

Division/Bureau Sub Division Bureau (PER to be prepared)
 Project or Application Branch Creek So Amended Plat
 Description of Project 21 lots on individual water and sewer in Gallatin Co

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Terrestrial and aquatic life and habitats			X			
2. Water quality, quantity and distribution			X			
3. Geology and soil quality, stability and moisture			X			
4. Vegetation cover, quantity and quality			X			
5. Aesthetics			X			
6. Air quality			X			
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air and energy			X			
9. Historical and archaeological sites				X		

POTENTIAL IMPACTS ON HUMAN ENVIRONMENT

	Major	Moderate	Minor	None	Unknown	Comments on Attached Pages
1. Social structures and mores			X			
2. Cultural uniqueness and diversity				X		
3. Local and state tax base and tax revenue			X			
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity and distribution of community and personal income			X			
7. Access to and quality of recreational and wilderness activities		X				
8. Quantity and distribution of employment			X			
9. Distribution and density of population and housing			X			
10. Demands for government services			X			
11. Industrial and commercial activity			X			
12. Demands for energy			X			
13. Locally adopted environmental plans and goals				X		
14. Transportation networks and traffic flows			X			

Other groups or agencies contacted or which may have overlapping jurisdiction.
 Individuals or groups contributing to this PER.
 Recommendation concerning preparation of EIS.
 PER Prepared by:
 DATE:

Developers, Bureau of Waste, F&G, Highway Dept
Not required
Thomas J. Wring
10/26/27

Date: August 1977

STATE AGENCY SUBDIVISION REVIEW

TO: Edward W. Casne, Health Department
Chuck Parrett, Natural Resources
Brace Hayden, State Lands
Hydrology Division, Mont. Bureau of Mines & Geology, Butte
James Posewitz, Fish and Game
Homer Wheeler, Highway Department

FROM: Local Planning Services Bureau
CDA/Division of Planning
Capitol P.O.
Helena, Montana 59601

SUBDIVISION NAME: Beaver Creek South

County: Gallatin Nearest Town: Bozeman

Public Hearing Date: August 31, 1977

COMMENTS DUE ON: August 26, 1977

Please send your comments to: Mr. Robert Klatt, Plat Review Officer
Gallatin County Surveyor's Office, County Courthouse, Bozeman, MT 59715
and one copy to the Division of Planning.

Additional Remarks: _____

RECEIVED

AUG 5 1977

MONTANA DEPT. OF HEALTH
& ENV. SCIENCES
SUBDIVISION BUTTE

MONTANA STATE DEPARTMENT OF HEALTH
AND
ENVIRONMENTAL SCIENCES

STATEMENT OF INFORMATION REGARDING
WATER SUPPLY, SEWAGE DISPOSAL AND SOLID WASTE DISPOSAL
FOR REALTY SUBDIVISIONS

Form E.S. 91

The following statement is made and submitted with the plat of a proposed realty subdivision in the State of Montana under provisions of Section 69-5001 through 69-5005, R.C.M. 1947 as amended by Chapter No. 509, Montana Session Laws, 1973, House Bill No. 465; MAC 16-2.14(10)-S14340; and the Montana Environmental Policy Act, Section 69-6504 (b)(3), Revised Codes of Montana, 1947.

A. DESCRIPTION OF PROJECT

1. Name of subdivision BEAVER CREEK SOUTH

Location (City or County) Gallatin County

Legal Description: Section 17 Township 7S Range 4E

2. Owner (State name of person, company, corporation or association owning the proposed subdivision. If organized, give name of officers.)

Beaver Creek South, Inc. Bruce Patterson, President
Don Brelsford, Sec-Treasurer

Address Box 1252, Bozeman Harry Birkenbuel, Vice-President

Bozeman Montana 59715 587-8501
City of Town State Zip Code Telephone No.

3. Area of subdivision (Total size in acres) 88.456

Number of lots 21

Area of lots Approximately 66.5 acres

Minimum lot area 2.1 acres

Does this meet minimum recommendations? (One acre for lots with individual water and sewer systems and 20,000 square feet for lots with either individual water or sewer systems.)

