Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

   BARNARD CONSTRUCTION
   701 GOLD AVENUE
   BOZEMAN, MT 59715

2. Type of action: Beneficial Water Use Permit Application No. 41H 30165312, by Barnard Construction

3. Water source name: Groundwater

4. Location affected by project: The proposed POU for non-consumptive geothermal use is located in SESWSE and SWSESE Section 22, T1S, R5E, Gallatin County and NWNENE Section 27, T1S, R5E, Gallatin County.

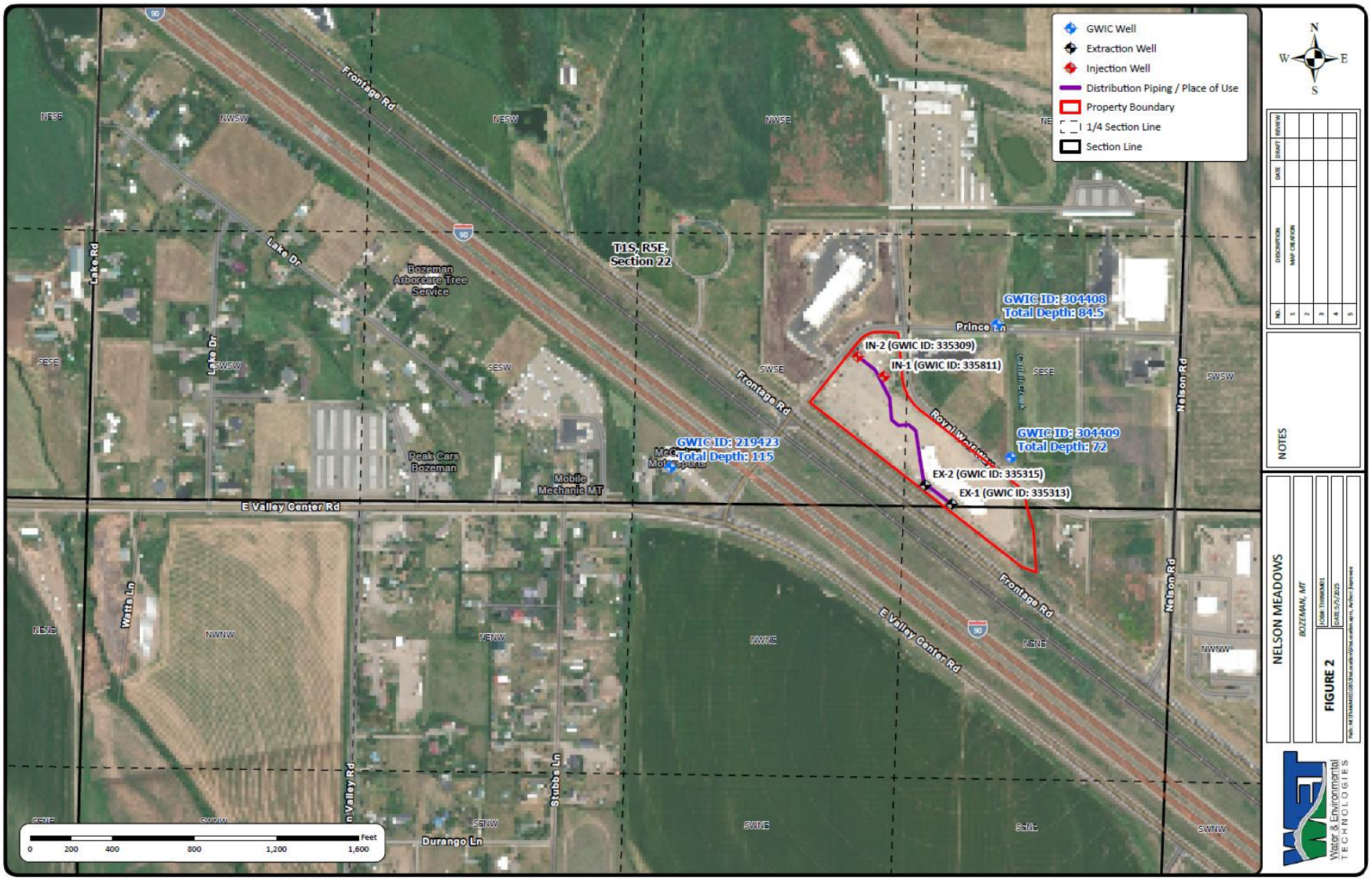

Figure 1. Proposed use for Beneficial Water Use Permit No. 41H 30165312

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits: Applicant submitted Beneficial Water Use Permit No. 41H 30165312 on September 23, 2025, to the Bozeman DNRC Water Resources Office. The Applicant proposes to divert groundwater, by means of two extraction wells at 202 ft (EX-1) and 232 ft depth (EX-2), with two points of diversion (PODs) in the SESESE Section 22, T2S, R5E, Gallatin County. The wells will divert groundwater from January 1 to December 31 for non-consumptive geothermal use. The wells divert a total 298.38 AF at a total flow rate of 550 GPM (275 GPM per well) to provide geothermal cooling for the commercial building in the SESWSE and SWSESE Section 22 and NWNENE Section 27, T1S, R5E, all in Gallatin County. Water diverted for non-consumptive geothermal use will be returned back to the aquifer system by injection wells. The two injection wells for the project area are located in the SESWSE Section 22, T1S, R5E, Gallatin County (IN-1 and IN-2). The Applicant proposes to divert 298.38 AF for non-consumptive geothermal use. The consumptive use associated with the proposed use is 0 AF. The DNRC shall issue a permit if an Applicant proves the criteria in 85-2-511 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:

- Montana Department of Fish, Wildlife & Parks (DFWP) – Montana Fisheries Information System (MFISH)
  https://myfwp.mt.gov/fishMT/explore
- Montana Department of Environmental Quality (DEQ) – Clean Water Act Information Center (CWAIC)
  https://clean-water-act-information-center-mtdeq.hub.arcgis.com/
- Montana National Heritage Program (MTNHP) – Species of Concern:
  https://mtnhp.org/mapviewer/?t=7
- U.S. Fish & Wildlife Service (USFWS) – National Wetlands Inventory Wetlands Mapper
  https://www.fws.gov/program/national-wetlands-inventory/wetlands-mapper
- Natural Resource Conservation Service (NRCS) – Web Soil Survey (WSS)
  https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

Part II. Environmental Review

1. *Environmental Impact Checklist*:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: No significant impact.

The source of supply is groundwater, which is not listed by DFWP. However, the wells are located approximately 3,200 ft from East Gallatin River. The East Gallatin River is identified as chronically or periodically dewatered. Modeling by the Department shows no surface water depletions related to the proposed appropriation. No impacts to water quantity have been identified. The wells are unlikely to impact the surface water quality because the proposed use is non-consumptive and no depletions will occur as a result of the proposed use.

