

**MISSOURI-MADISON RIVER FUND RECREATION PROJECT
FY2025 GRANT APPLICATION FORM**

Project Name: BLM Lake Sites Water System Replacements

Reservoir or River Segment: Hauser and Holter Reservoirs County(ies) Lewis and Clark

Site Name (or project location): White Sandy, Holter Lake and Log Gulch

Applicant Name: Chris McGrath

Position and Agency: BLM-Supervisory Outdoor Recreation Planner

Telephone: 406-438-0837

Email: cmcgrath@blm.gov

Project Sponsor Name: Chris McGrath

Position and Agency: BLM-Supervisory Outdoor Recreation Planner

Telephone: 406-438-0837

Email: cmcgrath@blm.gov

Project Cost Breakdown and Financial Request:

Complete the financial section below by providing total project cost (to the nearest dollar), contributions by applicant and cooperators, request for NorthWestern Energy match of agency funds (see detailed instruction), and River Fund Grant request. Document in-kind contributions by public agencies for determination of NorthWestern Energy match request. A description of funding sources and in-kind contributions should be included in the Project Description.

Total project cost:	<u>\$246,384</u>	
Applicant Contributions – cash (GAOA)	<u>\$</u>	
Applicant Contributions – value of in-kind:	<u>\$</u>	
Other Contributions – Please list by source:		
	<u>\$</u>	
	<u>\$</u>	
	<u>\$</u>	
	<u>\$</u>	Percentage of Total Project Cost:
Total Applicant and Other Contributions:	<u>\$</u>	<u>%</u>
NorthWestern Energy Match Request:	<u>\$</u>	<u>%</u>
River Fund Grant Request:	<u>\$246,384</u>	<u>100%</u>
Proposed Project Implementation Period:	<u>Spring to Fall 2025</u>	

**MISSOURI-MADISON RIVER FUND RECREATION PROJECT
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1. Has this project been previously submitted for funding consideration by the River Fund Board, either as a separate project or part of another project? Yes No

Related portions of this project have received funding in previous years, but the specific elements in this request have not yet been funded. During the 2022/2023 cycle, the River Fund awarded \$94,000 to replace the wells at Devil’s Elbow and Clark’s Bay recreation areas, with the work scheduled for spring 2024. The well was drilled in summer 2024 and is currently being connected to the distribution system. One well will now serve both Public Water Systems rather than maintaining two separate wells.

In the 2023/2024 cycle, the River Fund awarded \$236,607 to repair and replace the water distribution systems at Clark’s Bay and Devil’s Elbow, with work planned for summer 2024. However, this project was paused to ensure that the new well could be fully developed and functioning properly before upgrading the distribution system. The subsequent pumphouse upgrades will vary depending on the water quality results.

2. **Project Description:** Provide a description of the proposed project. Be sure to include specific project elements that are planned, and any associated cost detail.

This project aims to replace the Public Water Systems (PWS) distribution systems at White Sandy, Holter Lake, and Log Gulch. It is a continuation of the ongoing effort to upgrade all drinking water systems at BLM-managed sites along Hauser and Holter Reservoirs. The BLM has paired this request with a Great American Outdoor Act (GAOA) project, funded at \$650,000, to replace the irrigation systems and make landscaping improvements at these locations. This River Fund grant would specifically fund the replacement of drinking water distribution systems. Since the GAOA funding will not be utilized for the drinking water portion of the project, it was not listed as a contribution on the financial breakdown despite it being used for a significant portion of the larger water system upgrade project.

The BLM Butte Field Office (BFO) will issue one contract for the remainder of the project to minimize trenching and mobilization costs. Combining the potable water and irrigation projects will greatly reduce the government contracting costs associated with mobilization, boring, and trenching. With the one-time GAOA funding and the River Fund grant funds available, we aim to complete these system renovations in their entirety.

