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*: Siderius Family Limited Partnership, 161 Oxbow Trail, Kalispell MT 59901

2. *Type of action*: Application for Beneficial Water Use Permit 76LJ-30048581

3. *Water source name*: Groundwater Well

4. *Location affected by project*: SE¼NE¼ and SE¼ of Section 29 and NW¼NE¼ of Section 32 all in Township 28N, Range 21W, Flathead County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*: The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

   The Applicant proposes to divert water from groundwater, by means of a 287 foot well, from April 17 through October 16 at a rate of 550 GPM up to 69.87 AF, from a point in the NW¼SW¼NW¼SE¼ of Section 29, Township 28N, Range 21W, for landscaping irrigation use from April 17 through October 16. The Applicant proposes to irrigate common areas including parks, boulevards and other landscaped areas in Siderius Commons totaling 46.1 acres. The place of use is generally located in the SE¼NE¼ and SE¼ of Section 29 and the NW¼NE¼ of Section 32 all in Township 28N, Range 21W, Flathead County. This subdivision will consist of a mixture of commercial and domestic uses and is approximately 1 ½ miles south of Kalispell and 15 miles north of the Flathead Indian Reservation's most northern boundary.

6. *Agencies consulted during preparation of the Environmental Assessment*: (include agencies with overlapping jurisdiction)

   Natural Resources and Conservation Service soil maps
   Montana Department of Environmental Quality
   United States Fish and Wildlife Wetland Mapper
   Montana Natural Heritage Program

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: N/A

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: N/A

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.*

The proposed means of diversion is a well constructed by Sudan Drilling (MT license #WWC-450) in the deep alluvial aquifer to a depth of 287 feet, screened from 261 to 281 feet bgs and a static water level of 28 feet. Well was completed in February 2008.

Pumping of this well will likely reduce water in the surface sources of the Flathead River and Flathead Lake sometime in the future.

Determination: Through the Provisional Permit process, it has been determined that adjacent surface source senior appropriators of these surface sources will not be adversely affected.

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.*

The proposed means of diversion is a well constructed by Sudan Drilling (MT license #WWC-450) in the deep alluvial aquifer to a depth of 287 feet, screened from 261 to 281 feet bgs and a static water level of 28 feet. Well was completed in February 2008. Bruce Boody, Landscape Architect, Inc. designed the system layout. The water will be distributed from the POD well directly through 6-inch water mains which will be further split to supply irrigation sprinkler heads. The project area consists of 27 zones of pop-up rotor irrigation heads and 1 zone of pop-up spray and low trajectory spray heads. The 27 zones will be populated with Hunter I-40 commercial grade rotor spray heads set on 70' centers and dispensing 28.2 GPM with a #45 nozzle. Each zone will consist of 19 rotor heads. The spray zone will consist of primary 3-4" pop-up spray heads and dispense up to 5.62 GPM per head depending on nozzle configuration. The system is designed for diversion and delivery of water through 9600 feet of 6" PVC mainline and 15, 100 feet of secondary 3" PVC take-offs supplying each zone. An 8-inch Franklin Electric submersible turbine pump, Model 550ST8, 40 hp will be used providing 240 feet of head pressure at 550 GPM. The total dynamic head for the pump is a maximum of 146.6

feet. Pump curve and specifications as well as specifications on the sprinkler heads were included in the application.

Determination: No impact.

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."*

The Montana Natural Heritage Program's website was used to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project. The following animals were identified on that list located regionally: Wolverine, Fisher, Great Blue Heron, Veery, Bald Eagle, Westslope Cutthroat Trout, Pygmy Whitefish, Bull Trout, Lake Trout and Pygmy Water-lily.

Determination: No immediate impact.

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: This property is not located within a designated wetland boundary.

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

Determination: No pond; no impact.

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.*

The soils in this area are generally silt loams over sand. Kalispell loam is well drained with a moderately high to high water transmitting capacity.

Determination: No impact to soil quality or alteration of soil stability expected.

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 impact. Land will now have a good maintenance plan.

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

Determination: No impacts are anticipated.

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*

Determination: N/A – project not located on State or Federal Lands.

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 other impacts were identified in this EA.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: This subdivision appears to be in compliance with regulations of the Flathead County Planning Office.

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 impact expected.

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

Determination: No impact expected.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No**XX** If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

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?* None identified.

(*b)* *Local and state tax base and tax revenues?* Increase in tax revenues

(c) *Existing land uses?* None

(*d)* *Quantity and distribution of employment?* None

(e) *Distribution and density of population and housing?* Standard growth impacts

(f) *Demands for government services?* Developmental/growth impacts

(g) *Industrial and commercial activity?* None identified

(h) *Utilities?* Greater demand for electricity and natural gas

(i) *Transportation?* Not significant

(j) *Safety?* Not significant

(k) *Other appropriate social and economic circumstances?* None identified

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

Secondary Impacts: None expected

Cumulative Impacts: None expected

3. ***Describe any mitigation/stipulation measures:*** None identified

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:*** No reasonable alternatives identified

PART III. Conclusion

1. Preferred Alternative

2 Comments and Responses

3. ***Finding:***

*Yes___ No**XX** 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: Because no significant impacts were identified, this EA is the appropriate level of analysis.

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

Name: Kathy Olsen
Title: Water Resource Specialist
Date: August 3, 2011