Yes, for lots with both individual water and septic systems

4. Type of dwelling proposed:

Single-family residence	<u> X </u>	Apartment	<u> </u>
Duplex	<u> </u>	Condominium	<u> X </u>
Four-plex	<u> X </u>	Other	<u> </u>

If other, please explain. The four-plex lots may be developed
 either as rental or condominium units.

5. Water Supply:

a. State distance to nearest public water supply main of a municipal or community system. (Give name of municipality, water district, or company.)

 7 miles, to Big Sky Meadow Village water system

b. Proposed method of supply water. (Describe in detail. See items 2 on page 8 and B on page 9).

 Each lot shall have its' own well located in compliance
 with State of Montana and Gallatin County regulations

(For individual water systems, include adequate evidence that a water supply sufficient in terms of quality, quantity, and dependability is available). (See attached well logs)

c. Show the proposed location of the well(s) on the plat and proximity to existing and/or proposed sewage disposal system(s) in the area.

d. Is the water supply source(s) at least 100 feet away from any existing sewage disposal system? There are no existing sewage disposal systems but upon installation, all water wells will be 100 feet or more away from the disposal system.

6. Sewage Disposal:

a. State distance to nearest public sewer main of a municipal or community system. (Give name of municipality or sewer district.)

 7 miles-Big Sky Meadow Village central sewage system

b. Proposed method of collection and disposal of sewage. (Describe in detail. See items 3 on page 8 and B on page 9).

 Individual septic systems designed and installed in compliance
 with all applicable laws and regulations. (See engineers
 report with preliminary sizing of systems prepared by
 Morrison-Maierle)

- c. Does the proposed sewage disposal system(s) meet the minimum distance requirement between existing water supplies and sewage disposal systems in the area? All systems will meet or exceed minimum requirements.

(Show the location of the proposed sewage disposal system(s) on the plat and its' proximity to existing water supply systems in the area.)

7. Solid Waste Disposal

The Solid Waste Management Bureau of the State Department of Health and Environmental Sciences has devised a Solid Waste Approval Form to deal with the matter of solid waste disposal. Please fill out the upper portions of the attached form (page 13) and have the landfill operator fill out the middle section. Leave the lower third blank. Return to this office.

8. Drainage and Runoff.

a. Streets and roads.

- (1) State arrangements for disposing of surface water from streets and roads. (See item C on page 10).

Drain to barrow pits and spread on common open land

- (2) Type of road surface proposed. Gravel built to county standards

- (3) Describe roadway drainage systems. Drain to barrow pits and spread on common open land; see included maps
-
-

- (4) Are stream crossings required? No

If so, how will they be constructed? _____

- (5) Will there be cut and fill sections on streets and roads? Yes

If so, indicate locations on topographic map along with a sectional drawing of the proposed cuts.

- (6) Dust suppression plans. (These plans must meet Air Quality Bureau's requirements.)

Beaver Creek South will conform to any applicable regulations.

b. Other drainage problem area.

(1) Does there exist any low or wet areas that require drainage? No

(2) Are there any water courses, ditches or ravines which may be filled in? No

(3) Indicate provisions for handling such problems if not shown on the plans.

9. Additional Information.

a. Cellar drainage.

Are cellar or footing drains to be installed? No

If so, how will drainage be disposed of? _____

b. Laundry wastes.

Are laundry tubs to be located in basement? No

If so, how will wastes be disposed of? _____

c. Are garbage grinders to be used? Yes

B. EXISTING ECOLOGICAL CONDITIONS.

1. Present land use. The land is not being used for any purpose presently, nor has it been for the past four years.

2. Nature of soil. (Describe in detail to a depth of 10 feet if drainfields are to be used for sewage disposal. Description must be by one competent in the field of soil science using one of the standard classification systems. Attach results of percolation test results for subdivisions proposing individual sewage systems.)

See included engineers report describing the test pits dug on the property.