The BLM has redesigned the water systems to reduce the overall maintenance footprint, keeping costs manageable while enhancing user experience. New disturbance will be minimized by utilizing previously disturbed ground whenever possible and reducing the number of water lines and hydrants. Renovations will include updating the pumphouses, installing HDPE waterlines, hydrants, backflow preventers, filters, water softeners, and flow meters, as well as replacing other components. The BLM has already purchased the necessary hydrants and plans to remove abandoned hydrants, concrete pads, and remaining components of the old systems. In some areas, existing water lines will be maintained, but most will require complete replacement due to their deteriorated condition. Below is a site-specific breakdown of the drinking water project, listed in priority order in case phasing becomes necessary:

White Sandy Campground:

White Sandy has two existing wells: one for irrigation and one for drinking water. The drinking water well produces high levels of iron, sulfate, Total Dissolved Solids (TDS), and manganese—posing health concerns for infants and toddlers, as well as regular consumers like camp hosts. The other well is too close to a septic system to be used for drinking water. As a result, the water system has been out of public service since 2022. This project will renovate the pumphouse with a

filtration system to address water quality. If filtration proves inadequate, we may install an above-ground tank to haul in water for distribution. The distribution system is in poor condition due to faulty construction and maintenance, with two of the three potable water lines broken and the third serving only the host sites, so the distribution lines will be replaced.

White Sandy PWS Replacement \$75,761 including labor costs (see below).

Holter Lake Campground:

Holter Lake’s distribution system is deteriorating, with significant breaks in the lines. The drinking water well remains functional, so only the distribution system will be replaced. Pipes will be routed around the asphalt parking lot instead of through it, and new HDPE lines and hydrants will be installed, reducing the number of hydrants for better efficiency and lower maintenance. The pumphouse will be upgraded with new filters, pressure tanks, flow meters, and backflow preventers. Additionally, this proposal will eliminate cross-connections between irrigation and drinking water lines to ensure compliance with MT DEQ regulations.

Holter Lake PWS Replacement \$85,561 including labor costs (see below).

Log Gulch Campground:

Log Gulch’s water system is compromised, with several broken pipes affecting about two-thirds of the site. The well remains functional, so the project will focus on replacing the distribution system with new HDPE pipes and fittings. The number of hydrants will be reduced to increase maintenance efficiency while still meeting public expectations. Additionally, the pumphouse will receive proper pressure tanks, filtration, and other necessary upgrades.

Log Gulch PWS Replacement \$85,061 including labor costs (see below).

The BLM is also requesting labor funds to complete this project. Engineering staff require three workmonths to finalize designs, develop contract specifications, and administer the project, totaling \$29,049. The remaining labor costs will fund four maintenance workers who will assist with site preparation and cleanup, totaling \$23,935. Labor costs would be divided evenly between sites (\$17,661 per site) if project phasing is required.

Labor Cost Breakdown:

- Engineering Staff: \$29,049
 - Maintenance Staff: \$23,935
- Total Labor Cost: \$52,984**

Table 1. BLM Lake Site Water System Replacement Cost Per-Site Breakdown			
	Site Cost	BLM Labor Cost	Total Cost
White Sandy PWS Replacement	\$ 58,100	\$ 17,661	\$ 75,761
Holter Lake PWS Replacement	\$ 67,900	\$ 17,661	\$ 85,561
Log Gulch PWS Replacement	\$ 67,400	\$ 17,661	\$ 85,061
Total Cost to Replace PWS	\$ 193,400	\$ 52,984	\$ 246,384

For additional price breakdowns see attachment 1. For design drawing see attachment 2.

3. **Project Phasing:** Briefly discuss whether the project could be phased over more than one year or construction season.
 - ▶ Yes, this project could be phased, however overall cost would increase significantly due to multiple mobilization, trenching, and boring costs that would be repeated for each phase. Great America Outdoor Act (GAOA) funding will cover the replacement of the irrigation systems at these sites in 2025, so combining the drinking water systems work in the same contract would drastically increase efficiently and save overall cost. Splitting or phasing the work would result in paying for mobilization and trenching costs twice at each site.

4. **Cultural Resource Management:** Cultural Resource Management (CRM) requirements for any activity related to this Project must be completed and documented to NorthWestern Energy as a condition of awarded River Fund grant funds or NorthWestern Energy matching funds. Grant and matching funds may not be used for any land-disturbing activity, or the modification, renovation, or removal of any buildings or structures until the CRM consultation process has been completed. Summarize how you will complete requirements for Cultural Resource Management.

- ▶ The BLM BFO Archeologist has already received Montana SHPO concurrence that the proposed project would not impact any cultural resources.

5. **Scoring Criteria.** Respond to the following Scoring Criteria.

