DEQ
Montana Department
of Environmental Quality

June 5, 2023

FINDING OF NO SIGNIFICANT IMPACT

TO ALL INTERESTED GOVERNMENTAL AGENCIES AND PUBLIC GROUPS

As required by state and federal rules for determining whether an Environmental Impact Statement is necessary, an environmental review has been performed on the proposed action below:

Project	West Yellowstone Wastewater Treatment Plant
Location	West Yellowstone, Montana
Project Number	C301313
Total Cost	$37,211,600

The Town of West Yellowstone, through its 2020 Wastewater System Preliminary Engineering Report (PER), and a 2021 PER Addendum, both prepared by Forsgren Associates Inc., has identified the need to construct a new wastewater treatment facility. Deficiencies with the existing wastewater lagoon system include excessive sludge accumulation; damaged components including pond liners, influent flow meter, and the effluent transfer structure; and a non-functioning coarse bubble aeration system. The existing system was designed to treat an average daily flow of 439,000 gallons per day (gpd) and is currently seeing an average daily flow of 635,000 gpd during the critical peak season associated with summer tourism. This is 45% greater than the system's designed treatment capacity. The deficiencies noted above have prompted the Town to issue a moratorium on connections to or new uses of the Town's wastewater treatment system in May of 2022, essentially restricting any new development in the area.

To address treatment system deficiencies and produce a high-quality effluent for disposal, the Town will construct a new mechanical treatment plant adjacent to the existing lagoons on property leased from the Federal Aviation Agency. The new treatment facility will consist of a headworks screening facility, biological treatment basins (with aeration cycling for the enhanced removal of carbon and nitrogen), secondary clarifiers, and aerobic digesters. Biosolids generated from the treatment process will be dewatered and disposed of in the Logan Landfill. The treated effluent will be discharged to groundwater via the existing infiltration/percolation (I/P) bed system in accordance with their MGWPCS permit No. MTX000244. The treatment plant will be housed in a building to prevent freezing of the treatment basins and mechanical equipment. Once the new facility is complete the existing treatment lagoons will be reclaimed under a future project. The new treatment plant will be sized to handle current flows and will accommodate reasonable growth over the next 20 years with a flow rate up to 1.5 million gallons per day. In addition, the proposed project will improve reliability and will provide the needed operational flexibility to consistently meet permit effluent limits.

Federal and State grant/loan programs will fund the project. Environmentally sensitive characteristics such as threatened/endangered species, floodplains, wetlands, and historical sites are not expected to be adversely impacted because of the proposed project. No significant long-term environmental impacts were identified.

An environmental assessment (EA), which describes the project and analyzes the impacts in more detail, is available for public scrutiny on the DEQ web site (https://deq.mt.gov/public/water-public) and at the following locations:

Mike Abrahamson, P.E.
Department of Environmental Quality
1520 East Sixth Avenue
P.O. Box 200901
Helena, MT 59620-09011
mabrahamson@mt.gov

Dan Walker, Town Manager
Town of West Yellowstone
P.O. Box 1570
West Yellowstone, MT 59758

Comments on this Finding of No Significant Impact (FONSI) or on the Environmental Assessment (EA) may be submitted to the Department of Environmental Quality at the above address. Comments must be postmarked no later than 30 days after the publication date of this FONSI in the newspaper. After evaluating comments received, the department will revise the EA or determine if an environmental impact statement is necessary. If no substantive comments are received during the comment period, or if substantive comments are received and evaluated and the environmental impacts are still determined to be non-significant, this FONSI will stand. No administrative action will be taken on the project for at least 30 calendar days after the release of the FONSI.

Sincerely,

Rachel Clark, P.E.
Engineering Bureau Chief
Water Quality Division
Montana Department of Environmental Quality

TOWN OF WEST YELLOWSTONE

WASTEWATER TREATMENT PLANT

ENVIRONMENTAL ASSESSMENT

I. COVER SHEET

A. PROJECT IDENTIFICATION

Applicant:	Town of West Yellowstone
Address:	P.O. Box 1570 West Yellowstone, MT 59758
Project Number:	C301313

B. CONTACT PERSON

Name:	Dan Walker, Town Manager
Address:	P.O. Box 1570 West Yellowstone, MT 59758
Telephone:	(406) 646-7795

C. ABSTRACT

The Town of West Yellowstone, through its 2020 Wastewater System Preliminary Engineering Report (PER), and a 2021 PER Addendum, both prepared by Forsgren Associates Inc., has identified the need to construct a new mechanical wastewater treatment facility to address aging infrastructure, hydraulic capacity limitations, and maintain compliance with anticipated total nitrogen limits in the Town's Montana Ground Water Pollution Control System (MGWPCS) permit. The Town's existing three-cell lagoon system was constructed in the 1990s and discharges to nine infiltration-percolation (I/P) beds for the disposal of treated effluent to groundwater. Deficiencies with the existing lagoon system include excessive sludge accumulation; damaged components including pond liners, influent flow meter, and the effluent transfer structure; and a non-functioning coarse bubble aeration system. The existing system was designed to treat an average daily flow of 439,000 gallons per day (gpd) and is currently seeing an average daily flow of 635,000 gpd during the critical peak season associated with summer tourism. This is 45% greater than the system's designed treatment capacity. The deficiencies noted above have prompted the Town to issue a moratorium on connections to or new uses of the Town's wastewater treatment system in May of 2022, essentially restricting any new development in the area.

