles	**Existing Route** miles
Non-Irrigated cropland/CRP	3.71	2.19
Rangeland/Pasture	1.55	3.35
Road/Right of Way	0.13	0.08
Total	**5.39**	**5.62**

Land Use Type	Reroute 5 miles	Existing Route miles
Non-Irrigated cropland/CRP	0.87	0.85
Rangeland/Pasture	0.17	0.21
Road/Right of Way	0.01	0.01
Total	**1.05**	**1.07**

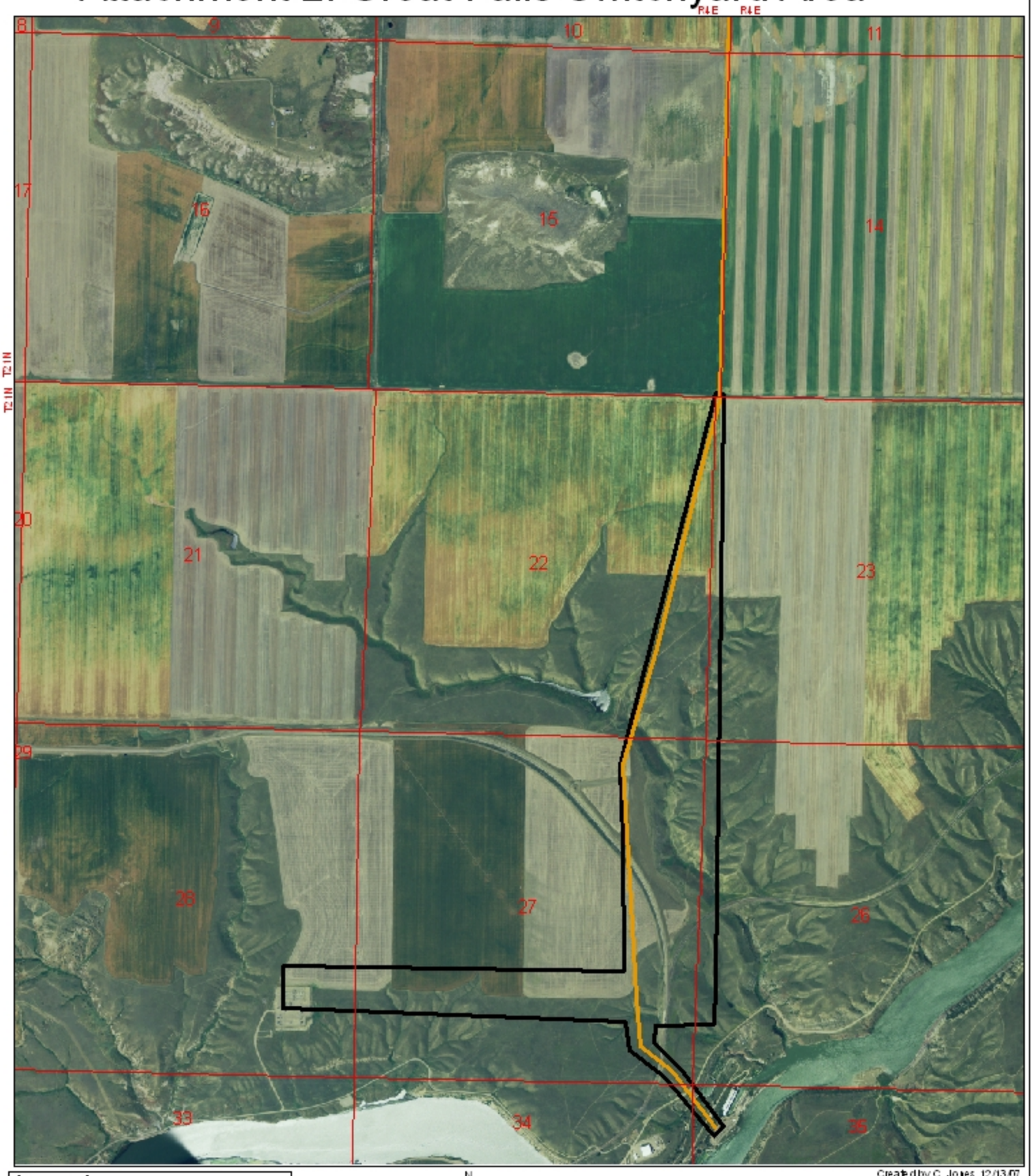
Land Use Type	Reroute 6 miles	Existing Route miles
Non-Irrigated cropland/CRP	8.09	6.84
Rangeland/Pasture	7.90	8.05
Irrigated Cropland	--	0.34
Road/Right of Way	0.06	0.18
Water	0.02	0.07
Commercial/Industrial	--	0.47
Residential	--	0.21
Total	**16.07**	**16.16**

Land Use Type	Reroute 7 miles	Existing Route miles
Non-Irrigated cropland/CRP	0.42	0.48
Total	**0.42**	**0.48**

Land Use Type	Reroute 8 miles	Existing Route miles
Non-Irrigated cropland/CRP	0.26	0.19
Rangeland/Pasture	0.01	0.18
Road/Right of Way	0.13	0.01
Commercial/Industrial	--	0.01
Total	**0.4**	**0.39**

Source: Color Aerial Photos,USDA NAIP 2005. Field Review, 2005. NRCS, October 2007.

Attachment 2: Great Falls Switchyard Area



Legend

- Existing Western Area Power Administration 161kV transmission line
- Area for eventual relocation of the upgraded line

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Created by C. Jones 12/13/07