5.1 Does the project occur at a 2188 license site?

- ▶ Yes, all three of these sites are 2188 sites. The sites are White Sandy, Holter Lake and Log Gulch Campgrounds.

5.2 Project is for operation and maintenance of an existing recreation site. Describe if the project will meet operation and maintenance needs. Higher points awarded to projects that are higher priority and are not a recurring expense. Lower points awarded to projects that are low priority and/or have been previously funded. It is unlikely that the timeframe of River Fund would address emergency operation and maintenance needs but could support non-emergency operation and maintenance needs.

- ▶ Yes, the proposed project is to replace existing drinking water systems within existing recreation sites where drinking water is identified as an amenity in the FERC license. The project will allow the water systems to return to being fully operational, within MT DEQ compliance and will reduce future maintenance issues by replacing these failing systems.

5.3 Project involves collaboration with other agencies or organizations. Identify project partners other than NorthWestern Energy or River Fund, if any, and describe their participation. Document all funding sources and all in-kind support and services to a project, because all are sources of partnerships and in-kind contributions from public agencies qualify for calculation of NorthWestern Energy matching funds. If there are no project partners, explain why.

- ▶ This project does involve some collaboration with Montana Department of Environmental Quality but does not have any partnerships.

5.4 Project provides a benefit to public recreation in the Project Area and addresses specific issues and goals of the Missouri-Madison Comprehensive Recreation Plan (CRP). Identify how the project provides a benefit to public recreation and describe how the project specifically addresses issues and goals in Chapter 2-1 of the CRP.

- ▶ **Goal: To provide safe and well-managed recreation sites and dispersed use areas that provide enjoyable user experiences across a spectrum of opportunities and seasons.**
The BLM's proposal to replace the dysfunctional water systems would improve visitors' experiences at the developed recreation sites by providing quality drinking water. Most of the camping public rely on drinking water availability at these campgrounds. Day use visitors are less impacted, but they would also benefit from having a source of safe, clean drinking water available at these sites. Additionally, reliable drinking water helps BLM to maintain high quality volunteer camp hosts who are a critical asset for both the agency and site visitors.

Goal: To maintain or proactively increase public safety for recreationists in the Project Area.

Replacing the dysfunctional drinking water systems would improve public health and safety and reduce the risk of the BLM providing unsafe drinking water. This project would meet drinking water standards as described in the Clean Water Act as well as meet requirements for MT DEQ to serve drinking water. The additional filtration/treatment being installed would improve water quality and further improve public health and safety.

5.5 Project responds to a clearly identified need. Describe and document the need for this project and how the project would address that need. Cite specific sources, as possible, to establish need and support the project. Discuss consequences if the funding request is unsuccessful. For a new construction or acquisition project, identify how post-project, long-term costs (such as site maintenance and management) will be provided.

- ▶ The lack of drinking water and frequent closures of portions of our water systems have been the top visitor complaints in recent seasons. Lack of water has also impacted BLM camp hosts and their willingness to serve as volunteers. Constantly addressing leaks and digging up these systems to maintain limited functionality has strained our already limited resources, while also negatively impacting the visitor experience. Visitors expect reliable drinking water at these sites since it has been provided for decades, and they are understandably disappointed when it is unavailable.

If the BLM is unable to secure funding through this process, we will continue to seek the necessary funds through every available source. In the meantime, the Holter Lake and Log Gulch systems will remain minimally operational, while White Sandy will continue to be closed to public water access until sufficient funding is secured to restore the system, as it is currently non-functional.

The BLM is actively working to address these challenges by adding a Permanent Full-Time Maintenance Leader and recently hired three Career Seasonal Maintenance Workers. This staffing increase will significantly enhance our long term ability to maintain these systems and facilities.

5.6 Project design options have been considered, estimated, and a preferred design selected. Well-designed projects reduce occurrences of budgetary overages, design changes, and additional complications. Discuss the current design phase for this project, demonstrate that the project has been well vetted, and include cost estimates.

- ▶ The BLM Butte Field Office and Western Montana District Engineering staff have dedicated significant time and effort over the past 2.5 years to assessing, reviewing, and planning alternative designs to ensure the success of this project while minimizing costs. We've collaborated closely with the BLM National Operations Center (NOC), particularly for the design of the pumphouses and filtration/treatment systems to improve water quality. The NOC specialists, who are the agency's national water system experts, have provided invaluable guidance, especially in refining the filtration and treatment designs. Additionally, we have been working with the Montana DEQ to ensure the redesigned systems meet all necessary approvals and standards.

