CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name:	Circuit 92 Electric Distribution Project
Proposed Implementation Date:	Fall 2018
Proponent:	Northwestern Energy Corporation
Location:	Clark Fork River Crossing within the SE4, of Section 18, T13N-R19W
County:	Missoula

I. TYPE AND PURPOSE OF ACTION

Northwestern Energy has submitted an easement application (20' wide X 245' long - .11 acres) for the installation and use of a new 1000 MCM electric power distribution line underneath the Clark Fork River. This proposed installation is intended to provide an increased level of reliability, as well as an improved switching capability during outages and scheduled maintenance, to a substantial portion of Missoula customers located between South 3rd Street and the Clark Fork River.

Montana Code (MCA 70-16-201) provides for state ownership from the low water mark to the low water mark on navigable water bodies. Based on historical evidence, the Clark Fork River is commercially navigable from Deer Lodge, Montana to the Idaho state line. Therefore, the state claims ownership of the riverbed below the low water mark between these two points.

II. PROJECT DEVELOPMENT

1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project. List number of individuals contacted, number of responses received, and newspapers in which notices were placed and for how long. Briefly summarize issues received from the public.

Affected landowners along the proposed route of the powerline have been contacted. The City of Missoula owns the land from the substation to both sides of the river at the crossing site. DNRC claims ownership of the land below the low water mark at the Clark Fork River crossing. MDT owns the land between City property and Reserve Street. The powerline then follows within highway and street right-of -way corridors (see map).

2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

Examples: cost-share agreement with U.S. Forest Service, 124 Permit, 3A Authorization, Air Quality Major Open Burning Permit.

The City of Missoula - floodplain permit,
Missoula County Conservation District – 310 Permit,
Montana Department of Environmental Quality (DEQ) – Storm Water Pollution Prevention Plan (SWPPP)

3. ALTERNATIVE DEVELOPMENT:

Describe alternatives considered and, if applicable, provide brief description of how the alternatives were developed. List alternatives that were considered but eliminated from further analysis and why.

Four alternatives have been considered by NW Energy including:

1) No Action – continue to utilize the existing power distribution infrastructure.

2) Construct a new line along the abandoned Old Milwaukee railroad route crossing the Clark Fork River approximately ½ mile downstream of the proposed site. This site involves a more dynamic section of the river and involves crossing multiple channels
3) Construct an aerial power distribution line crossing the Clark Fork River at the proposed site. This was not favored by the City of Missoula due to visual impacts of an aerial powerline. Placing power poles in an area susceptible to seasonal flooding may also be a concern.
4) Proposed Action – Horizontal Directional Drilling (HDD) of a power distribution line under the Clark Fork River.

NW Energy has chosen to submit a proposal for HDD drilling/boring of a new power distribution line under the Clark Fork River.

In the analysis of this easement grant application, DNRC will evaluate the environmental effects of both (No Action) and the proposed action (Proposed Action) alternatives.

III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify direct, indirect, and cumulative effects to soils.

Existing Conditions: The proposed action occurs in an area within the Missoula Valley that has filled with Quaternary unconsolidated deposits greater than 200 feet thick (see Montana Bureau of Mines and Geology July 2007 publication – Montana Ground-Water Assessment Atlas 4, Part B, Map 3, by Larry N. Smith).

No Action: No effects

Proposed Action: HDD would occur below and across the Clark Fork River at a depth of 30 feet below the lowest elevation of the bed of the Clark Fork River. No unusual geologic features are known in the area or are expected to be encountered by the proposed action.

The minimum distance the drilling and power line would be from the active channel in the vertical direction is 30 feet. The horizontal distance between the bore profile and the active channel would never be less than 31 feet. The HDD equipment would be staged approximately 100-125' feet back from the edge of the west bank and 40 feet from the east bank.

Soil loss from erosion would be avoided and minimized according to specific mitigation measures and practices listed in the Stormwater Pollution Prevention Plan (SWPPP) prepared to meet Montana DEQ Construction Stormwater regulatory requirements.

Impacts to the unusual geologic features, soil quality, stability, and moisture are not anticipated with this project.

5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify direct, indirect, and cumulative effects to water resources.