Montana Department of Environmental Quality

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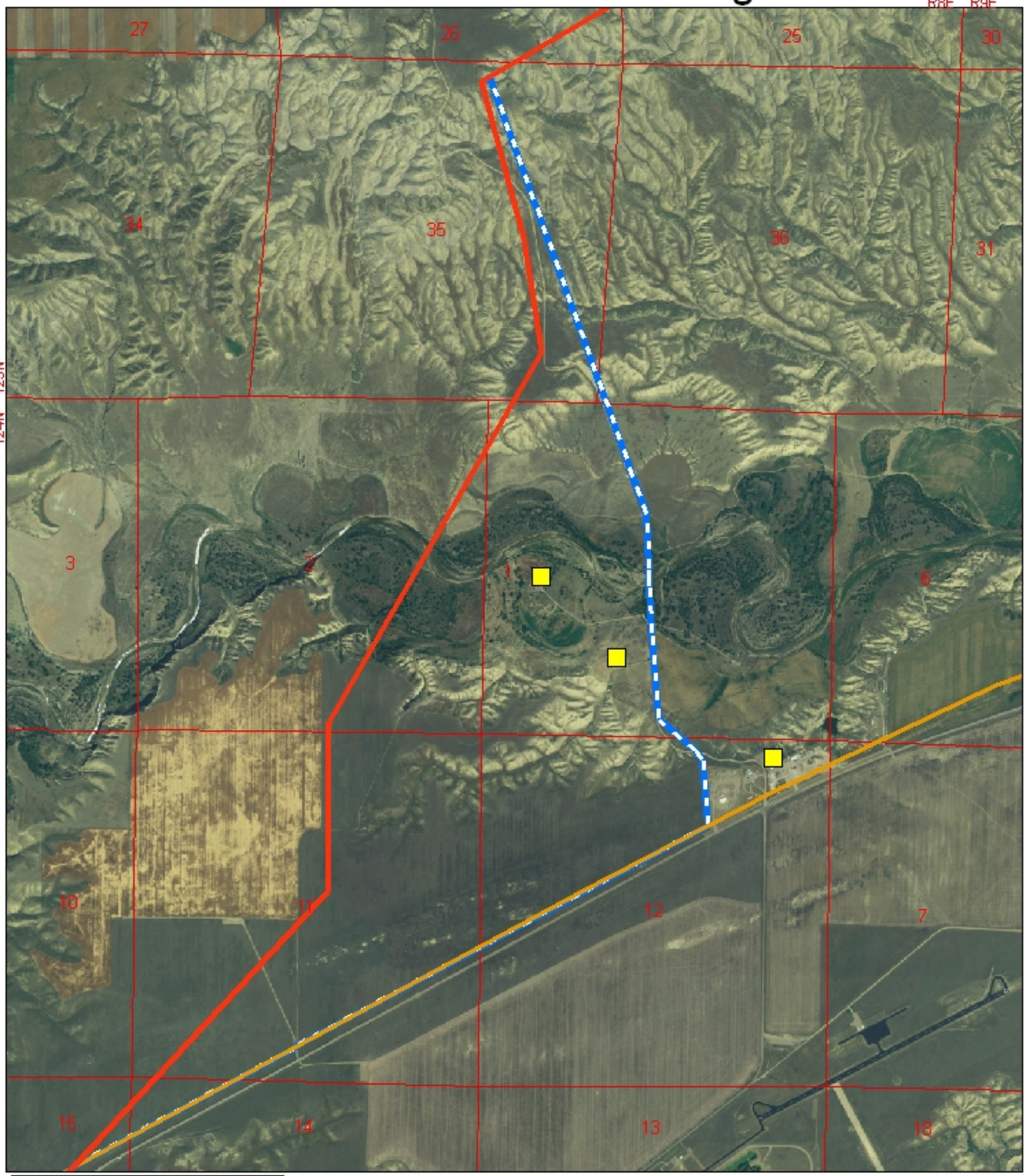
Source: Color Imagery, USDA 2005, Resilences, Montana Cadastral Mapping Project, 2007.

Attachment 3: Teton River Crossing Area



Legend

- Existing Western Area Power Administration 161kV transmission line
- Reroute 6
- Alternative Reroute 6
- Residences

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Montana Department of Environmental Quality

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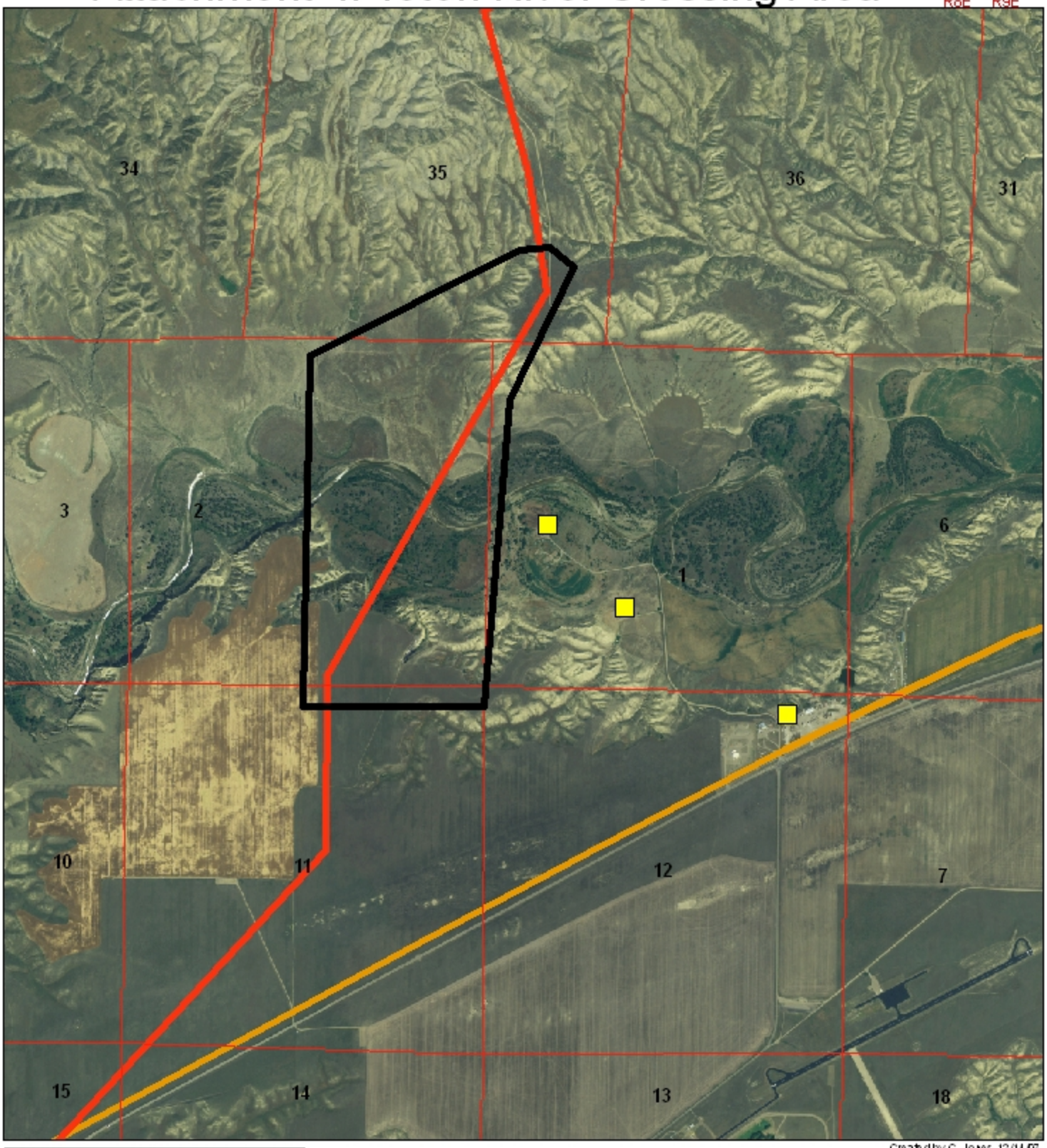
Source: Color Imagery, USDA 2005. Residences, Montana Cadastral Mapping Project, 2007.