5.7 Project supports or protects other resources and is consistent with or supports resource plans in the Project Area. Describe how this project will protect resource values (such as public access, water quality, fisheries, wildlife, habitats, and cultural resources) and support other resource and agency plans, including Project 2188 License plans and land use and land management plans in place in the Corridor. Management plans should provide justification for the project.

- ▶ This project would improve public health and safety and would improve water quality related to the drinking water systems but otherwise would not have any impacts on other resources in the areas. This project is consistent with the other resources and the BLM Resource Management Plan.

6. Insert map(s) showing the location of the proposed project, drawings and design work related to the project, and a reasonable number of photos (as available) here.

Attachment 1 - Cost Breakdown

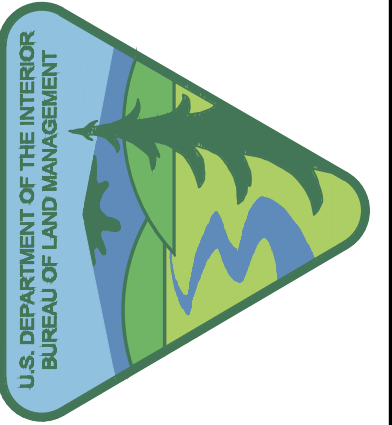
White Sandy Potable Distribution System			
Quantities			
Lines =	3		
Total Feet of Line =	2600		ft
Hydrants =	7		
Feet of trenching =	2350		ft
Boring under Pavement =	100		ft
Cost			
Pipe	\$	3	ft
Hydrant Install	\$	200	each
Trenching	\$	4	ft
Boring under Pavement =	\$	150	ft
Pressure Test =	\$	1,500	each
Disinfection =	\$	1,500	each
Pump Room Updates =	\$	21,500	each
SubTotal Estimate =	\$	58,100	
Labor =	\$	-	
Total Site Estimate =	\$	58,100	

Holter Lake Potable Distribution System			
Quantities			
Lines =	3		
Total Feet of Line =	2000		ft
Hydrants =	10		
Feet of trenching =	1850		ft
Boring under Pavement =	220		ft
Cost			
Pipe	\$	3	ft
Hydrant Install	\$	200	each
Trenching	\$	4	ft
Boring under Pavement =	\$	150	ft
Pressure Test =	\$	1,500	each
Disinfection =	\$	1,500	each
Pump Room Updates =	\$	16,500	each
SubTotal Estimate =	\$	67,900	
Labor =	\$	-	
Total Site Estimate =	\$	67,900	

Log Gulch Potable Distribution System			
Quantities			
Lines =	4		
Total Feet of Line =	2700	ft	
Hydrants =	7		
Feet of trenching =	2100	ft	
Boring under Pavement =	200	ft	
Cost			
Pipe	\$ 3	ft	
Hydrant Install	\$ 200	each	
Trenching	\$ 4	ft	
Boring under Pavement =	\$ 150	ft	
Pressure Test =	\$ 1,500	each	
Disinfection =	\$ 1,500	each	
Pump Room Updates =	\$ 16,500	each	
SubTotal Estimate =	\$ 67,400		
Labor =	\$ -		
Total Site Estimate =	\$ 67,400		