No Action: No effects

Proposed Action: Surface water would not be encountered by the proposed action. A construction storm water permit would be obtained from the Montana DEQ. A requirement of the permit includes the preparation and use of a SWPPP. The SWPPP would include site-specific practices to prevent erosion and delivery of stormwater contaminated with sediment and other construction wastes from being delivered to nearby surface waters. The SWPPP has been completed and has been submitted to the DEQ. The construction stormwater authorization number is MTR107442.

Construction dewatering is not anticipated for the project. In the event dewatering is necessary, the water would be land applied where it cannot reach surface waters. If this is not possible, the water would be pumped into water trucks and disposed off-site in upland areas away from surface waters.

Groundwater would be intercepted by the HDD. There would be no products used in the drilling process that would impact or contaminate groundwater. Naturally occurring bentonite clay is used as a viscosifier during the drilling process to reduce friction and stabilize the drill hole by sealing pores and holding soil particles in place. Drilling fluid is circulated from equipment on the surface, through a drill pipe, and back to the surface along the drill hole. Drilling fluid returns are collected at the entry and exit points and stored for recycling.

Bentonite clay is not a listed hazardous material/substance as defined by the U.S. EPA Emergency Planning and community Right-to-know Act or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) regulatory criteria. Bentonite is non-toxic and commonly used in farming practices but has the potential to impact plans, fish and their eggs if discharged to waterways in significant quantities.

Impacts to water quality, quantity, and distribution are not anticipated with this project.

---

6. AIR QUALITY:

What pollutants or particulate would be produced (i.e. particulate matter from road use or harvesting, slash pile burning, prescribed burning, etc)? Identify the Airshed and Impact Zone (if any) according to the Montana/Idaho Airshed Group. Identify direct, indirect, and cumulative effects to air quality.

No Action: No effects

Proposed Action: A minor amount of emissions associated with the operation of motorized equipment (cars, trucks, excavators/backhoes, boring machines) would be produced during hole boring and powerline installation. These operations would not be expected to take more than 10 days to complete.

---

7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify direct, indirect, and cumulative effects to vegetation.

No Action: No effects

Proposed Action: The State property lies below the low water marks of the Clark Fork river and does not support terrestrial vegetation. The proposal calls for boring under the river bed, thus there would be no impact to either terrestrial or aquatic vegetation on state trust land.

Two excavated bore pits approximately 4' X 4' X 3'deep would be constructed on each side of the river approximately 50'-125' back from the edge of the river. These pits are where equipment would operate and where the powerline would enter the ground. On the west side of the river the powerline would immediately connect to an existing aerial line. On the east side of the river the powerline would be buried in a trench 3-4' deep on land owned by the City of Missoula and the Montana Department of Transportation. There would likely be a 4-8' wide swath of vegetation cleared from the area where the powerline is trenched. Because of the moist conditions in this area, riparian shrub regrowth is expected to occur within 5 years.

8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify direct, indirect, and cumulative effects to fish and wildlife.

Existing Conditions: Terrestrial and Avian Wildlife

Limited habitats for terrestrial wildlife exist in the project area. Surrounding uplands and riparian habitats likely support a variety of wildlife species, but human disturbance in the vicinity has reduced overall species use of these habitats through time.

No Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Proposed Action: Some short-duration disturbance to terrestrial wildlife could occur, but would occur outside of the breeding, nesting, or wintering periods when individuals could be more affected by potential disturbance. No appreciable changes to existing habitats on DNRC-managed lands would be anticipated, small changes to habitats on other ownerships would occur. Collectively, negligible effects to terrestrial wildlife would be anticipated.

Existing Conditions: Fisheries

The Clark Fork River supports a diverse fishery. Species present include bull-trout, westslope cutthroat trout (WCT), mountain whitefish, northern pike minnow, longnose dace, longnose sucker, slimy sculpin, brown trout, rainbow trout, brook trout, northern pike and other minor species (MFISH 2016). Both westslope cutthroat trout and bull trout are considered sensitive species by DNRC. Bull trout is a federally threatened species and potential for impacts to this species are discussed in detail in Section 9 below.

No Action: No disturbance to fisheries would occur. No changes to existing habitats would be anticipated. Collectively, no effects to fisheries would be anticipated.