Attachment 4: Teton River Crossing Area



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Legend

- Existing Western Area Power Administration 161kV transmission line
- Reroute 6
- Area for eventual relocation of the upgraded line
- Residences

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Montana Department of Environmental Quality

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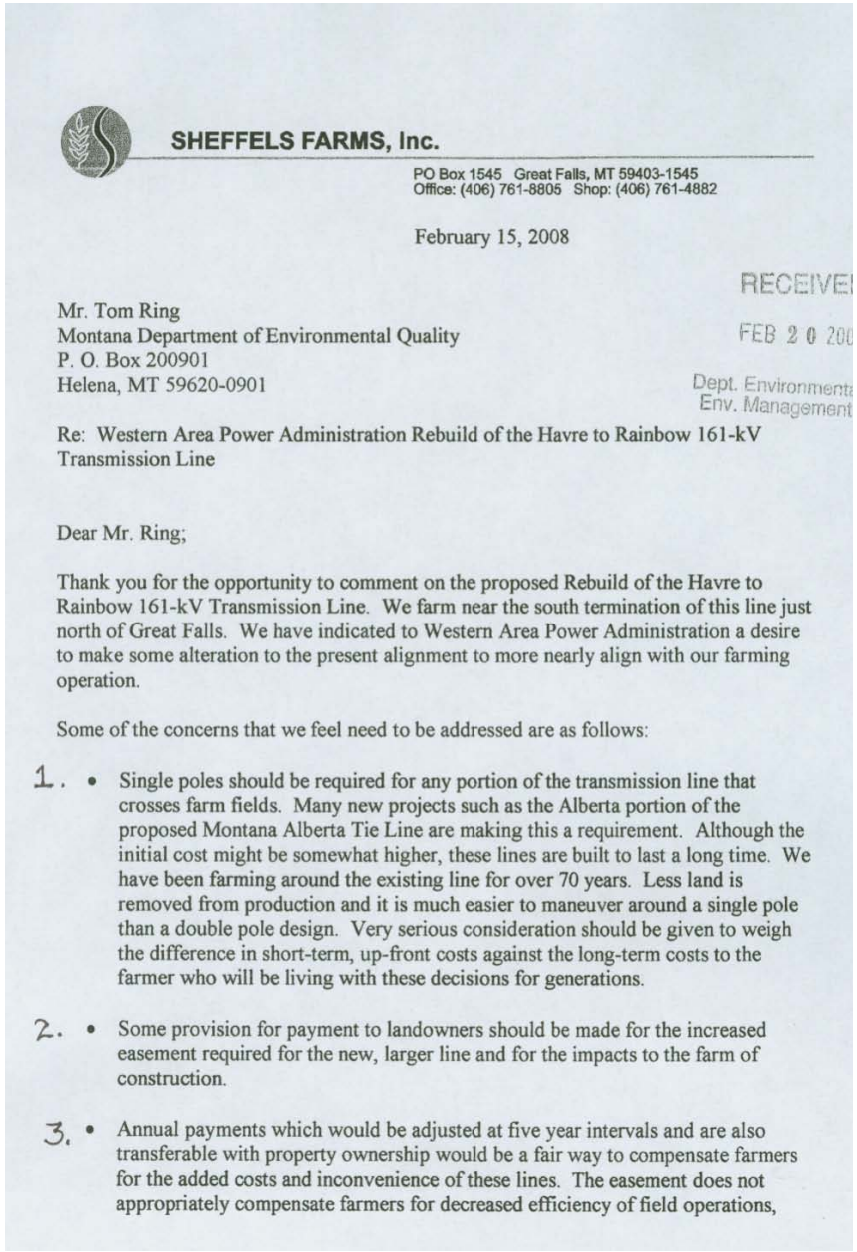
Source: Color Imagery, USDA 2005. Residences, Montana Cadastral Mapping Project, 2007.



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February 15, 2008

RECEIVE
FEB 2 0 200

Mr. Tom Ring
Montana Department of Environmental Quality
P. O. Box 200901
Helena, MT 59620-0901

Dept. Environmenta
Env. Management

Re: Western Area Power Administration Rebuild of the Havre to Rainbow 161-kV Transmission Line

Dear Mr. Ring;

Thank you for the opportunity to comment on the proposed Rebuild of the Havre to Rainbow 161-kV Transmission Line. We farm near the south termination of this line just north of Great Falls. We have indicated to Western Area Power Administration a desire to make some alteration to the present alignment to more nearly align with our farming operation.

Some of the concerns that we feel need to be addressed are as follows:

1. • Single poles should be required for any portion of the transmission line that crosses farm fields. Many new projects such as the Alberta portion of the proposed Montana Alberta Tie Line are making this a requirement. Although the initial cost might be somewhat higher, these lines are built to last a long time. We have been farming around the existing line for over 70 years. Less land is removed from production and it is much easier to maneuver around a single pole than a double pole design. Very serious consideration should be given to weigh the difference in short-term, up-front costs against the long-term costs to the farmer who will be living with these decisions for generations.

2. • Some provision for payment to landowners should be made for the increased easement required for the new, larger line and for the impacts to the farm of construction.

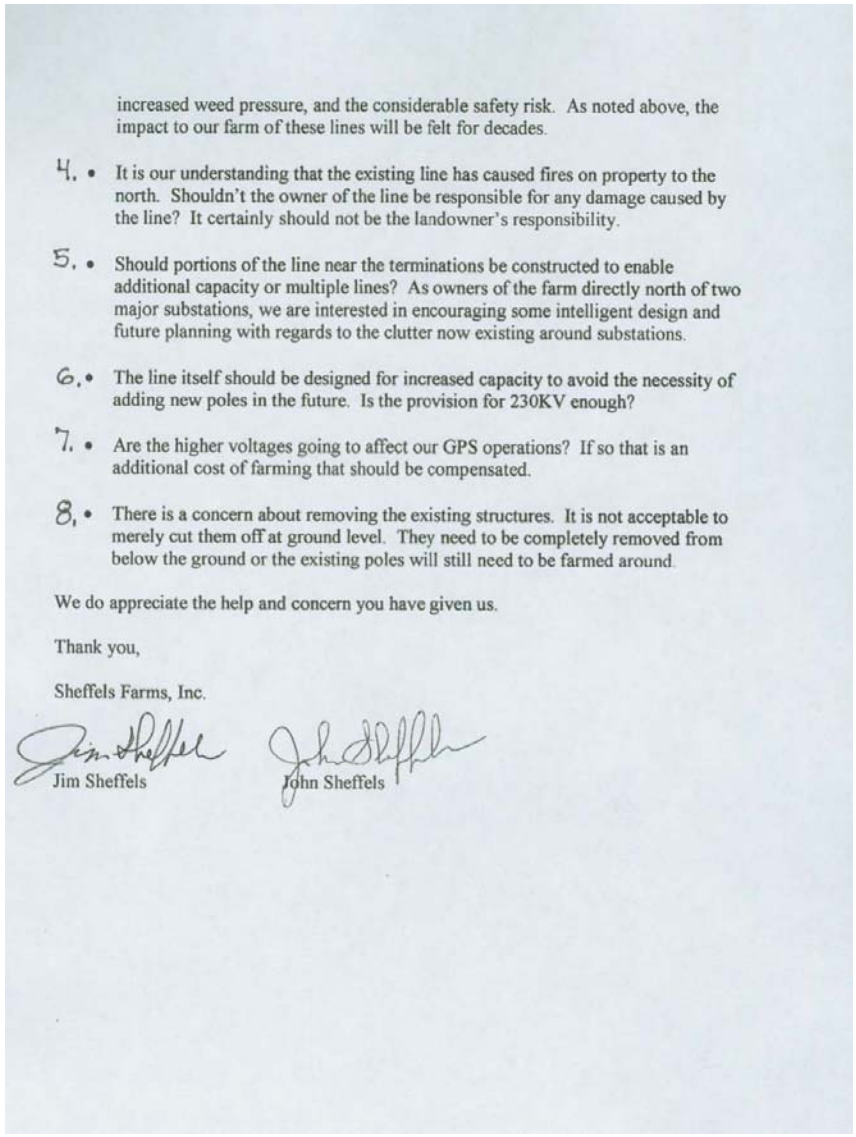
3. • Annual payments which would be adjusted at five year intervals and are also transferable with property ownership would be a fair way to compensate farmers for the added costs and inconvenience of these lines. The easement does not appropriately compensate farmers for decreased efficiency of field operations,