To address treatment system deficiencies and produce a high-quality effluent for disposal, the Town will construct a new mechanical treatment plant adjacent to the existing lagoons on property leased from the Federal Aviation Agency (FAA). The new treatment facility will consist of a headworks screening facility with grit removal, biological treatment basins (with aeration cycling for the enhanced removal of carbon and nitrogen), secondary clarifiers, and aerobic digesters. Biosolids generated from the treatment process will be dewatered and disposed of in the Logan Landfill. The treated effluent will be discharged to groundwater via the existing infiltration/percolation (I/P) bed system in accordance with their MGWPCS permit No. MTX000244. The treatment plant will be housed in a building to prevent freezing of the treatment basins and mechanical equipment. Once the new facility is complete the existing treatment lagoons will be reclaimed under a future project. The new treatment plant will be sized to handle current flows and will accommodate reasonable growth over the next 20 years with a flow rate up to 1.5 million gallons per day. In addition, the proposed project will improve reliability and will provide the needed operational flexibility to consistently meet permit effluent limits.

Federal and State grant/loan programs will fund the project. The improvements, including administration, engineering, and construction are estimated to cost approximately $37,211,600. It is anticipated that the project will be funded through a low interest loan (2.5%) obtained from the Water Pollution Control State Revolving Fund (WPCSRF) loan program, several grants from the American Rescue Plan Act (ARPA), a grant from the Renewable Resource Grant program, and local funds.

Environmentally sensitive characteristics such as wetlands, floodplains, threatened or endangered species, and historical sites are not expected to be adversely impacted because of the proposed project. Additional environmental impacts related to land use, water quality, air quality, public health, energy, noise, and growth, were also assessed. No significant long-term environmental impacts were identified.

Under Montana law, (75-6-112, MCA), no person may construct, extend, or use a public sewage system until the DEQ has reviewed and approved the plans and specifications for the project. Under the Montana Water Pollution Control State Revolving Fund Act, the DEQ may loan money to municipalities for construction of public sewage systems.

The DEQ, Water Pollution Control State Revolving Fund Program, has prepared this Environmental Assessment to satisfy the requirements of the Montana Environmental Policy Act (MEPA) and the National Environmental Policy Act (NEPA).

D. COMMENT PERIOD

Thirty (30) calendar days

II. PURPOSE OF AND NEED FOR ACTION

The Town's existing wastewater treatment lagoon system, constructed in the 1990s, was designed to treat an average daily flow of 439,000 gallons per day (gpd) and is currently seeing average flows during the critical peak season of 635,000 gpd which is 47% greater than the system was designed to treat. In addition, the aging infrastructure has excessive sludge accumulation; has damaged components including lagoon liners, influent flow meter, and effluent transfer structure; and a non-functioning coarse bubble aeration system. The deficiencies noted above limit the reliability and operability of the system and have negatively impacted treatment which has required the Town to issue a moratorium on connections to or new uses of the Town's wastewater treatment system in May of 2022, essentially hindering economic development in the area.

III. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. INITIAL SCREENING TREATMENT ALTERNATIVES

Four alternatives for addressing West Yellowstone's treatment system needs were evaluated for initial screening. These included:

T-0. No Action
T-1. Status Quo
T-2. Expand Lagoons
T-3. Mechanical Treatment

T-0. NO ACTION - The no-action alternative considered making no improvements to the existing wastewater treatment system. The Town's current system exceeds its design flow capacity, will eventually exceed its effluent permit limits, and has several items that need repair or replacement. Poor performance and insufficient hydraulic capacity have resulted in the Town issuing a moratorium on new wastewater connections which would remain in place indefinitely. Therefore, the no-action alternative was not considered to be a viable option and was not given further consideration.

T-1. STATUS QUO - This alternative would consist of upgrading any existing equipment that needs replacement to keep the system fully functional. This would include replacing the pond liners, the coarse bubble aeration system, and the removal and disposal of the excessive biosolids buildup. This alternative would still not address the facility's capacity issue or insufficient total nitrogen removal. Therefore, the moratorium on new wastewater connections would need to remain in place.

T-2. EXPAND LAGOONS - This alternative consists of upgrading any equipment as outlined in the Status Quo alternative and expanding the lagoon system to provide adequate capacity to treat current and future flows. Two new aerated lagoons (2.7 acres each) would be constructed along with a ball-type floating cover to deter wildlife due to the proximity of

the airport. Additional unit treatment processes would be needed to enhance nitrogen removal to meet future permit limits.

T-3 MECHANICAL TREATMENT - This alternative consists of constructing a mechanical treatment plant at the existing lagoon site. A mechanical treatment facility would allow the Town to consistently meet stringent discharge permit limits utilizing technology that is reliable and produces a high-quality effluent. The treatment plant would need to be housed in a building to prevent freezing.

B. COST COMPARISON – NET PRESENT VALUE ANALYSIS FOR INITIAL ALTERNATIVES ANALYSIS

The net present value analysis is a means of comparing alternatives in present day dollars and can be used to determine the most cost-effective alternative. An alternative with low initial capital cost may not be the most cost-efficient project if high operation and maintenance costs occur over the life of the alternative. Table 1 provides a summary of the net present value analysis of the initial alternatives considered.

TABLE 1
ECONOMIC EVALUATION OF FEASIBLE INITIAL ALTERNATIVES

Alternative Number (From Above)	Alternative	Capital Cost	Annual O&M	Life Cycle O&M	Net Present Value
T-1	Status Quo	$4,319,000	$227,700	$4,554,000	$8,873,000
T-2	Expand Lagoons	$30,426,000	$909,600	$18,192,000	$48,618,000
T-3	Mechanical Treatment	$37,211,600	$261,600	$5,232,000	$42,443,600

C. BASIS OF SELECTION OF PREFERRED INITIAL SCREENING ALTERNATIVE

Selection of the preferred initial screening alternative was based upon several criteria, both monetary and non-monetary. The ranking criteria considered are shown in Table 2. Each alternative was assigned a ranking 1 to 3 in each category with 1 being the worst in the category and 3 being best in the category with respect to the alternatives considered. The rankings were then summed, resulting in a total score, with the greatest score indicating the preferred alternative. As shown in the ranking criteria matrix, Alternative T-3 (Mechanical Treatment) ranked the highest, primarily due to regulatory compliance and process flexibility/expandability. Even though it does not have the lowest present worth cost, based on the overall score, sound engineering judgment, and owner preference, alternative T-3 was selected for further analysis.