Action Alternative: The proposed disturbances would occur outside of the channel of the river and would remain beneath the subsurface for the entire width of the Clark Fork River and there would be no disturbance to channel banks or bed. A Storm Water Pollution Prevention Plan would be in place during construction to prevent sedimentation impacts to the river. The drill sites are located on adjacent uplands, well away from the river and would have no direct, indirect, or cumulative effect to fisheries.

9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify direct, indirect, and cumulative effects to these species and their habitat.

Existing Conditions: Terrestrial and Avian Wildlife

Limited habitats for terrestrial wildlife exist in the project area. Some use of the project area by bald eagles could occur. Surrounding riparian habitats likely support a variety of wildlife species, including common species as well as less common species such as great blue herons, yellow-billed cuckoos, and pileated woodpeckers. Proximity to human developments, Reserve Street, and numerous other forms of human disturbance likely limits some wildlife use of the vicinity.

No Action: No disturbance to terrestrial wildlife would occur. No changes to existing habitats would be anticipated. Collectively, no effects to terrestrial wildlife would be anticipated.

Proposed Action: Some short-duration disturbance to terrestrial wildlife could occur. Proposed activities would occur outside of the bald eagle nesting season, but some disturbance to foraging bald eagles could occur. The proposed activities would occur during the fall, which would be expected to occur outside of the nesting period for numerous sensitive avian species that could be using habitats on adjacent ownerships. No appreciable changes in bald eagle prey species would be anticipated. No appreciable changes to existing habitats for other

species would be anticipated. Collectively, negligible effects to terrestrial threatened, endangered, or sensitive wildlife species would be anticipated.

Bull Trout: Bull trout is a federally threatened species. This reach of the Upper Clark Fork River is considered occupied by bull trout habitat.

Bull Trout- No Action: No disturbance to fisheries would occur. No changes to existing habitats would be anticipated. Collectively, no effects to fisheries would be anticipated.

Bull Trout Action: The project would not impact the bed or banks of the Clark Fork River. There would be no direct, indirect or cumulative impacts to bull trout, with the proposed horizontal drilling project and subsurface electric power distribution line installation.

10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine direct, indirect, and cumulative effects to historical, archaeological or paleontological resources.

No Action: No effects

Proposed Action: A Class I (literature review) level review was conducted by the DNRC staff archaeologist for the area of potential effect (APE). This entailed inspection of project maps, DNRC's sites/site leads database, land use records, General Land Office Survey Plats, and control cards. The Class I search revealed that no cultural or paleontological resources have been identified in the APE. Because the area of potential effect on state land is the bed of the Clark Fork River, no cultural resources are present. No additional archaeological investigative work will be conducted in response to this proposed development. However, if previously unknown cultural or paleontological materials are identified during project related activities, all work will cease until a professional assessment of such resources can be made.

11. AESTHETICS:

Determine if the project is located on a prominent topographic feature,or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify direct, indirect, and cumulative effects to aesthetics.

Existing Conditions: The proposed action is within the City of Missoula. The riparian river corridor provides a break from adjacent urban development. The City has recently focused attention towards preserving open space along the river corridor.

No Action: No effects

Proposed Action: The proposal to drill/bore under the river (out of sight) would not cause additional impacts to the aesthetics of the river corridor.

12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify direct, indirect, and cumulative effects to environmental resources.

No Action: There would continue to be a greater potential for extended power blackouts to the neighborhood area between South 3rd Street and the Clark Fork River. Northwestern Energy would continue to have an undesirable level of risk of fines associated with power outages

Proposed Action: The proposal is intended to bring greater redundancy into the power distribution system for a portion of the City and reduce the potential impacts associated with power outages. Placing the powerline underground, would allow the river corridor to more effectively function as open space for the community

13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

This proposal is part of a larger project with MDT to widen Reserve Street and relocate some NW Energy structures.

IV. IMPACTS ON THE HUMAN POPULATION

- *RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.*
- *Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.*
- *Enter "NONE" If no impacts are identified or the resource is not present.*

14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No Action: Potential loss of power could have public safety implications for the neighborhood between South 3rd Street and the Clark Fork River.