1. Comment noted. Although MATL will be using single poles on a portion of their project in Alberta, use will be limited to irrigated agricultural lands north of Highway 61. In Montana MATL proposes to use single pole structures when diagonally crossing most crop land and land enrolled in the Conservation Reserve Program. H-frame structures are proposed by MATL when crossing cropland perpendicular or parallel to field boundaries.

   As indicated in Attachment 2 of DEQ's draft report and decision on Western's Havre to Rainbow project, in the area north of the Rainbow substation DEQ is proposing to allow Western to locate the line on the field edge in T 21 N R 4 E Section 22 owned by the Sheffels. Cropland in this area is not irrigated. If the line were located to closely parallel the field boundary in this area, single poles will not be required by DEQ.

2. As indicated in the bullet addressing Pre-Construction on page 23 of the Western EA, Western will be purchasing easements for any additional right-of-way needed for the project. Western will also be negotiating compensation for construction related damages to property during easement agreement negotiations as indicated on page 27 of the Western EA.

3. Comment noted. Nothing in DEQ's determination of compliance would prevent landowners from seeking annual damage payments during negotiations with Western. Under 75-20-401, MCA, DEQ is not allowed to have such damage payments included as part of a yearly easement payment.



increased weed pressure, and the considerable safety risk. As noted above, the impact to our farm of these lines will be felt for decades.

4. • It is our understanding that the existing line has caused fires on property to the north. Shouldn't the owner of the line be responsible for any damage caused by the line? It certainly should not be the landowner's responsibility.

5. • Should portions of the line near the terminations be constructed to enable additional capacity or multiple lines? As owners of the farm directly north of two major substations, we are interested in encouraging some intelligent design and future planning with regards to the clutter now existing around substations.

6. • The line itself should be designed for increased capacity to avoid the necessity of adding new poles in the future. Is the provision for 230KV enough?

7. • Are the higher voltages going to affect our GPS operations? If so that is an additional cost of farming that should be compensated.

8. • There is a concern about removing the existing structures. It is not acceptable to merely cut them off at ground level. They need to be completely removed from below the ground or the existing poles will still need to be farmed around.

We do appreciate the help and concern you have given us.

Thank you,

Sheffels Farms, Inc.

Jim Sheffels John Sheffels

4. Compensation for damages from a fire would depend on the circumstances. For example, if the fire was a result of negligence on the part of the line owner/operator, a civil suit to recover damages is a possible remedy. If the fire were caused by an act of nature that could not be anticipated, damages may not be recoverable in a civil suit.

5. DEQ recommends that in congested areas, consideration be given to structure designs that would hold more than one line where:
   - the use of multi circuit structures would not adversely affect reliability of the grid and reliability of service provided by individual line owners would not be compromised,
   - safety of line workers could be assured, and
   - impacts to other resources would not increase.

   The Sheffels property in T 21 N R 4 E section 22 is not considered by DEQ to be congested.

6. For the foreseeable future, operation of the Havre-Rainbow line at 161-kV would improve the reliability of the line. Upgrading the line to 230-kV would increase flexibility to accommodate future system needs and allow Western to transmit power from new resources. Thus Western's proposal already factors in increased capacity over the current demand that will allow the addition of some new power generation (wind energy) and DEQ has no basis for requiring Western to construct a transmission line with even greater capacity.

7. Western has indicated that they would correct future GPS interference problems caused by their line (Schulund, Dirk, Environmental Permit Coordinator, Western Area Power Administration, Feb 27, 2008 telephone call with Tom Ring, Environmental Sciences Specialist, Montana Department of Environmental Quality).

8. Comment noted. As indicated in the bullet on Existing Structure Removal on page 26 of the Western EA, Western would pull poles from the ground rather than cutting them off at ground surface.

STATE OF MONTANA

ENVIRONMENTAL SPECIFICATIONS

FOR

WESTERN AREA POWER ADMINISTRATION'S

HAVRE-RAINBOW TRANSMISSION LINE REBUILD

March 2008

STATE OF MONTANA
ENVIRONMENTAL SPECIFICATIONS FOR
WOLF POINT - WILLISTON TRANSMISSION LINE REBUILD

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DEFINITIONS

ACCESS EASEMENT:	Any land area over which the OWNER has received an easement from a landowner allowing travel to and from the project. Access easements may or may not include access roads.
ACCESS ROAD:	Any travel course which is constructed by substantial recontouring, grading and/or blading of land and which is intended to permit passage by most four-wheeled vehicles.
BEGINNING OF CONSTRUCTION:	Any project-related earthmoving or removal of vegetation (except for clearing of survey lines).
BOARD:	Montana Board of Environmental Review
CONTRACTOR:	Constructors of the Facility (agent of owner)
DEQ:	Montana Department of Environmental Quality
DNRC:	Montana Department of Natural Resources and Conservation
DOT:	Montana Department of Transportation
EXEMPT FACILITY:	A facility meeting the requirements of 75-20-202, MCA and accompanying rules.
LANDOWNER:	The owner of private property or the managing agency for public lands.
MFWP:	Montana Fish, Wildlife, and Parks
OWNER:	The owner(s) of the facility, the owner's agent, or the owner's construction and maintenance crews.
SENSITIVE AREA:	Area that exhibits environmental characteristics that may make it susceptible to impact from construction of a transmission facility. The extent of these areas is defined for each project. These may include, but are not limited to, any of the areas listed in ARM 17.20.1429 or 17.20.1430 as "sensitive areas" or "areas of concern".
SHPO:	State Historic Preservation Office
STATE INSPECTOR:	The person or persons designated by DEQ to monitor reclamation and operation of the facility for compliance with conditions of DEQ approval.