3. Topography.

- a. State whether ground is flat, rolling, steep, or gentle slope, etc. to be accompanied with a topographic map with contour intervals that comply with local governing agency requirements.

Gently sloping fans on three quarters of the property
and moderate steep hill on the balance.

- b. State the percent of slope of land at the absorption field for subdivisions proposing individual sewage systems.

No drainfield system will be installed on slopes exceeding
15%. See included plat for each lot.

- 4. Will there be any grading (either cut or fill) one or more feet in depth?

Yes, see engineers report on roads.

If so, clearly designate on plans or describe in report.

- 5. Depth to water table during high water season, (see item D on page 11):

Maximum Undetermined Minimum 12', See well logs
 Date determined Nov. 30, 1973 Also see engineers test pit report
for May of 1973 and June of 1977
 (See well logs for

- 6. Depth to bedrock or other impervious material. Unknown conditions to 50'

Do any of the lots have extensive rock outcroppings? No

- 7. Has this land or any portion thereof ever been flooded? No

If so, give maximum high water elevation and year of occurrence.

- 8. Is this area located in the 100-year flood plain? No
 (See item E on page 11).

If so, delineate on plat. If the flood plain has not been delineated indicate the flood prone areas.

- 9. Is this subdivision or any part thereof located on a public water supply watershed?

No

C. ENVIRONMENTAL ASSESSMENT.

1. Probable impact of the project on the environment.

- *Soils and vegetative cover will be disturbed for roads, driveways, foundations and drainfields.
- *Visual changes will occur simply because of the change in land usage.
- *Increased human usage of surrounding areas by future residents of the subdivision can be expected, primarily for recreation.
- *Some change in both traffic usage and traffic patterns can be expected to occur.

2. Any probable adverse environmental effects which cannot be avoided.

- *Soils and vegetative cover will be disturbed as described above.
- *Birds and small wildlife will be disturbed and perhaps displaced.
- *Other wildlife will be disturbed to some extent but to what degree is unknown.
- *It is probable that to some persons the residential development will be aesthetically and visually unpleasant.
- *Minor long-term impact on air quality from dust, automobile pollutants and wood burning heating plants.

3. Alternatives considered with evaluation of each.

Alternative #1

Rearrange subdivision into 21 lots of an increased size, four lots to be four-plex lots and the remaining 17 to be single-family lots.

First, as with almost all subdivisions, this alternative is being proposed as a better use of the land and the resultant economic considerations this implies. Because of the lengthy delay encountered in the initial approval of Beaver Creek South, many of the initial considerations, which were the basis for the original concept of the subdivision, have changed. Market demand is different, the lack of growth as projected for Big Sky and the desires of adjacent and nearby property owners lead us to believe that another alternative than originally approved would be in the best interests of Beaver Creek South and the residents of the area and Gallatin Canyon. As a note, many of the original objections to Beaver Creek South seem to be minimized, as described below.

1. Energy consumption of 32 dwelling units will be substantially less than the originally proposed 174.

2. Human impacts on the surrounding areas will be less.
3. Traffic loads on US191 will be less.
4. Impact on the Ophir School System will be greatly reduced.
5. Particulate emission from automobiles and heating plants will be less.
6. Visual impact will not be so severe because of the reduction in number of dwelling units and the elimination of the commercial area as originally approved.

Alternative #2

Do nothing with the property.

Since this land is not capable of supporting its' cost basis without some change in status (grazing potential), the "do nothing" alternative is not realistic nor acceptable to the owner.

Alternative #3

Sell the property to some conservation group or state agency who would pursue the "do nothing" alternative.

This would be a viable alternative if interest existed. However, this interest has not been evidenced to date and what few efforts we have made in this direction have been totally non-productive.

Alternative #4

Rearrange the property into even larger parcels than proposed in alternative #1, even to the point of not requiring subdivision review.

This alternative has been considered but is unacceptable to the owner because of the properties cost basis-market value relationship. Also, any potential change along this concept would require a substantial relaxation of covenants and restrictions on the property to provide any opportunity for sale; a situation which we would prefer not to get involved in.