Proposed Action: Implementation would provide an increased level of reliability as well as improved switching capability during outages and scheduled maintenance to a substantial portion of Missoula customers located between South 3rd Street and the Clark Fork River. Additional redundancy in power supply routes and improved switching capability would reduce potential public safety issues.

15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

No Action: Potential loss of power could have adverse effects for existing and future industrial and commercial developments in the neighborhood between South 3rd Street and the Clark Fork River.

Proposed Action: Implementation would provide an increased level of reliability as well as improved switching capability during outages and scheduled maintenance to industrial and commercial customers located between South 3rd Street and the Clark Fork River. Additional redundancy in power supply routes and improved switching capability would reduce the potential for lost service, production and potential safety issues There would be a benefit to the community associated with a reduction in the frequency and duration of power outages to a portion of the city. There would also be a corresponding reduced potential for NW Energy to be fined for blackouts in service.

16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify direct, indirect, and cumulative effects to the employment market.

No Action: No effect

Proposed Action: Drilling/boring and installation of the powerline under the river is estimated to provide potential employment for 5-10 people for up to 10 days.

17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify direct, indirect, and cumulative effects to taxes and revenue.

No Action: No effect.

Proposed Action: Construction and installation of the proposed new powerline would marginally increase the taxable value of Northwestern Energy property. An indirect effect of improving the reliability of the power distribution system could be to foster additional development within the area served by this distribution line.

18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify direct, indirect, and cumulative effects of this and other projects on government services

No Action: No effect

Proposed Action: By improving the power distribution to a portion of the city, there may be a reduction in the need for government services to deal with the impacts of power outages.

19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

No Action: No effect

Proposed Action: The City of Missoula has been acquiring lands along the Clark Fork River as open space for the community. Drilling/boring the proposed power distribution line under the river would not adversely the character of the land for open space. Northwestern Energy is working with both the City of Missoula and the Montana Department of Transportation to provide services to the community. The project would be subject to permitting by the Missoula County Conservation District (310 Permit), the Montana Department of Environmental Quality (SWPPP), and the City of Missoula (Floodplain Permit).

20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify direct, indirect, and cumulative effects to recreational and wilderness activities.

No Action: No effect

Proposed Action: The area is an open space river corridor within an urban setting. There is a trail on the west bank of the river adjacent to the city sewage treatment plant that appears to receive some recreational use. The lands on the east side of the river are marshy and are a popular camping area for transients. The property does not provide access to wilderness.
The proposal to drill/bore a powerline under the river would not be expected to impact current and future use of the area for recreational purposes.

21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify direct, indirect, and cumulative effects to population and housing.

No Action: No effect

Proposed Action: The proposal is intended to improve the reliability of electrical service to a portion of Missoula. There could be a slight growth inducing effect to population and housing associated with improved electrical service to the area served by this powerline.

22. SOCIAL STRUCTURES AND MORES:
Identify potential disruption of native or traditional lifestyles or communities.

No Action: No effect

Proposed Action: No effect

23. CULTURAL UNIQUENESS AND DIVERSITY:
How would the action affect any unique quality of the area?

No Action: No effect

Proposed Action: No effect

24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:
Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify direct, indirect, and cumulative economic and social effects likely to occur as a result of the proposed action.

No Action: No effect

Proposed Action: An easement approximately 245' long and 20' wide involving .11 acres of land would be granted to Nothwestern Energy Corporation for a buried powerline. The cost of this easement would be calculated at ½ the value similar adjacent properties. The revenue collected would be deposited in the permanent fund for the Public Lands Navigable Waters Trust account. This trust is for the support of public schools (K-12) facilities and technology needs.

EA Checklist Prepared By:	**Name:**	Robert H Storer	**Date:**	August 28, 2018
	Title:	SW Land Office Trust Lands Program Manager		

V. FINDING

25. ALTERNATIVE SELECTED:

I select the proposed Action alternative.