INTRODUCTION

This document contains measures identified by DEQ for minimizing the impacts of the Havre - Rainbow transmission line. Measures normally included in these specifications that have been covered by Western's Construction Standards – Standard 13 Environmental Quality Protection for this project have been dropped from this document. Additional site specific measures will be identified as necessary based on review of final design. Any measures deemed necessary as a result of this review will be included in Appendix A: Sensitive Areas. The purpose of these specifications is to ensure mitigation of environmental impacts during the construction, operation and maintenance of the project. These specifications are intended to supplement the texts of contract plans and specifications. As specified later in this document, the STATE INSPECTOR will have the responsibility for arranging reviews and inspections by other state agencies that would otherwise have been done through a permit application process. If the OWNER's personnel will complete project construction and reclamation activities rather than a CONTRACTOR, measures described in these specifications apply to the OWNER.

0.0 GENERAL SPECIFICATIONS

0.1 SCOPE

These specifications apply to all lands affected by the project. Where the landowner requests practices other than those listed in these specifications, the OWNER may authorize such a change provided that the STATE INSPECTIOR is notified in writing of the change and that the change would not be in violation of: (1) the intent of any state law which is superseded by the Montana Major Facility Siting Act; (2) any conditions imposed by DEQ; (3) DEQ's finding of minimum adverse impact; or (4) the regulations in ARM 17.20.1901 and 17.20.1902, regarding monitoring requirements and reclamation standards.

0.2 ENVIRONMENTAL PROTECTION

The OWNER shall conduct all operations in a manner to protect the quality of the environment and to reduce impacts to the greatest extent practical.

0.3 CONTRACT DOCUMENTS

These specifications shall supplement and be part of the contract documents; therefore, the OWNER and the OWNER'S agents shall be held responsible for adherence to these specifications in performing the work.

0.4 BRIEFING OF EMPLOYEES

The OWNER shall ensure that the CONTRACTOR, if one is used, and all field supervisors are provided with a copy of these specifications and informed of which sections are applicable to specific procedures. It is the responsibility of the OWNER and its CONTRACTOR to ensure that the intent of these measures is met. Supervisors shall inform all employees of the

applicable environmental constraints spelled out herein prior to and during construction. Site-specific measures in appendices attached hereto shall be incorporated into the design and construction specifications or other appropriate contract document.

0.5 COMPLIANCE WITH REGULATIONS

All project-related activities of the OWNER shall comply with all applicable local, state, and federal laws, regulations, and requirements.

0.6 LIMITS OF LIABILITY

The OWNER is not responsible for correction of environmental damage or destruction of property caused by negligent acts of DEQ employees during construction monitoring activities.

0.7. DESIGNATION OF SENSITIVE AREAS

The DEQ, in its evaluation of the project, has designated certain areas along the right-of-way or access roads as SENSITIVE AREAS. The location of all such SENSITIVE AREAS is described in Appendix A. Special precautions shall be taken in these areas during construction, operation, and maintenance, as described elsewhere in these specifications (see sections 2.1.6, 2.2.2, 2.9.3, and 4.1.1) or in the attached appendices. The OWNER shall take all reasonable actions to avoid adverse impacts in these SENSITIVE AREAS.

0.8. DESIGNATION OF STRUCTURES

Each structure for the project shall be designated by a unique number on plan and profile maps. References to specific poles or towers in Appendices A shall use these numbers. Project-related communication between the OWNER and DEQ shall incorporate numbers and information shown on plan and profile maps for the Havre-Rainbow transmission line.

0.9. ACCESS

When easements for construction access are obtained for construction personnel, provision will be made by the OWNER to ensure that DEQ personnel will be allowed access to the right-of-way and to any off-right-of-way access roads used for construction. Liability for damage caused by providing such access for the STATE INSPECTOR shall be limited by section 0.6 Limits of Liability.

0.10. DESIGNATION OF STATE INSPECTOR

DEQ shall designate a STATE INSPECTOR to monitor the OWNER'S compliance with these specifications and any other conditions contained in DEQ's Conclusion and Decision as provided in ARM 17.20.1902(1). The STATE INSPECTOR shall be the OWNER's liaison with the State of Montana on construction, post-construction, and reclamation activities. All communications regarding the project shall be directed to the STATE INSPECTOR. The name of the STATE INSPECTOR is listed in Appendix B.

1.0 PRECONSTRUCTON PLANNING AND COORDINATION

1.1 PLANNING

1.1.1. Planning of all stages of construction and maintenance activities is essential to ensure that construction-related impacts will be kept to a minimum. The CONTRACTOR and OWNER shall, to the extent possible, plan the timing of construction, construction and maintenance access and requirements, location of special use sites, and other details before the commencement of construction.

1.1.2. Preferably thirty (30) days, but at least fifteen (15) days before the start of construction, the OWNER shall submit plan and profile map(s) depicting the location of the centerline and of all construction access roads, maintenance access roads, structures, clearing back lines, and, if known, special use sites.

1.1.3. If special use sites are not known at the time of submission of the plan and profile, the following information shall be submitted no later than five (5) days prior to the start of construction. The location of special use sites including staging sites, pulling sites, splicing sites, borrow pits, and storage or other buildings shall be plotted on one of the following and submitted to DEQ: ortho-photomosaics of a scale 1:24,000 or larger, or available USGS 7.5' topographic maps of a scale 1:24,000 or larger.

1.1.4. Changes or updates to the information submitted in 1.1.2 and 1.1.3 shall be submitted to DEQ as they become available. In no case shall a change be submitted less than five (5) days prior to its anticipated date of construction. Changes in these locations prior to construction where designated SENSITIVE AREAS are affected must be submitted to DEQ seven (7) days before construction and approved by the STATE INPECTOR prior to construction.

1.2 PRECONSTRUCTION CONFERENCE

1.2.1. At least one week before commencement of any construction activities, the OWNER shall schedule a preconstruction conference. The STATE INSPECTOR shall be notified of the date and location for this meeting. One of the purposes of this conference shall be to brief the CONTRACTOR and land management agencies regarding the content of these specifications and other conditions of the DEQ decision, and to make all parties aware of the role of the STATE INSPECTOR. A telephone conference call may be made for the preconstruction conference at the mutual discretion of the OWNER and DEQ.

1.2.2. The OWNER's representative, the CONTRACTOR's representative, the STATE INSPECTOR, and representatives of affected state and federal agencies who have land management or permit and easement responsibilities shall be invited to attend the preconstruction conference or participate in the preconstruction conference call.