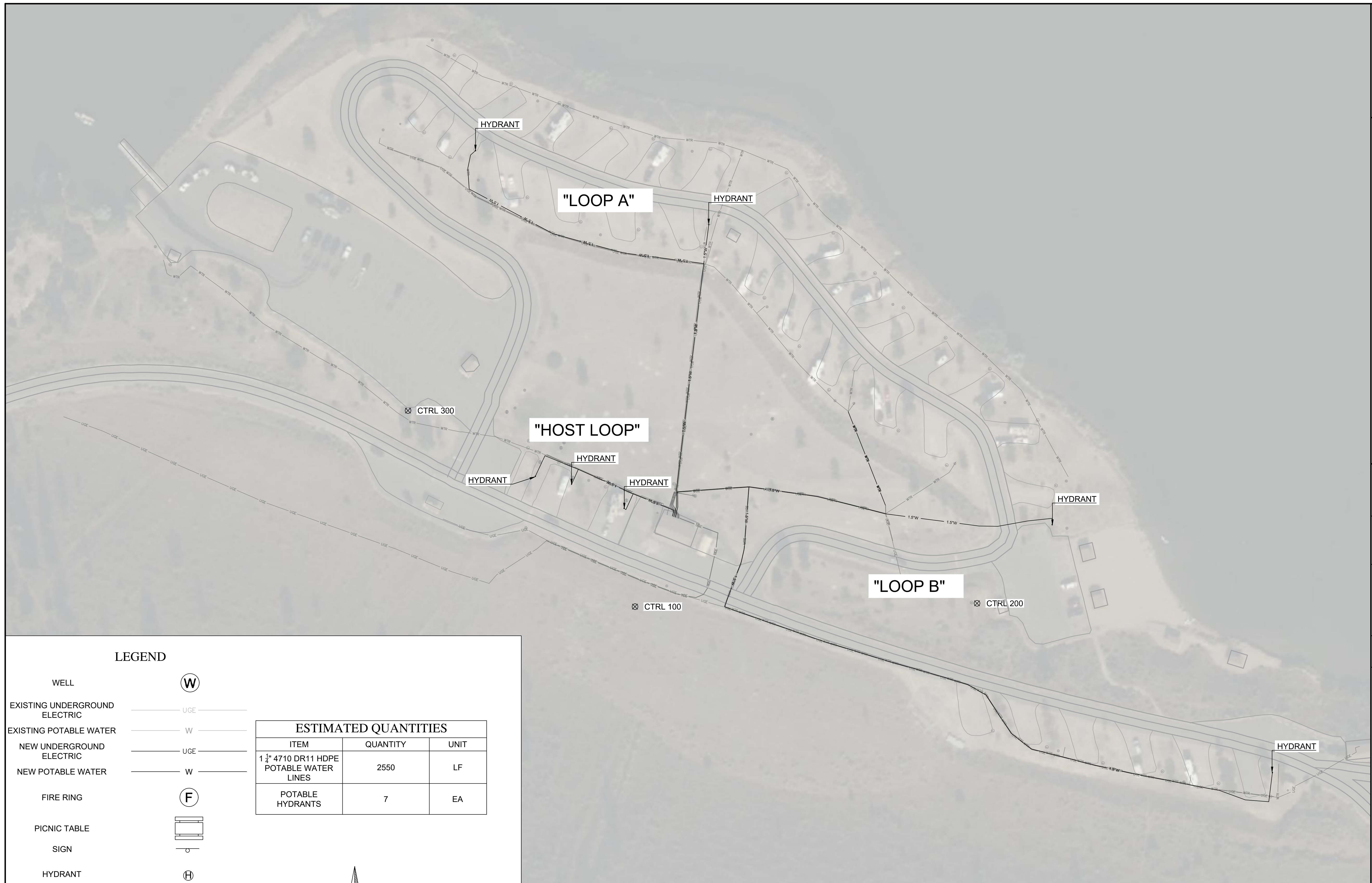
Labor Needed for Water System Project				
Position	Cost/WM	Work Months (WM)	Cost	Notes
Engineer	\$9,683.00	3	\$29,049.00	0.5 WMs for initial design, 0.5 Wms contracting, 2 WMs administering the contract
Maintenance Leader	\$6,211.00	1	\$6,211.00	0.5 WMs prepping for contract, 0.5 WMs after contract
Maintenance Worker	\$5,908.00	3	\$17,724.00	0.5 WMs prepping for contract, 0.5 WMs after contract for 3 CS positions
Total Cost to BLM			\$52,984.00	
Per-Site			\$17,661.33	

BLM Lake Site Water System Replacement Cost Per-Site Breakdown				
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RIVER FUND 2024 - LAKE SITES POTABLE
WATER DISTRIBUTION SYSTEM REPLACEMENT