Table 2 Initial Alternatives Ranking Criteria			
Criteria	**Alt T-1: Status Quo**	**Alt T-2: Expand Lagoons**	**Alt T-3: Mechanical Treatment**
	Score	**Score**	**Score**
Owner Preference	1	2	3
Cost	3	1	2
Schedule	3	1	2
Regulatory Compliance	1	2	3
Process Flexibility/ Expandability	1	2	3
Environmental Clearance	3	1	2
Land Acquisition	3	1	2
Total	**15**	**10**	**17**

D. FINAL SCREENING TREATMENT ALTERNATIVES

Three mechanical treatment alternatives were evaluated for final screening. These include:

M-1. Membrane Bioreactor (MBR)
M-2. Aero-Mod™
M-3. STM Aerotor™

M-1 MEMBRANE BIOREACTOR (MBR) – This alternative would consist of construction of a suspended growth activated sludge biological reactor integrated with a membrane filtration system. A membrane filtration system replaces the solids separation function of both secondary clarifiers and effluent filters in conventional activated sludge systems, resulting in a smaller footprint than other activated sludge plants. MBR technology

enables the bioreactors to be operated at a considerably higher biomass concentration than conventional activated sludge plants, which allows for the construction of smaller tanks that still provide a high level of treatment. The membranes are immersed in an aeration tank in direct contact with the treated wastewater and a vacuum is applied to the header connected to the membranes which draws treated water through the membranes filtering out particles larger than 0.4 micrometers. Coarse bubble diffusers are used to scour the membrane surfaces to keep them clean. The biological trains would contain aeration and anoxic zones for BOD and nitrogen removal while the membranes would filter out any particulate matter (TSS). The MBR process would combine the unit operations of aeration, secondary clarification, and filtration into a single process, and would produce a high-quality effluent. The treatment plant would be housed in a building to prevent freezing of the equipment. Treated effluent would be discharged to groundwater through the existing I/P basins in accordance with the facility's groundwater discharge permit.

M-2 AERO-MOD™ – The Aero-Mod™ system is an extended aeration process which would consist of a headworks building with flow measurement and mechanical screening and a series of concrete bioreactor basins, each equipped with a diffused aeration system to provide oxygen to the wastewater. The aeration system would be cycled on and off creating aerated and anoxic zones to maximize carbon and nitrogen removal from the wastewater. Secondary clarifiers would be used to separate solids from the treated water and to maintain the necessary microbial concentrations for adequate treatment. The clarifiers would utilize air lift pumps for the removal of settled solids. Aerobic digesters would be utilized to treat and stabilize the biosolids that are wasted from the process. The biosolids would be dewatered in a 20-yard roll-off dumpster with a filter bag installed inside. The filter bag would then be sent to the Logan landfill for final disposal. The treatment plant would be housed in a building to prevent freezing of the equipment. Treated effluent would be discharged to groundwater through the existing I/P basins in accordance with the facility's groundwater discharge permit.

M-3 STM AEROTOR™ - This alternative consists of constructing a mechanical "STM AEROTOR™" and secondary clarifiers to provide biological treatment. Two bioreactors would be constructed for redundancy and maintenance purposes. Each bioreactor would contain aerobic and anoxic zones for the biological removal of carbon and nitrogen. Oxygen would be provided to the bioreactor using a series of large paddle wheels. As the paddle wheels rotate a portion of the paddles becomes exposed to the atmosphere, and hollow compartments within each paddle entrap air, pulling the air under the surface where it is released at the bottom of the rotation. The wheel provides both mixing and oxygen transfer. The bioreactors would be covered to prevent ice build-up on the drive chain which can damage the equipment as the wheel rotates. The secondary clarifiers would allow solids to settle out of the wastewater. Two concrete clarifiers would be constructed and would

include solids collection and sludge wasting equipment consisting of sludge scraper systems and pumps. A portion of the sludge would be returned to the front of the bioreactor basin to ensure an adequate concentration of biomass to optimize treatment and the remainder would be wasted to the solids handling processes. The treatment plant would be housed in a building to prevent freezing of the equipment. Treated effluent would be discharged to groundwater through the existing I/P basins in accordance with the facility's groundwater discharge permit.

E. COST COMPARISON – NET PRESENT VALUE ANALYSIS MECHANICAL TREATMENT ALTERNATIVES ANALYSIS

Similar to the cost comparison or feasible initial alternatives, Table 3 provides a summary of the net present value analysis of the alternatives considered.

TABLE 3
ECONOMIC EVALUATION OF FEASIBLE MECHANICAL TREATMENT ALTERNATIVES

Alternative Number (From Above)	Alternative	Capital[1] Cost	Annual O&M	Life Cycle O&M	Net Present Value
M-1	MBR	$23,701,000	$420,500	$8,410,000	$32,111,000
M-2	Aero-Mod™	$37,211,600	$261,600	$5,232,000	$42,443,600
M-3	STM Aerotor™	$29,520,000	$261,300	$5,226,000	$34,746,000

1. Based on conceptual costs from the Town of West Yellowstone Wastewater Treatment Plant Preliminary Engineering Report dated May 2020, except for the Aero-Mod costs which are based on actual design costs in April 2023.