Alternative #5

Develop the property as it is presently subdivided.

While we believe this is a possible alternative and could be accomplished with proper marketing and promotion, the majority of factors which were the basis of our initial development concept have changed enough, as mentioned in Alternative #1, to justify that same Alternative.

4. Relationship between local short-term uses of environment and enhancement of long-term productivity.

The immediate effect of this Planned Unit Development is to provide limited, carefully controlled residential development which will not, in our opinion, infringe excessively on the characteristics of the immediate area. We believe that confining these 21 dwelling units within the proposed subdivision provides a better alternative, both now and in the future, than have the same 21 dwelling units scattered from Beaver Creek to the Big Sky entrance. Finally, we feel that this proposal is compatible with surrounding land uses, as evidenced by surrounding residential construction, and will continue to be in the future.

5. Any irreversible or irretrievable commitment of resources.

Materials will be typical of those used in residential construction; lumber, concrete and related resources will obviously be permanently committed. Also, utility services including electricity will be required for lights and heat and may depend upon the consumption of natural resources.

Also, land which could be used for grazing purposes will be committed to uses which would eliminate this use.

D. PUBLIC OBJECTIONS TO PROJECT, IF ANY, AND THEIR RESOLUTION.

E. AGENCIES CONSULTED ABOUT THE PROJECT.

1. State agency and representative's name.

2. Local agency and representative's name.

Gallatin County Commissioners, George Sager, Chairman
Gallatin County Engineers Office, Rob Klatt and Earl Best
Gallatin County Sanitarians Office, Emery Nelson and Larry Wallace

3. Is this subdivision or any part thereof located in an area under the control of local planning, zoning or other officials?

Yes, Gallatin County Commissioners

If so, have these plans been submitted to such authorities?

Yes

Have these plans been approved by such authorities?

It is hereby agreed that if the attached plans dated April 19, 1977 or any revision or amendment thereof are approved by the Department of Health and Environmental Sciences, installation of water supply and sewage disposal facilities will be made in accordance with the details thereof as shown on such approved plans. If the subdivided lands shown on such plans are sold before such installations are made, it is agreed that all purchasers of lots will be furnished with a legible reproduction of the approved plans, and they will be notified of the necessity of making installations in accordance with such approved plans.

Signature

James Foltz

Official Title President, Beaver Creek South, Inc.

Date

July 13, 1977

The statement must be signed by the owner of the land platted for subdivision or the responsible official of the company or corporation offering the same for sale.

SOLID WASTE APPROVAL FORM

Date July 28, 1977

To the Montana Department of Health and Environmental Sciences concerning solid waste disposal for Beaver Creek South, a proposed subdivision in Gallatin County.

Gentlemen:

This is to advise the department that SWHR Hauling will collect, remove and dispose of all solid wastes from the above-referenced proposed subdivision on a regular basis as development requires.

F. E. Duke
Refuse Hauler

1047
MRC Registration Number

Date 28 July 1977

This is to advise the Montana Department of Health and Environmental Sciences that the City of Bozeman sanitary landfill will accept solid waste generated by the above-referenced proposed subdivision and hauled by Bob Hauling.

Arnold Collins
Landfill Operator, Manager of Refuse District, Mayor of said town or County Commissioner

Date _____

To the Water Quality Bureau of the Montana Department of Health and Environmental Sciences concerning solid waste disposal for _____, a proposed subdivision in _____ County.

Gentlemen:

This is to advise the Water Quality Bureau that the above-referenced plan for solid waste disposal is _____
Approved or Disapproved

Solid Waste Management Bureau
Montana Department of Health and Environmental Sciences
Helena, Montana 59601

COMMUNITY IMPACTS

WATER: Description of use.

All water requirements for this development will be provided by individual wells on each lot. This water will be used for typical domestic purposes including lawn sprinkling. Two wells have been drilled on the property (see the included well logs) which indicate sufficient resources to meet any foreseeable needs.