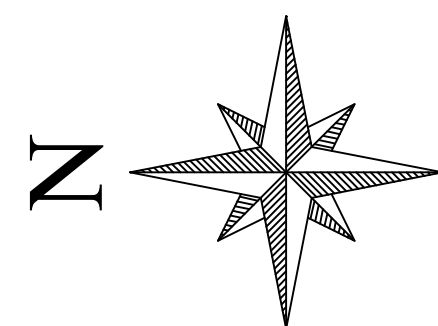
WHITE SANDY PLAN



LEGEND

- WELL
- EXISTING UNDERGROUND ELECTRIC
- EXISTING POTABLE WATER
- NEW UNDERGROUND ELECTRIC
- NEW POTABLE WATER
- FIRE RING
- PICNIC TABLE
- SIGN
- HYDRANT
- IRR BOX
- CURBSTOP VALVE

ESTIMATED QUANTITIES		
ITEM	QUANTITY	UNIT
1 1/4" 4710 DR11 HDPE POTABLE WATER LINES	2550	LF
POTABLE HYDRANTS	7	EA

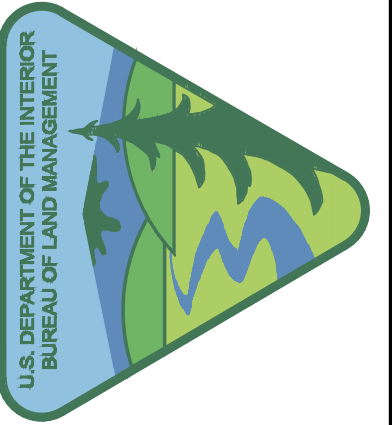


SCALE 1" = 60'