F. BASIS OF SELECTION OF PREFERRED MECHANICAL TREATMENT ALTERNATIVE

Selection of the preferred mechanical treatment alternative was based upon several criteria, both monetary and non-monetary. The ranking criteria considered are shown in Table 4. Each alternative was assigned a ranking 1 to 3 in each category with 1 being the worst in the category and 3 being best in the category with respect to the alternatives considered. The weight value indicates the importance of each criterion to the Town. The rankings were then summed, resulting in a total score, the greatest score indicating the preferred alternative. As shown in the ranking criteria matrix, Alternative M-2 (Aero-Mod™) ranked the highest, primarily due to regulatory compliance and process flexibility/expandability. Even though it does not have the lowest present worth cost, based on the overall score, sound engineering judgment, and owner preference, alternative M-2 was selected to provide advanced wastewater treatment for the Town of West Yellowstone.

Table 4 Mechanical Treatment Alternatives Ranking Criteria							
Criteria		**Alt M1: MBR**		**Alt M-2: Aero-mod™**		**Alt M-2: STM Aerotor™**	
	Weight	**Rating**	**Total Value**	**Rating**	**Total Value**	**Rating**	**Total Value**
Capital Cost	15%	2	0.3	3	0.45	1	0.15
O&M Life Cycle Cost	15%	2	0.3	3	0.45	1	0.15
Footprint Size	15%	3	0.45	1	0.15	2	0.3
Wastewater Industry Experience	10%	2	0.2	3	0.3	2	0.2
Process Flexibility	10%	3	0.3	1	0.1	2	0.2
Process Complexity/ Operability	10%	1	0.1	3	0.3	2	0.2
Power Requirements	10%	1	0.1	2	0.2	3	0.3
Expandability	6%	2	0.12	1	0.06	3	0.18
Reliability / Maintainability	6%	1	0.06	3	0.18	2	0.12
Chemical Requirements	3%	1	0.03	3	0.09	3	0.09
Total	**100%**		**1.96**		**2.28**		**1.89**

The estimated administration, engineering, and construction cost for the recommended alternative (Alternative M-2) is $37,211,600. The Town will fund the project through a $32,289,346 low interest loan (2.50%; 30-year term) obtained from the Water Pollution Control State Revolving Fund (WPCSRF) loan program. Of this loan amount $750,000 will be forgiven at the end of the project. Additional funding will include a $262,483 ARPA – Minimum Allocation Grant, a $2,000,000 ARPA – Competitive Grant, a $750,000 Gallatin County ARPA Allocation, a $125,000 Renewable Resource Grant, and a local contribution of $1,784,771.

Sewer rates will be raised by 25% before construction is complete to pay for the proposed improvements. The financial impact of this project on the system users is shown in Table 5. After the rate increases are imposed, residential user rates will increase from $27.07/month to approximately $33.96/month. Based on the EPA guidance for project affordability, the proposed project will result in a monthly cost per household that is 1% of the monthly median household income, and therefore, is not expected to impose an economic hardship on household income.

Table 5
PROJECT AFFORDABILITY

Monthly user cost[1]	$33.96
Monthly median household income (mMHI)[2]	$3,192.17
User rate as a percentage of mMHI	1%

[1] E-mail correspondence with Town's Financial Director, April 2023
[2] Based on 2015 -2019 American Communities Survey data

IV. AFFECTED ENVIRONMENT

A. PLANNING AREA AND MAPS

The Town of West Yellowstone is located at the junction of US Highway 191 and US Highway 20, in southwestern Montana at the western entrance to Yellowstone National Park (see Figure 1). The West Yellowstone boundary and planning area are shown in Figure 2. This area includes the incorporated limits of the Town of West Yellowstone and some adjacent undeveloped lands (totaling 80-acres) that were recently deeded to the Town of West Yellowstone by the Forest Service. Figure 3 shows the proposed location of the mechanical treatment plant at the existing lagoon site on property leased from the FAA. The mechanical plant will be constructed within the footprint of an existing I/P cell located along the southern edge of the existing polishing pond.

B. POPULATION AND FLOW PROJECTIONS

According to census data, the population for the Town of West Yellowstone has been stable over the past decade and stands at approximately 1,270 residents. However, the growth of the community has been severely limited by a sewer moratorium that was imposed due to a lack of wastewater treatment plant capacity. Once this sewer moratorium on local development is lifted, it is

expected that new residential properties, businesses, and hotels will be constructed which will likely result in an increase in West Yellowstone's year-round population as well as be a boost for the local tourism industry. As a major point of entry into Yellowstone National Park, it is the influx of tourists during the summer months that dictates the needed sewer capacity of the wastewater treatment facility.

Currently, the average peak season daily flow to the existing WWTF is approximately 635,000 gallons per day (gpd). The proposed treatment system improvements will be designed to handle an average daily flow rate of 1.5 million gallons per day (MGD) which equates to an annual growth rate of approximately 4% over the 20-year design period (year 2043).

C. NATURAL FEATURES

The Town of West Yellowstone is bordered in all directions by Federal lands, including National Park and Forest Service land. These lands have native vegetation and are sparsely developed. There are three parcels to the east totaling 80-acres that have recently been deeded to the Town by the Forest Service which could potentially have a higher density of development. Within the Town limits, land use is predominantly residential with motels and areas of light commercial and small businesses.

The treatment site is located on Pleistocene obsidian sand deposits that washed out of Yellowstone Park. Sand deposits in this area range between 90 and 100 feet thick. The local aquifer is unconfined and is hydraulically connected to the downgradient Madison River and Hebgen Lake. Groundwater near the WWTP is Class I groundwater which is a high-quality water of the state. Class I groundwater must be maintained so that these waters are suitable for the following beneficial uses with little or no treatment: public and private water supplies; culinary and food processing purposes; irrigation; drinking water for livestock and wildlife; and commercial and industrial purposes. The static groundwater elevation is approximately 30 feet below the ground surface.