Water quality **-** *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: No significant impact.

The source of supply is groundwater, which is not listed by the Montan Department of Environmental Quality (DEQ) on the CWAIC website. No hydraulically connected surface waters were identified proposed project will not affect surface water quality

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: No significant impact.

The well is located approximately 3,200 ft from nearby East Gallatin River. The proposed 550 GPM up to 298.38 AF per year are not likely to have a significant impact on surface water flows, nor are they likely to have a significant impact on nearby water right owners. Water use will be measured with a meter supplied by Montana Department of Natural Resources and Conservation (DNRC).

Diversion Works*- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: No significant impact.

Consistent with applicable laws and socially accepted practices, water will be diverted using wells with pumps. Bridger Drilling Inc., a licensed driller (license number WWC-560), has constructed the wells in accordance with the rules of the Board of Water Well Contractors. The diversion works should not create significant channel impacts, flow modifications, or barriers. No significant impacts to existing resources have been identified.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater,*

assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: No significant impact. A search of the MTNHP website on January 12, 2026, for T1S, R5E, Gallatin County returned the following results: the following results:

- 41 animal Species of Concern: American Bittern, American Goshawk, American White Pelican, Black Rosy-Finch, Black Tern, Black-crowned Night Heron, Black-necked Stilt, Bobolink, Brown Creeper, Caspian Tern, Cassin's Finch, Clark's Grebe, Clark's Nutcracker, Common Loon, Common Tern, Evening Grosbeak, Ferruginous Hawk, Forster's Tern, Franklin's Gull, Golden Eagle, Gray-crowned Rosy-Finch, Great Blue Heron, Green-tailed Towhee, Horned Grebe, Lewis's Woodpecker, Loggerhead Shrike, Long-billed Curlew, Nelson's Sparrow, Pacific Wren, Pileated Woodpecker, Pinyon Jay, Sage Thrasher, Solitary Sandpiper, Trumpeter Swan, Varied Thrush, Veery, White-faced Ibis, Snapping Turtle, Northern Leopard Frog, Western Toad, and Arctic Graylin.
- 11 animal Potential Species of Concern: North American Porcupine, Barrow's Goldeneye, Black-and-white Warbler, Broad-tailed Hummingbird, Common Poorwill, Great Gray Owl, Hooded Merganser, Ovenbird, Rufous Hummingbird, Short-eared Owl, and Tennessee Warbler
- 1 animal Special Status Species: Bald Eagle
- 0 plant Species of Concern
- 1 plant Potential Species of Concern: Small Yellow Lady's-slipper
- 0 plant Special Status Species

As this proposed project is to divert water from a well located on private property, the groundwater use should not influence surface water flows to significantly impact to threatened, endangered, or special concern species. The pumping of groundwater will not decrease surface water flows to significantly impact any of these species.