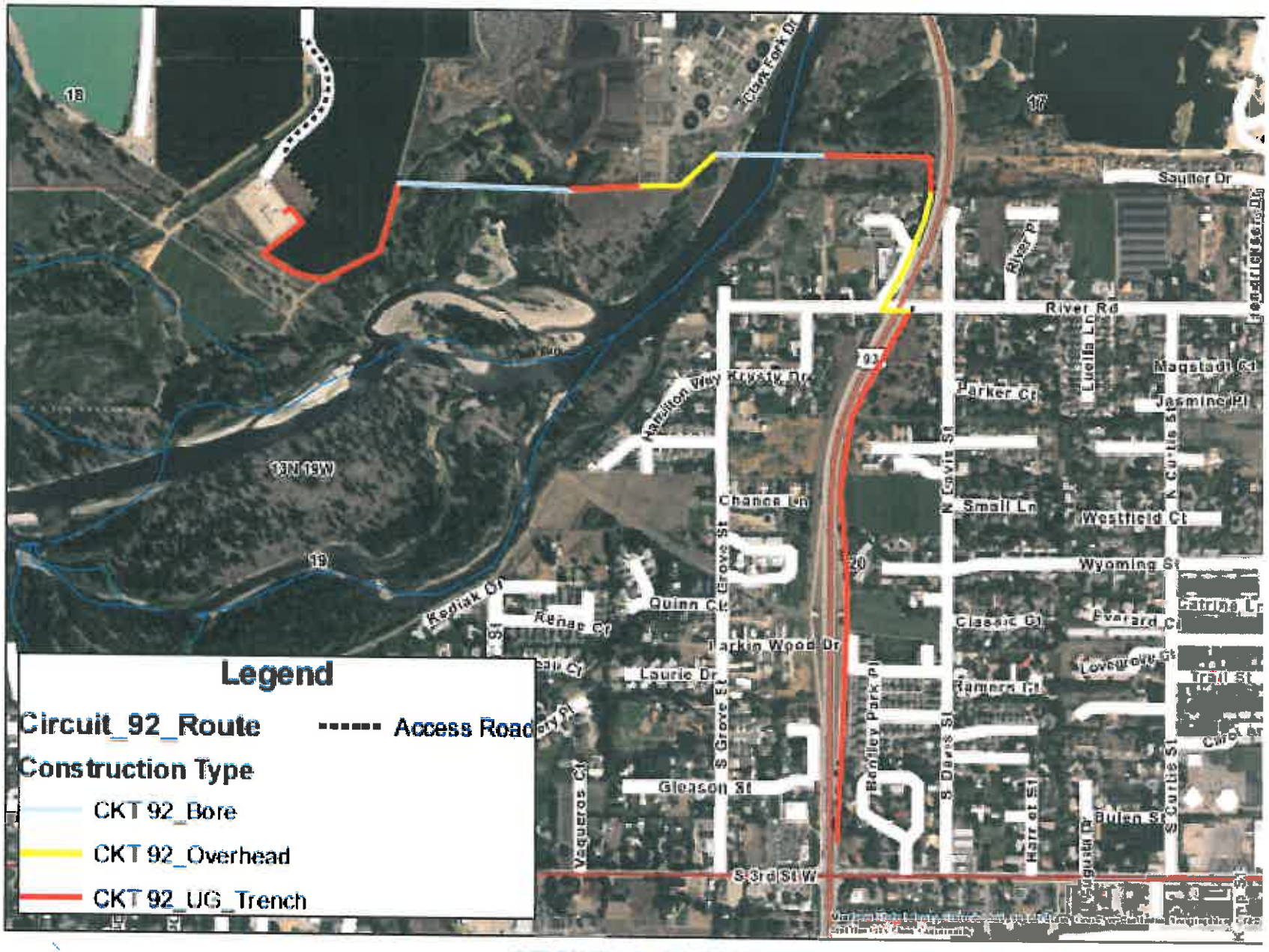
26. SIGNIFICANCE OF POTENTIAL IMPACTS:

I find that implementation of this alternative will not cause significant environmental impacts.

27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:

[ ]	EIS	[ ] More Detailed EA	[X] No Further Analysis

EA Checklist Approved By:	**Name:**	Jonathan Hansen
	Title:	Missoula Unit Manager
Signature:		**Date:** 9-6-18



CIRCUIT 92 - ELECTRIC DISTRIBUTION PROJECT
T13N, R19W, SECTION 17, 18 & 19
CITY OF MISSOULA
MISSOULA COUNTY, MONTANA