West Yellowstone's average high temperature is 75°F but can occasionally approach 100°F during the summer months. The average low temperature is approximately 14°F, with periods of sub-zero temperatures at times during the winter months. The average annual precipitation rate is 21.56 inches per year with most of that falling from December to March and again in May and June. The average evaporation rate in the area is 34 inches per year.

V. ENVIRONMENTAL IMPACTS OF PROPOSED PROJECT

A. DIRECT AND INDIRECT ENVIRONMENTAL IMPACTS

1. Land Use/Prime Farmland – The proposed project will not impact prime farmland or land use in general. The new mechanical treatment plant will

be constructed within the existing treatment system boundaries in the southeast corner of the property where the sewer force main enters the property. The treatment plant buildings will occupy an area that is approximately 350'x 85'. The I/P cells will remain in use for the disposal of treated effluent.

2. Floodplains –The Town's new wastewater treatment facility is not located within any designated 100-year floodplain.

3. Wetlands – Based on the U.S. Fish and Wildlife Services National Wetland Inventory map there are no wetlands that will be impacted by this project which will be constructed withing the boundaries of the existing treatment system.

4. Cultural Resources – No impacts to cultural resources are anticipated. All construction activity will occur within the boundaries of the existing treatment system which has been previously disturbed. No historical structures will be impacted.

5. Fish and Wildlife – The U.S. Fish & Wildlife Service indicated that the Bald Eagle, Grizzly Bear, Gray Wolf, Canada Lynx, and the North American Wolverine are animal species of concern in the West Yellowstone area. The project will not affect any critical wildlife habitats, nor will any known endangered species be affected. The new treatment system will be constructed within the boundaries of the existing treatment system, which is leased from the FAA.

6. Water Quality - The Town of West Yellowstone operates under an MDEQ issued MGWPCS discharge permit (MTX00024). The MDEQ establishes effluent limits in the permit based on water quality standards that are protective of beneficial uses (including human health) such that there shall be no increase of a parameter to a level that renders the waters harmful, detrimental, or injurious to the beneficial uses.

   The proposed mechanical treatment facility is a more efficient and flexible treatment process that will improve the quality of water discharged to groundwater. With expected effluent concentrations from the Aero-Mod system of <30 mg/L BOD; <10mg/L TSS and <10 mg/L Total Nitrogen the new treatment system should provide a high-quality effluent that can meet the Total Nitrogen effluent limit of 314 lbs/day.

   Impacts to the nearby surface stream associated with storm water runoff during construction will have to be mitigated with appropriate best management practices and carefully maintained during construction.

7. Air Quality - Short-term negative impacts on air quality are expected to occur during construction from heavy equipment in the form of dust and exhaust fumes. Proper construction practices will minimize this problem with the project specifications requiring dust control. The new facility will

produce some odors associated with the wastewater treatment processes, but these will be reduced as much as possible using aeration equipment and building enclosures. The remote location of the treatment plant along with the prevailing wind direction in the area also helps to minimize the influence of odors upon residents in the area.

8. Public Health - Public health will not be negatively affected by the proposed project. The proposed treatment facility improvements will improve treatment resulting in a better-quality effluent being discharged to the groundwater. Improved sewage treatment will reduce the potential to pollute ground and surface waters.

9. Energy – An increase in energy consumption will occur after the new treatment plant is constructed. Energy consumption will be minimized as much as possible using energy efficient equipment (pumps, aeration equipment, lighting, etc.).

   The consumption of energy resources directly associated with construction of the recommended improvements is unavoidable but will be a short-term commitment.

10. Noise - Short-term impacts from excessive noise levels may occur during the construction activities. The construction period will be limited to normal daytime hours to avoid early morning or late evening construction disturbances. The headworks equipment and treatment basins will be housed in buildings which will minimize noise, and the treatment facility will be in a relatively remote area so no significant long-term impacts from noise will occur.

11. Sludge Disposal – Aerobic digesters would be utilized to treat and stabilize the biosolids that are wasted from the Aero-Mod™ treatment process. The biosolids would be dewatered in a 20-yard roll-off dumpster with a filter bag installed inside. The filter bag would then be sent to the landfill located at Logan, MT for final disposal. Treated biosolids compliant with EPA 503 and Montana DEQ regulatory standards for composting will be approved for compost disposal at the Logan Landfill. Biosolids that exceed the composting acceptance criteria will be disposed of as a class 2 solid waste provided the biosolids can pass the paint filter test and not exceed the RCRA limits for toxicity.

    Once the new treatment facility is operational, sludge in the existing lagoons will need to be removed for final disposal. The sludge in the existing lagoons will be pumped into bio-bags for dewatering and then taken to the Logan Landfill for final disposal in accordance with EPA's 258 Regulations *Criteria for Municipal Solid Waste Landfills.*

12. Environmental Justice – Environmental Justice Executive Order 12898: The proposed project will not result in disproportionately high or adverse

human health or environmental effects on minority or low-income populations. No disproportionate effects among any portion of the community would be expected.

13. Wild and Scenic River Act – The proposed project will not impact any rivers designated as wild and scenic by Congress or the Secretary of the Interior.

14. Growth - The anticipated increase in population and development in the service area will result in increased flows to the WWTP. The 20-year design flow rate is based on an increase of approximately 4.0 percent per year. Improvements to the WWTP will be a positive feature for the community providing additional treatment capacity that will allow the Town to manage its growth in a proactive manner and promote urbanization within its service area.

15. Cumulative Effects - The increased treatment capacity at the wastewater treatment plant may result in secondary and/or cumulative impacts due to growth of the community and expansion of the service area. Secondary impacts associated with housing, commercial development, solid waste, transportation, utilities, air quality, water utilization, and possible loss of agricultural and rural lands may occur. These secondary impacts are uncertain at this time, and therefore, cannot be directly addressed in the EA. However, these impacts will need to be managed and minimized as much as possible through proper community planning. There are several existing town, county and state regulations already in place (i.e., zoning regulations, comprehensive planning, subdivision laws, etc.) that control the density and development of property with regards to water supply, sewage disposal, solid waste disposal, transportation, and storm drainage system.