WHITE SANDY
DISTRIBUTION SYSTEM REPLACEMENTS

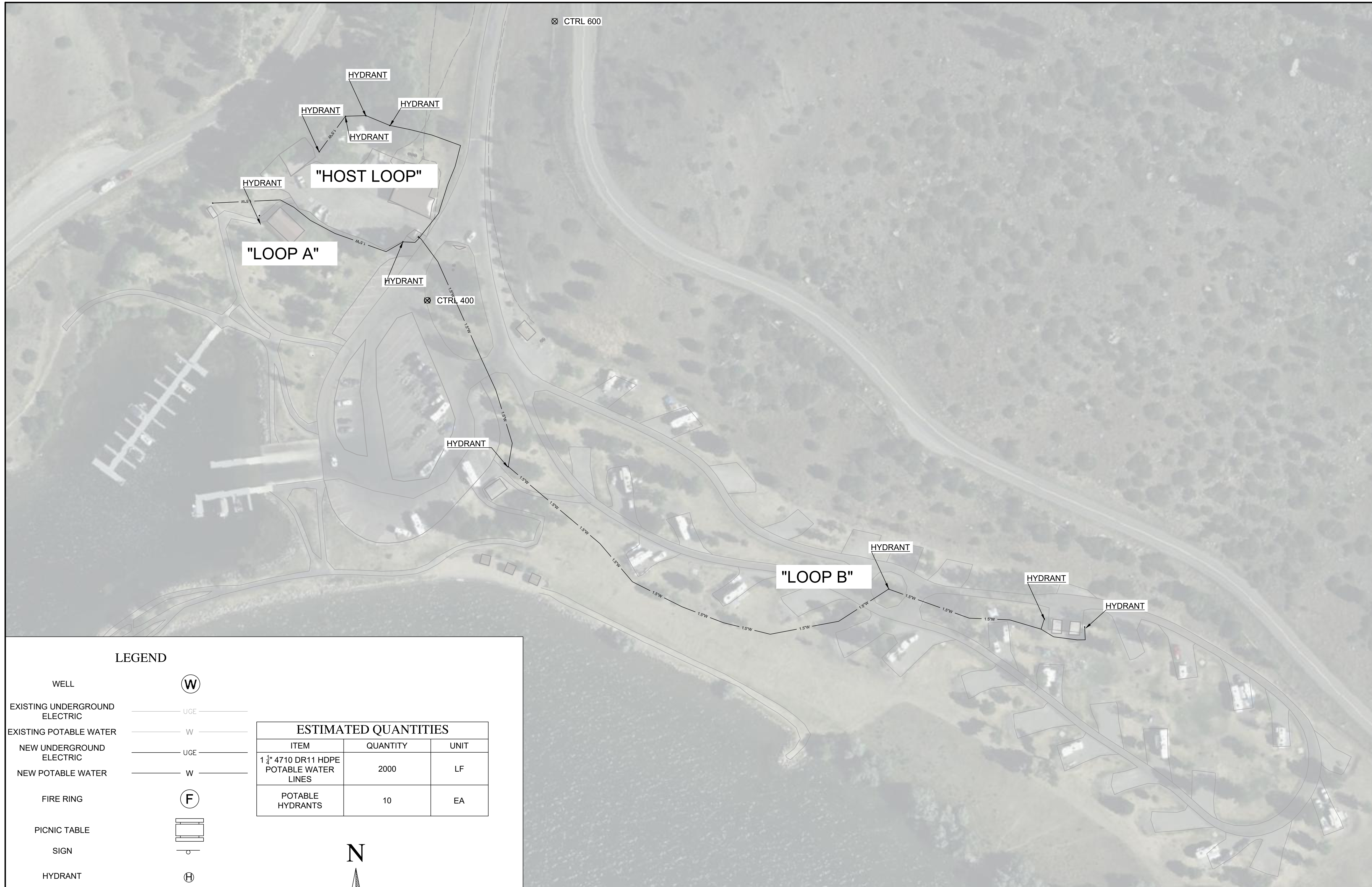
MARK	REVISION	DATE	APPROVED

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DISTRICT: WESTERN MONTANA DISTRICT
DESIGN OFFICE: BUTTE FIELD OFFICE
ISSUED FOR: BUTTE FIELD OFFICE ISSUE DATE: 02/16/2024
SHEET C2
01 OF 03



RIVER FUND 2024 - LAKE SITES POTABLE
WATER DISTRIBUTION SYSTEM REPLACEMENT

HOLTER LAKE PLAN



LEGEND

- WELL Ⓜ
- EXISTING UNDERGROUND ELECTRIC — UGE —
- EXISTING POTABLE WATER — W —
- NEW UNDERGROUND ELECTRIC — UGE —
- NEW POTABLE WATER — W —
- FIRE RING ⓕ
- PICNIC TABLE
- SIGN
- HYDRANT Ⓜ
- IRR BOX ⊗
- CURBSTOP VALVE ⊕

ESTIMATED QUANTITIES		
ITEM	QUANTITY	UNIT
1 1/4" 4710 DR11 HDPE POTABLE WATER LINES	2000	LF
POTABLE HYDRANTS	10	EA



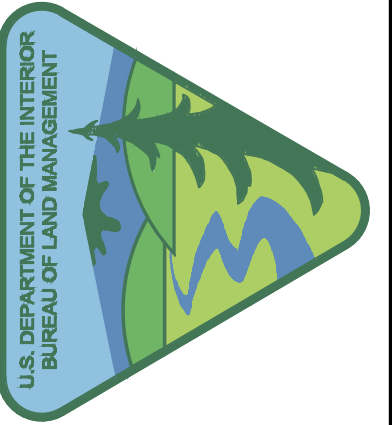
SCALE 1" = 60'