Wetlands **-** *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: Not applicable.

A January 8, 2026, search on the National Wetlands Inventory Mappers shows no wetlands directly in the project area. A Riverine habitat classified as R4SBC exists near the project area. No significant impacts on wetlands near the project area are expected as a result of the proposed permit.

Ponds **-** *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: Not applicable.

No ponds are involved in the project.

Geology/Soil quality, stability and moisture *- Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: No significant impact.

A January 8, 2026, search of the NRCS Web Soil Survey identified low surface salinization risk in the project area. The soil moisture of the project area should not be significantly impacted because all water diverted and used for geothermal heating and cooling will be immediately returned to the source aquifer. The soil disturbances due to construction of the wells will be temporary and are not predicted to cause a significant impact on soil stability or soil quality.

Vegetation cover, quantity and quality/Noxious weeds *- Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: No significant impact.

The wells are constructed by a licensed driller, in accordance with the rules of the Board of Water Well Contractors, so there should not be significant impacts on nearby vegetative cover. A relatively small area will be disturbed to drill the wells, but this should have little impact on the surrounding area's vegetative cover, and neither should it allow the establishment of noxious weeds. Under Montana law, owners are responsible for noxious weed control on their property.

Air quality *- Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No significant impact.

No deterioration of air quality will result from the drilling of this well or diversion of water from it.

Historical and archeological sites *- Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

Determination: Not applicable.

The project is not located on State or Federal Lands. Furthermore, the Applicant made no mention of significant historical or archeological sites on the property.

Demands on environmental resources of land, water, and energy *- Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No significant impact.

No other demands on environmental resources of land, water, and energy have been identified.

HUMAN ENVIRONMENT

Locally adopted environmental plans and goals *- Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No significant impact.

Drilling wells for water supply and using water for non-consumptive geothermal use are locally accepted practices within the state of Montana and the Gallatin Valley.

Access to and quality of recreational and wilderness activities *- Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No significant impact.

The proposed project is located entirely on private property and will not affect access to recreational activities or the quality of recreational and wilderness activities.

Human health *- Assess whether the proposed project impacts on human health.*

Determination: No significant impact.

The project will not impact human health.

Private property *- Assess whether there are any government regulatory impacts on private property rights.*

*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

Determination: No significant impact.

The project does not impact government regulations on private property rights.

Other human environmental issues *- For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No significant impacts identified.

(b) *Local and state tax base and tax revenues?* No significant impacts identified.

(c) *Existing land uses?* No significant impacts identified.

(d) *Quantity and distribution of employment?* No significant impacts identified.

(e) *Distribution and density of population and housing?* No significant impacts identified.

(f) *Demands for government services?* No significant impacts identified.

(g) *Industrial and commercial activity?* No significant impacts identified.

(h) *Utilities?* No significant impacts identified.

(i) *Transportation?* No significant impacts identified.

(j) *Safety?* No significant impacts identified.

(k) *Other appropriate social and economic circumstances?* No significant impacts identified.

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

3. *Describe any mitigation/stipulation measures:*

After moving through the geothermal heating and colling process, diverted water will immediately be returned to the source aquifer via two injection wells located at a close distance from the production wells. The Department shall have right of access to monitor, conduct tests, or take measurements or water samples.

4. ***Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

The “no action” alternative would be to build the building with no geothermal heating and cooling system. The Applicant would have to find an alternative heating and cooling

system. This would entail expense to change the design plans and further demand on Bozeman's power supply.

Part III. Conclusion

1. ***Preferred Alternative:*** The preferred alternative is to grant the permit application if the Applicant has proven the criteria of §85-2-311, MCA.

2. ***Comments and Responses:*** None at this time.

3. ***Finding:*** *Yes___ No_**X**_ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: The EA is the appropriate level of analysis because the proposed project is for non-consumptive use of water as it is immediately returned to the source aquifer. The geothermal heating and cooling use of water is a locally accepted practice, and no significant impacts are anticipated. None of the identified impacts for any of the alternatives are significant as defined in ARM 36.2.524.

Name of person(s) responsible for preparation of EA:

Name: Kendrew Ellis
Title: Water Resource Specialist
Date: January 12, 2026