B. UNAVOIDABLE ADVERSE IMPACTS

Short-term construction related impacts (i.e., noise, dust, etc.) will occur, but should be minimized through proper construction management. Energy consumption during construction and energy for operation of the new mechanical treatment plant cannot be avoided.

VI. PUBLIC PARTICIPATION

A public meeting to discuss the treatment system improvements was held on May 9, 2023. At this meeting the project engineer discussed the need for the project, the treatment system alternatives considered, associated costs, funding sources, the impact to user rates, and project schedule. Only one comment was made inquiring about the types of facility that were considered. No other public comments were received.

VII. AGENCY ACTION, APPLICABLE REGULATIONS AND PERMITTING AUTHORITIES

All proposed improvements will be designed to meet state standards in accordance with Design Standards for Public Sewage Systems (Circular DEQ-2) and will be constructed using standard construction methods. Best management practices will be implemented to minimize or eliminate pollutants from leaving the construction site. No additional permits will be required from the State Revolving Fund (SRF) section of the DEQ for this project after the review and approval of the submitted plans and specifications. However, coverage under the storm water general discharge permit and groundwater dewatering discharge permit, are required from the DEQ Water Protection Bureau prior to the beginning of construction. A Section 404 permit from the U.S. Army Corp of Engineers, a 124 Permit from the Department of Fish, Wildlife and Parks and a 318 Authorization from the Department of Environment Quality will be required for any work that will impact surface water and will be obtained if necessary.

VIII. RECOMMENDATION FOR FURTHER ENVIRONMENTAL ANALYSIS

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

Rationale for Recommendation: Through this EA, the DEQ has verified that none of the adverse impacts of the proposed West Yellowstone Wastewater Treatment System project are significant. Therefore, an environmental impact statement is not required. The environmental review was conducted in accordance with the Administrative Rules of Montana (ARM) 17.4.607, 17.4.608, 17.4.609, and 17.4.610. The EA is the appropriate level of analysis because none of the adverse effects of the impacts are significant.

IX. REFERENCE DOCUMENTS

The following documents have been utilized in the environmental review of this project and are considered to be part of the project file:

1. Town of West Yellowstone Wastewater Treatment Plant Preliminary Engineering Report, May 2020, prepared by Forsgren Associates Inc.
2. Town of West Yellowstone Wastewater Treatment Plant Preliminary Engineering Report Addendum, October 2021, prepared by Forsgren Associates Inc.
3. General Correspondence with Town of West Yellowstone Financial Director and Forsgren Associates Inc. regarding the public meeting, project budget and user rates, May 2023.

X. AGENCIES CONSULTED

The following agencies have been contacted regarding the proposed construction of this project:

1. The U.S. Fish and Wildlife Service was contacted on 10/22/21 and on 4/25/23 regarding impacts to fish and wildlife resources from the proposed project. No response was received from the U.S. Fish and Wildlife Service.

2. The Montana Department of Natural Resources and Conservation (DNRC) reviewed the proposed project and stated that they commonly review these projects for implications relating to regulatory floodplains and water rights and that they have no comments on the proposed project.

3. The Montana Historical Society's State Historic Preservation Office (SHPO) reviewed the proposed project. According to their records, there have been no previously recorded sites and one cultural resource inventory done within the designated search locales. SHPO stated that if any structure over 50 years old is to be altered, it is recommended that they be recorded and a determination of their eligibility for listing on the National Register of Historic Places be made. They indicated that "as long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural properties will be impacted". They felt that a cultural resource inventory is unwarranted at this time but should structures need to be altered or if cultural materials are inadvertently discovered during this project, their office must be contacted, and the site investigated.

4. The U.S. Department of the Army Corps of Engineers (USCOE) reviewed the proposed project. The USCOE is responsible for administering Section 404 of the Clean Water Act, which regulates the excavation or placement of dredged or fill material below the ordinary high water mark of our nation's rivers, streams, lakes or in wetlands. The USCOE stated that "based on the information provided, they were unable to ascertain if regulated activities are proposed or if jurisdictional waters of the U.S. are present within the project area." They further stated that if the final design includes the placement of fill material in any jurisdictional area that they need to submit a Montana Joint Permit Application to their office prior to starting any work and they will determine what type of permit, if any, will be required.