HOLTER LAKE
DISTRIBUTION SYSTEM REPLACEMENTS

MARK	REVISION	DATE	APPROVED

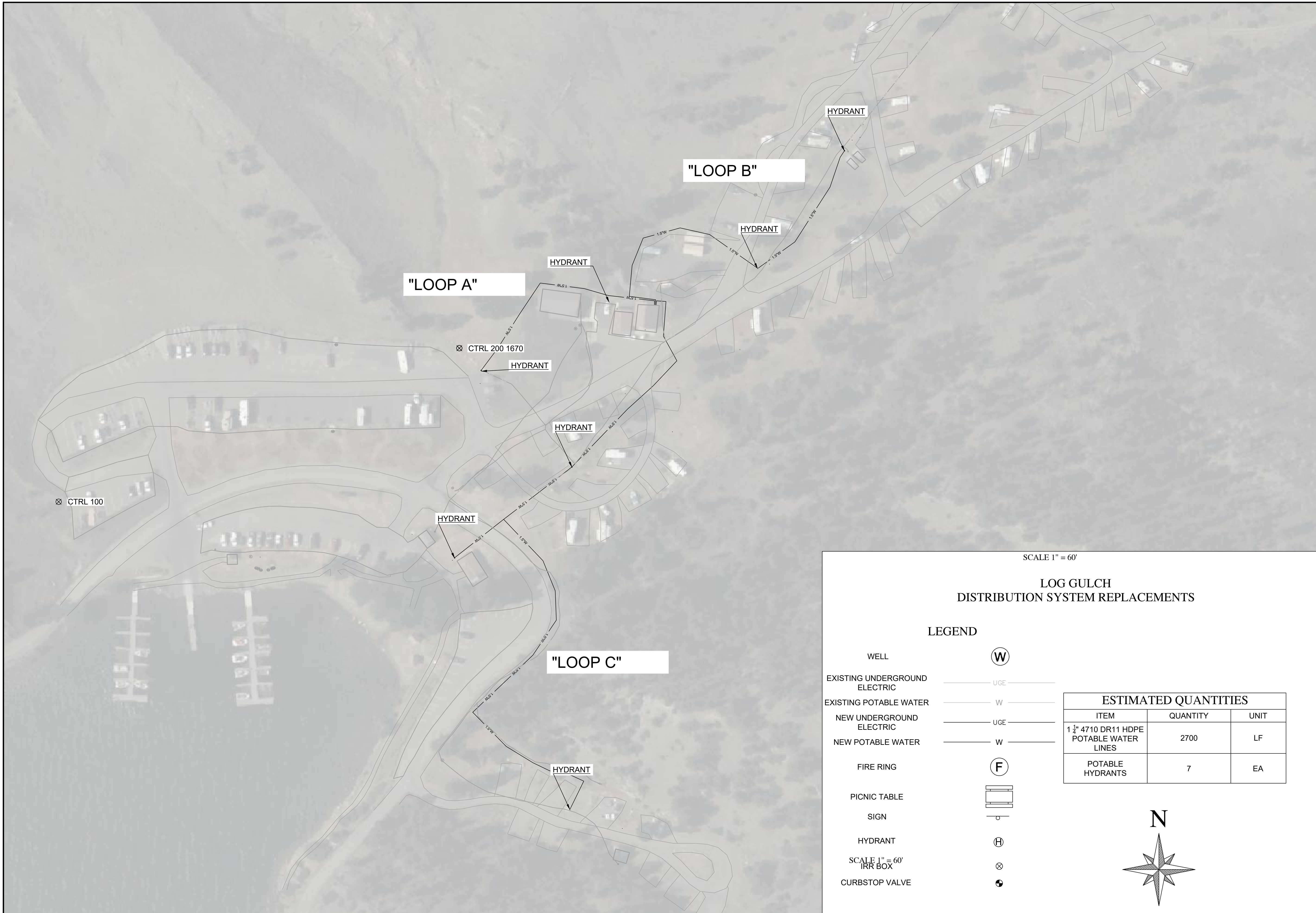
U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
DISTRICT: WESTERN MONTANA DISTRICT
DESIGN OFFICE: BUTTE FIELD OFFICE
ISSUED FOR: BUTTE FIELD OFFICE ISSUE DATE: 02/16/2024

SHEET C3
2 OF 03



RIVER FUND 2024 - LAKE SITES POTABLE
WATER DISTRIBUTION SYSTEM REPLACEMENT












HOLTER LAKE PLAN



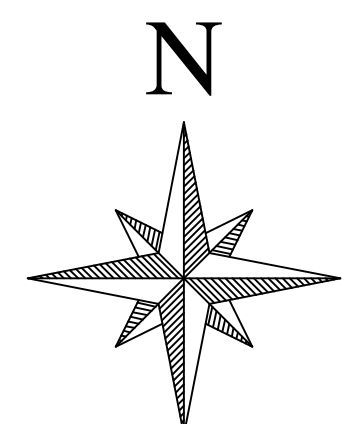
SCALE 1" = 60'

LOG GULCH
DISTRIBUTION SYSTEM REPLACEMENTS

LEGEND

- WELL 
- EXISTING UNDERGROUND ELECTRIC 
- EXISTING POTABLE WATER 
- NEW UNDERGROUND ELECTRIC 
- NEW POTABLE WATER 
- FIRE RING 
- PICNIC TABLE 
- SIGN 
- HYDRANT 
- SCALE 1" = 60'
IRR BOX 
- CURBSTOP VALVE 

ESTIMATED QUANTITIES		
ITEM	QUANTITY	UNIT
1 1/4" 4710 DR11 HDPE POTABLE WATER LINES	2700	LF
POTABLE HYDRANTS	7	EA



MARK	REVISION	DATE	APPROVED

U.S. DEPARTMENT OF THE INTERIOR
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