1.3 PUBLIC CONTACT

1.3.1. Written notification by the OWNER's field representative or the CONTRACTOR shall be given to local public officials prior to the beginning of construction to provide information on the presence of work crews in the area. If local officials require further information, the OWNER shall hold meetings to discuss potential temporary changes. Officials contacted shall include the county commissioners and law enforcement officials.

1.3.2. The OWNER shall negotiate with the landowner in determining the best location for access easements and the need for gates.

1.3.3. The OWNER shall contact local government officials, or the managing agency, as appropriate, regarding implementation of required traffic safety measures.

2.0 CONSTRUCTION

2.1. GENERAL

2.1.1. The OWNER shall take all necessary actions to avoid adverse impacts to SENSITIVE AREAS listed in Appendix A. The STATE INSPECTOR shall be notified five (5) working days in advance of initial clearing or construction activity in these areas.

2.1.2. Flow in a stream course may not be permanently diverted. If temporary diversion is necessary, flow will be restored before a major runoff season or the next spawning season, as determined by the STATE INSPECTOR in consultation with the managing agency (2.11.6).

2.2. CONSTRUCTION MONITORING

2.2.1. The STATE INSPECTOR is responsible for implementing the monitoring plan required by ARM 17.20.1902. The plan specifies the monitoring data and activities required, the terms and schedules of data collection, and assigns responsibilities for data collection, inspection reporting, and other monitoring.

2.2.2. The STATE INSPECTOR may require mitigating measures or procedures at some sites beyond those listed in Appendix A in order to minimize environmental damage due to unique circumstances that arise during construction, such as unanticipated subsurface conditions. The STATE INSPECTOR will provide the OWNER with written documentation of the reasons for any modifications.

2.3. TIMING OF CONSTRUCTION

2.3.1. Construction and motorized travel may be restricted or prohibited at certain times of the year in certain areas. Exemptions to these timing restrictions may be granted by DEQ in writing if the OWNER can clearly demonstrate that no substantial environmental

impacts will occur as a result. These areas, listed in Appendix A, include sensitive areas and areas of concern in ARM 17.20.1429 and 17.20.1430.

2.4. PUBLIC SAFETY

2.4.1. All construction activities shall be done in compliance with existing health and safety laws.

2.4.2. The electric field at the edge of the right-of-way will not exceed 1 kilovolt per meter measured 1 meter above the ground in subdivisions and residential areas with five or more dwelling units per 20 acres unless the affected landowner waives this condition. The electric field at road crossings under the facility will not exceed 7 kilovolts per meter measured 1 meter above the ground.

2.5. PROTECTION OF PROPERTY

2.5.1. Reasonable precautions shall be taken to protect, in place, all public land monuments and private property corners or boundary markers. If any such land markers or monuments are destroyed, the marker shall be reestablished and referenced in accordance with the procedures outlined in the "Manual of Instruction for the Survey of the Public Land of the United States" or, in the case of private property, the specifications of the county engineer. Reestablishment of survey markers will be at the expense of the OWNER.

2.5.2. In areas with livestock, the OWNER shall make a reasonable effort to comply with the reasonable requests of landowners regarding measures to control livestock. Care shall be taken to ensure that all gates are closed after entry or exit and the landowner shall be compensated for any losses to personal property due to construction or maintenance activities. Gates shall be inspected and repaired when necessary during construction and missing padlocks shall be replaced. The OWNER shall ensure that gates are not left open at night or during periods of no construction activity. Any fencing or gates cut, removed, damaged, or destroyed by the OWNER shall immediately be replaced with new materials. Fences installed shall be of the same height and general type as the fence replaced or nearby fence on the same property, and shall be stretched tight with a fence stretcher before stapling or securing to the fence post. Temporary gates shall be of sufficiently high quality to withstand repeated opening and closing during construction, to the satisfaction of the landowner.

2.5.3. The OWNER shall promptly notify the affected landowner and the STATE INSPECTOR of damage to land, crops, property, or irrigation facilities, contamination of degradation of water, or livestock injury caused by the OWNER's construction activities within 2 working days of the occurrence, and the OWNER shall reasonably restore any damaged resource or property or provide reasonable compensation to the affected party.

2.5.4. Pole holes and anchor holes must be covered or fenced in any fields, pastures, or ranges used for livestock grazing or where a landowner's requests can be reasonably accommodated.

2.5.5. Where new access roads cross fence lines, the OWNER shall make reasonable effort to accommodate the landowner's wishes on gate location and width.

2.5.6. Any breaching of natural barriers to livestock movement by construction activities will require fencing sufficient to control livestock.

2.6. TRAFFIC CONTROL

2.6.1. At least 30 days before any construction within or over any state or federal highway right-of-way or paved secondary highway for which DOT has ownership or maintenance responsibility, the OWNER will notify the appropriate DOT field office to review the proposed occupancy and to obtain appropriate permits and authorizations. The OWNER must supply DEQ with documentation that this consultation has occurred. This documentation should include any measures recommended by DOT and to what extent the OWNER has agreed to comply with these measures. In the event that recommendations or regulations were not followed, a statement as to why the OWNER chose not to follow them should be included. DEQ will make a determination of location or methods where there is a disagreement.

2.6.2. In areas where the construction creates a hazard, traffic will be controlled according to the applicable DOT regulations. Safety signs advising motorists of construction equipment shall be placed on major state highways, as recommended by DOT. The installation of proper road signing will be the responsibility of the OWNER.

2.6.3. Traffic delays will be restricted on primary access routes, as determined by DOT or the managing agency.

2.6.4 Access for fire and emergency vehicles will be provided for at all times.

2.6.5 In sensitive areas listed in Appendix A, additional measures are identified where structures are proposed to be located within the right-of-way for US Highway 87.

2.7. ACCESS ROADS AND VEHICLE MOVEMENT

2.7.1. Where practical, all roads and trails shall be initially designed to accommodate one-way travel of the largest piece of equipment that will be required to use them; road or trail width shall be no wider than necessary.

2.7.2. In order to minimize soil disturbance and erosion potential, no cutting and filling for access road construction shall be allowed in areas of up to 5 percent sideslope. In areas of over 5 percent sideslope, road building that may be required shall conform to a 4 percent outslope. The roads shall be constructed to prevent channeling of runoff, and shoulders or berms that would channel runoff shall be avoided. In areas where blading may be necessary and compaction or rutting may be severe, topsoil shall be salvaged and used in reclamation of disturbed areas, not needed for maintenance access.

2.7.3. The OWNER will maintain all permanent access roads, including drainage facilities, which are constructed for use during and after the period of construction. In the event that a road would be left in place, the OWNER and landowner may enter agreements regarding maintenance for erosion control following construction.