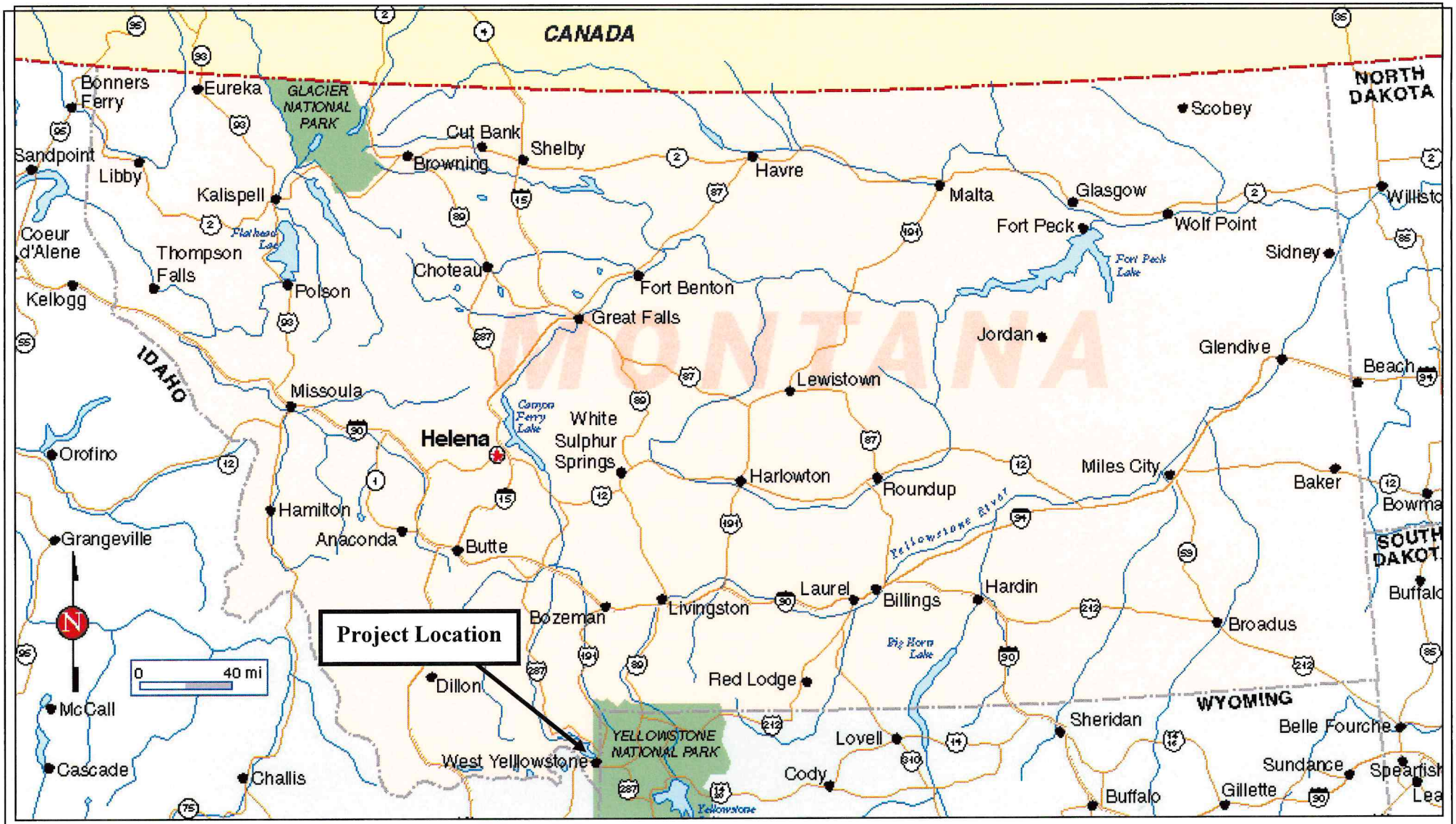
5. The Montana Department of Fish, Wildlife and Parks (FWP) was contacted on 10/22/21 and on 4/25/23 regarding impacts to fish and wildlife resources from the proposed project. No response was received from the Montana Department of Fish, Wildlife and Parks.

EA Prepared by:

Mike Abrahamson, P.E. — Date: 6/2/23

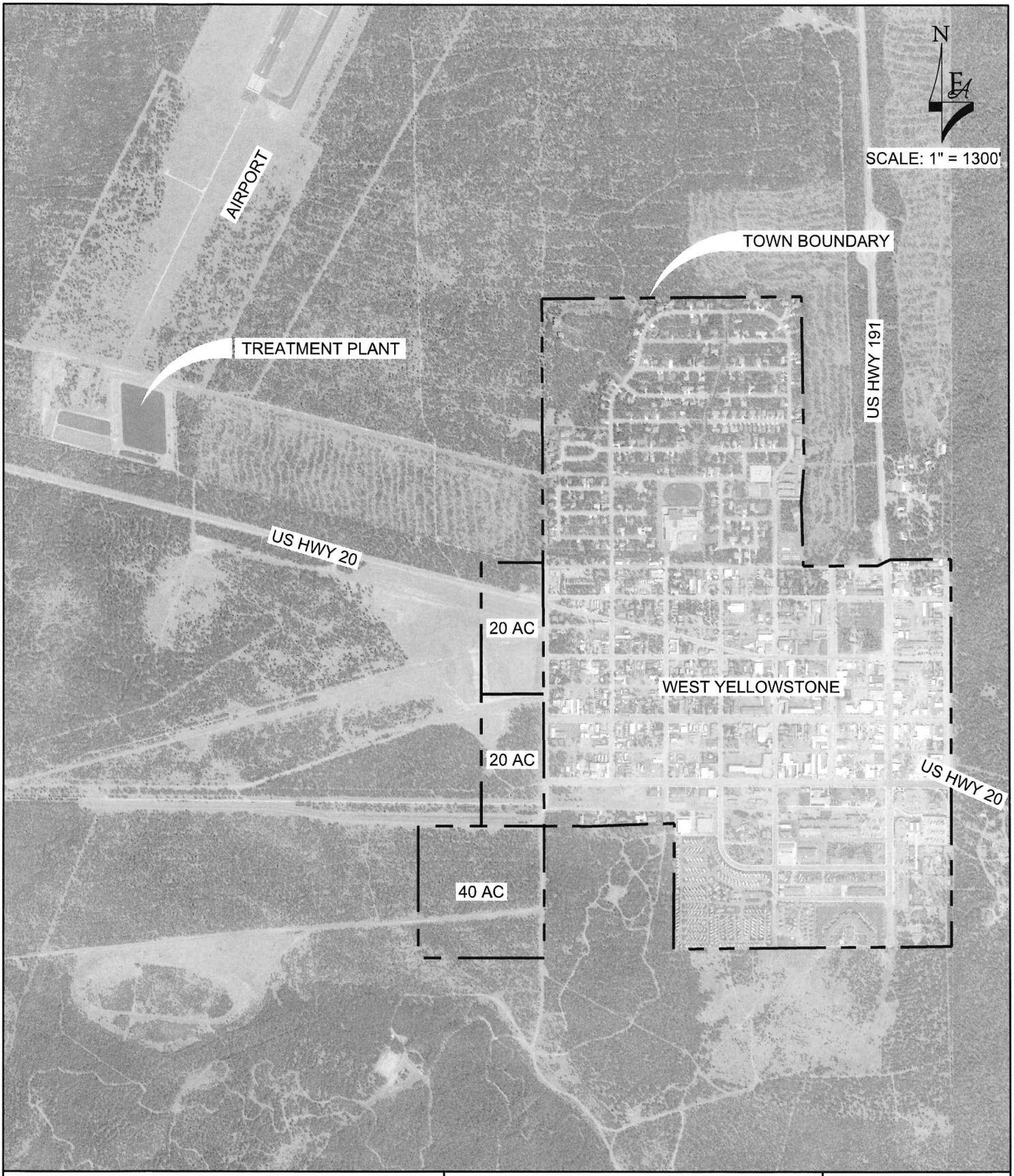
EA Reviewed by:

Michele Marsh, P.E. — Date: 6/2/2023



Montana Department of
ENVIRONMENTAL QUALITY

Figure 1. Site Location Map – Town of West Yellowstone



FORSGREN Associates Inc.
350 NORTH 2ND EAST, REXBURG, ID 83440
PH: 208.356.9201 FAX: 208.356.0206

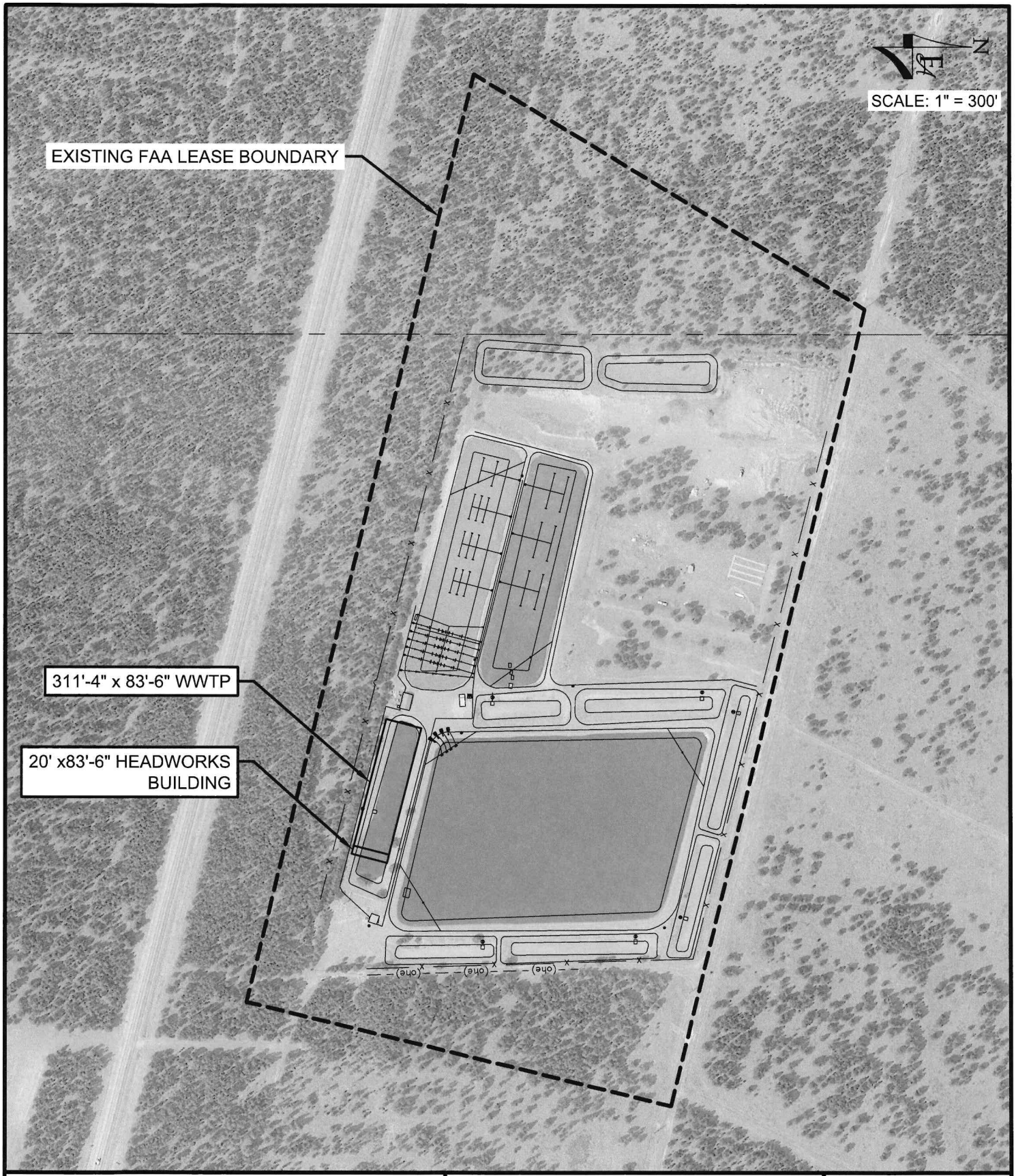
WEST YELLOWSTONE WWTP

FIGURE 2

PLANNING BOUNDARY

PROJECT NO:
01-19-0046-200

DATE:
MARCH 2020



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WEST YELLOWSTONE WWTP

FIGURE 3

MECHANICAL TREATMENT

PROJECT NO:
01-19-0046-200

DATE:
MARCH 2020