2.7.4. At least thirty (30) days prior to construction of a new access road approach intersecting a state or federal highway, or of any portion of a structure encroaching upon a highway right-of-way, the OWNER shall submit to DOT a plan and profile map showing the location of the proposed construction. At least five (5) days prior to construction, the OWNER shall notify the STATE INSPECTOR of any measures recommended by DOT and actions taken by the OWNER as provided in 2.6.1.

2.8. EQUIPMENT OPERATION

2.8.1. Sock lines will be strung using methods that minimize disturbance of soils and vegetation.

2.8.2. Following construction activity in areas designated by the local weed control board as a noxious weed area or found to contain noxious weeds, the CONTRACTOR shall thoroughly clean all vehicles and equipment to remove weed parts and seeds immediately prior to leaving the area.

2.9. RIGHT-OF-WAY CLEARING AND SITE PREPARATION

2.9.1. Right-of-way clearing shall be kept to the minimum necessary to meet the requirements of the National Electric Safety Code.

2.9.2. Crane landings shall be constructed with minimum disturbance considering conditions at each structure site. In areas where more than one crane landing per tower site would be built, the STATE INSPECTOR will be notified at least 5 days prior to the beginning of construction at those sites. Topsoil will be salvaged at crane landings and used in reclamation of disturbed areas.

2.9.3. To avoid unnecessary ground disturbance, counterpoise should be placed or buried in disturbed areas whenever possible.

2.10. EROSION AND SEDIMENT CONTROL

2.10.1. Clearing and grubbing for roads and rights-of-way and excavations for stream crossings shall be carefully controlled to minimize silt or other water pollution downstream from the rights-of-way. Sediment retention basins will be installed as required by the STATE INSPECTOR or managing agency.

2.10.2. Roads shall cross drainage bottoms at sharp or nearly right angles and level with the stream bed whenever possible. Temporary bridges, fords, culverts, or other structures to avoid stream bank damage will be installed as required by the DEQ 124 Permit.

2.10.3. Under no circumstances shall stream bed materials be removed for use as backfill, embankments, road surfacing, or for other construction purposes.

2.10.4. No excavations shall be allowed on any river or perennial stream channels or floodways at locations likely to cause detrimental erosion or offer a new channel to the river or stream at times of flooding.

2.10.5. Installation of culverts, bridges, or other structures in perennial streams will be done with normal construction procedures following on-site inspections with DEQ, MFWP, and local conservation districts. All culverts shall be installed with the culvert inlet and outlet at natural stream grade or ground level. Water velocities or positioning of culverts shall not impair fish passage.

2.10.6. The OWNER shall prevent material from being deposited in any watercourse or stream channel. Where necessary, measures such as hauling of fill material, construction of temporary barriers, or other approved methods shall be used to keep excavated materials and other extraneous materials out of watercourses. Any such materials entering watercourses shall be removed immediately.

2.10.7. The OWNER shall be responsible for the stability of all embankments created during construction. Embankments and backfills shall contain no stream sediments, frozen material, large roots, sod, or other materials that may reduce their stability.

2.10.8. Where allowed following a preconstruction survey by DEQ and OWNER, culverts, arch bridges, or other stream crossing structures shall be installed at all permanent crossings of flowing or dry watercourses where fill is likely to wash out during the life of the road. Culvert or bridge installation is prohibited in areas of important fish spawning beds identified by MFWP and during specified fish spawning seasons on less sensitive streams or rivers. All culverts shall be big enough to handle approximately 15-year floods. Culvert size shall be determined by standard procedures that take into account the variations in vegetation and climatic zones in Montana, the amount of fill, and the drainage area above the crossing, and shall be approved as specified in 2.11.6. All culverts shall be installed at the time of road construction.

2.10.9. No perennial watercourses shall be permanently blocked or diverted.

2.10.10. To reduce the amount of sediment entering streams, a strip of undisturbed vegetation will be provided between areas of disturbance (road construction or tower construction) and stream courses, and around first order or larger streams that have a well-defined stream course or aquatic or riparian vegetation, unless otherwise required by the landowner. Buffer strip width is measured from the high water line of a channel and will be determined by the STATE INSPECTOR and managing agency, using Table 1 as a guideline. For braided streams with more than one discernible channel (ephemeral or permanent) the high water line of the outermost channel is used. In the event that vegetation cannot be left undisturbed, structural sediment containment, approved by the STATE INSPECTOR, must be installed before soil-disturbing activity commences.

Table 1. Recommended Buffer-Filter Strip Widths (measured from the normal high water line)

Land Slope	For Stable Soils Non-Fishery Streams (Feet)	For Fishery Stream or Sensitive Soils With Dissected Slopes * (Feet)
0 %	25	50
10 %	45	90
20 %	65	130
30 %	85	170
40 %	105	210
50 %	125	250
60 %	145	290
70 %	165	330

* Designated in Appendix A.

2.10.12. When no longer needed, all temporary structures or fill installed to aid stream crossing shall be removed and the course of the stream reestablished to prevent future erosion.

2.10.13. All temporary dams built on the right-of-way shall be removed after line construction unless otherwise approved by the STATE INSPECTOR. Dams allowed to remain shall be upgraded to permanent structures and shall be provided with spillways or culverts and with a continuous sod cover on their tops and downstream slopes. Spillways may be protected against erosion with riprap or equivalent means.

2.10.14. Point discharge of water will be dispersed in a manner to avoid erosion or sedimentation of streams as required by DEQ.

2.10.15. Riprap or other erosion control activities will be planned based on possible downstream consequences of activity, and installed during the low flow season if possible.

2.10.16 Water used in embankment material processing, aggregate processing, concrete curing, foundation and concrete lift cleanup, and other wastewater processes shall not be discharged into surface waters without a valid discharge permit from DEQ.

2.11. PREVENTION AND CONTROL OF FIRES

2.11.1. Burning, fire prevention, and fire control shall meet the requirements of the managing agency and/or the fire control agencies having jurisdiction. The STATE INSPECTOR shall be invited to attend all meetings with these agencies to discuss or prepare these plans. A copy of any plans developed shall be provided to the STATE INSPECTOR.
The OWNER shall direct the CONTRACTOR to comply with regulations of any county, town, state or governing municipality having jurisdiction regarding fire laws and regulations.

2.12. WASTE DISPOSAL

2.12.1. The OWNER shall use licensed solid waste disposal sites. Inert materials (Group III wastes) may be disposed of at licensed Class III landfill sites. Mixed refuse (Group II wastes) must be disposed of at licensed Class II landfill sites.

3.0 POST-CONSTRUCTION CLEANUP AND RECLAMATION

3.1. RESTORATION, RECLAMATION, AND REVEGETATION

3.1.1. Restoration, reclamation, and revegetation of the right-of-way, access roads, crane pads, splicing or stringing sites, borrow sites, gravel fill, stone, or aggregate excavation, or any other disturbance shall be consistent with standards specified in ARM 17.20.1902 (10). In rangeland, coverage of desirable perennial plant species excluding, specifically, species recognized as noxious weeds, shall be 30 percent or more of that on adjacent rangeland of similar slope and topography the year following revegetation, and 90 percent or more of the coverage of adjacent rangeland of similar slope and topography within five (5) years following revegetation.

3.1.2. Following construction the OWNER shall consult with each landowner to determine whether soil in agricultural areas has been compacted by movement of construction equipment. If soil compaction has occurred, the OWNER shall direct the CONTRACTOR to rip or otherwise loosen the soil deep enough to restore productivity. If complete restoration is not possible, the OWNER shall compensate the landowner for lost productivity.

3.1.3. Earth next to access roads that cross streams shall be replaced at slopes less than the normal angle of repose for the soil type involved.

3.1.4. All drainage channels shall be restored to a gradient and width that will prevent accelerated erosion.

3.1.5. Drive-through dips, open-top box culverts, waterbars, or cross drains shall be added to roads at the proper spacing and angle as necessary to prevent erosion.

3.1.6. Interrupted drainage systems shall be restored.

3.1.7. During restoration in areas where topsoil has been salvaged, the site will be graded to near natural contours, topsoil replaced on the surface, and the restored area reseeded.

3.2. MONITORING

3.2.1. Upon notice by the OWNER, the STATE INSPECTOR will schedule post-construction monitoring to monitor the effectiveness of erosion controls and reseeding measures. The STATE INSPECTOR shall document observations for inclusion in monitoring reports regarding the success of mitigating measures required by DEQ.

4.0 OPERATION AND MAINTENANCE

4.1 RIGHT-OF-WAY MANAGEMENT AND ROAD MAINTENANCE

4.1.1. Maintenance of the right-of-way and permanent access roads shall provide for the protection of SENSITIVE AREAS identified prior to and during construction. Maintenance activities of the right-of-way will be consistent with best management practices and environmental protection measures contained in these specifications.

4.1.2. Vegetation that has been saved through the construction process and which does not pose a hazard or potential hazard to the transmission line, particularly that of value to fish and wildlife, shall be allowed to grow on the right-of-way.

4.1.3. Vegetative cover adjacent to the transmission line in areas other than cropland shall be maintained in cooperation with the landowner.

4.1.4. Grass cover, water bars, cross drains, and the proper slope shall be maintained on permanent access roads and service roads in order to prevent soil erosion.

4.2. MAINTENANCE INSPECTIONS

4.2.1 Operation and maintenance inspections using ground vehicles shall be timed so that routine maintenance will be done when access roads are firm, dry, or frozen, whenever possible.

4.3. HERBICIDES AND WEED CONTROL

4.3.1. Weed control, including any application of herbicides in the right-of-way, will be in accordance with recommendations of the Montana Department of Agriculture.

4.3.2. Proper herbicide application methods will be used to keep drift and non-target damage to a minimum.

4.3.3. Herbicides must be applied according to label specifications and in accordance with 4.4.1 above. Only herbicides registered in compliance with applicable federal and state laws may be applied.

4.3.4. In areas disturbed by the transmission line, the OWNER will cooperate with landowners in control of noxious weeds as designated by the weed control board having jurisdiction in the county crossed by the line.

4.3.5. All application of herbicides must be performed by an applicator currently licensed in the State of Montana.

4.3.6. Following the completion of restoration and reseeding, the OWNER and STATE INSPECTOR shall inspect the right-of-way and access roads for newly established stands of

noxious weeds. The county weed control supervisor shall be invited to attend this inspection. In the event that stands of weeds are encountered, the OWNER shall take appropriate control measures.

4.4. MONITORING

4.4.1. DEQ may continue to monitor operation and maintenance activities of the project in order to ensure compliance with the specifications in this section.

APPENDICES

APPENDIX A: SENSITIVE AREAS

The following sensitive areas have been identified:

1. Sensitive areas are:

A. For wetlands crossed by the line, Western will obtain Federal Permits and State certifications, as determined necessary by the Corp of Engineers and DEQ, along with appropriate Montana permits. Construction in these areas shall be conducted when the ground is dry or frozen to avoid unnecessary rutting and disturbance.

B. Right-of-way along U.S. Highway 87 where structures or guy wires are located adjacent to or in the highway right-of-way. New structures should be located for adequate safety clearance from U.S. Highway 87. Western would obtain DOT review of proposed structure locations along the highway and obtain utility occupancy permits as necessary.

For any structure relocations that may be necessary for adequate safety clearance along U.S. Highway 87 the structures shall be located no more than 250 feet from the existing line in a manner that minimizes impacts to existing land use, unless otherwise approved in writing by the Department.

C. The following sensitive areas have been identified for monitoring with Western staff following construction staking and prior to construction to confirm that staked centerline locations / staked structure locations meet the intent of the Conclusions and Determination for the Havre-Rainbow Transmission Line Rebuild:

Reroute 1 Northern Agricultural Research Center- concern: minimize interference with planned irrigation expansion or compensate for loss of ability to expand irrigation.

Reroute 3 avoiding the town of Big Sandy;

Reroute 4 shortening line length in cultivated fields;

Reroute 5 straightening the transmission line by eliminating a turning structure;

Reroute 6 avoiding the town of Loma and confluence of Marias and Teton rivers;

Reroute 7 straightening the transmission line by eliminating a turning structure;

Reroute 8 moving the transmission line away from an expanding gravel pit and shed;

Proposed line location north of the Rainbow Substation along field boundaries at the edge of the conservation easement as depicted in Attachment 2 of the Department conclusions and determination; and

Proposed line location north near the Teton River crossing as depicted in Attachment 4 of the Department conclusions and determination, to avoid potential effects on land being marketed for recreational residential development.

APPENDIX B: NAME AND ADDRESS OF STATE INSPECTOR AND OWNER'S LIAISON

STATE INSPECTOR
Tom Ring
Environmental Specialist
Montana Department of Environmental Quality
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(406) 444-6785

OWNER'S LIAISON
Dirk Shulund
Western Area Power Administration
Upper Great Plains Region
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APPENDIX C: MONITORING PLAN

The STATE INSPECTOR is responsible for implementing this monitoring plan required by 75-20-303(b) and (c), MCA, and for reporting whether terms of the DEQ Decision and Environmental Specifications are being met, along with any conditions in the Stormwater Discharge permit. The STATE INSPECTOR may identify additional mitigating measures in order to minimize environmental damage due to unforeseen or unique circumstances that arise during construction. These measures will be presented in writing to the Owner's Liaison who will see that such measures are implemented in a timely manner.

In the spring and summer following construction, the STATE INSPECTOR will determine the adequacy of erosion controls, check for successful seed germination, and determine, in conjunction with county weed supervisors, areas where weed control would be necessary.

After one (1) and five (5) complete growing seasons following construction, the STATE INSPECTOR will determine whether revegetation efforts have been sufficient to meet the requirements of ARM 17.20.1902 (10).