Capacity: The two wells drilled (6") yielded 98 and 60 gallons per minute. Assuming each lot has a well and that each dwelling unit would require 5 gallons per minute, it is evident that sufficient water exists.

State Standards: The plans for individual wells on each lot will meet State of Montana standards and all wells will be constructed in compliance with all applicable regulations.

SEWAGE DISPOSAL:

All sewage disposal will be by septic system and drain-fields on each lot, built in compliance with State and County regulations and inspected during construction as required by the Gallatin County Sanitarian.

Capacity: The total effluent expected to be generated per day will be 7,335 gallons per day. This is based on four four-plex lots (two bedrooms per apartment with four occupants per apartment @ 60 gpd/occupant) and seventeen single-family lots with three bedroom houses with five occupants @ 75 gpd per occupant. These estimations are from the "Manual of Septic Tank Practice" published by the U.S. Department of Health and Welfare. Individual septic systems will meet the needs of this development and all standards of the Department of Health and Environmental Sciences. See engineering report by Morrison-Maierle.

SOLID WASTE DISPOSAL:

All solid waste will be transported to the Gallatin County Sanitary Landfill by Suhr Hauling. Covenants for the property prohibit any disposal of solid waste on the property itself.

ROADS: Description.

Private roads will be constructed within the proposed subdivision as shown on the preliminary plat.

Access to Arterials: No lots will have direct access to U.S.191. All access and egress is through one common encroachment.

Modification of Existing Roads: None, other than to improve to County Standards the one presently used by Bill Davis.

Dust: Provisions will be made to comply with applicable regulations as they are required by State or Local Agencies.

Pollution and Erosion: Roads will be constructed with adequate barrow pits to collect runoff and channel to common areas for spreading and absorption-evaporation. Any areas of substantial cut or fill, or areas evidencing a problem, will be reseeded to prevent erosion.

Installation and Maintenance: Beaver Creek South, Inc. will pay the initial cost of installing the roads within the development. The Beaver Creek South Association will be responsible for maintenance.

Traffic Generation: Assuming that each dwelling unit will have 2 cars, a total of 66 cars would be using the roads and highway. Based on past discussions of this question when 170 dwelling units were proposed (and approved), this traffic should not create any major problem.

Year-round Access: Year-round access will be available to all residents.

UTILITIES:

Electrical power will be supplied by the Montana Power Company. Phone service will be by the Continental Telephone Company of the West with offices in Big Timber. All utilities will be installed underground and are expected to be installed within two years of approval of this plat.

EMERGENCY SERVICES:

Fire: Big Sky of Montana has a volunteer fire department which may be available if needed. However, this fire department is not required to provide protection to Beaver Creek South.

Police: Police protection will be provided by the Gallatin County Sheriffs Department to the extent it now exists.

SCHOOLS:

The 33 proposed dwelling units at Beaver Creek South can be projected to have approximately 26 school-age children. This is based on the office of the Superintendent of Public Instruction estimate that the average family has 8/10 student age child. Of these 26, approximately 18 could be expected to attend the Ophir School with the remaining 8 attending Bozeman schools by bus. If each dwelling unit at Beaver Creek South was valued at an average of \$45,000, (which is below the national average) property tax revenue generated for the school district would be about \$1949.00 per student for a total of \$50,678.00, based on the 1976 mill levy of 167.78.

In a phone call to Virginia Kada of the Ophir School on July 28, the average number of students in attendance in 1976 was 41. The estimate of cost per student, \$1852.36, is based on the following expenses of the school district.

General budget.....\$54,449.16
Special budget.....9,579.16
Debt service.....11,918.49
\$75,946.81

The capacity of the present school is approximately 80 and could easily handle the projected students from Beaver Creek South, although additional staff would probably be required.

LAND USE:

Planning: The proposed development is not in an area governed by any master plan or zoning district.

Public Lands: Since this land is not used nor required for access to public lands, it will not affect the public use of public land with respect to access. Existing public lands in the area are used primarily for grazing and recreation and no change in this use is foreseen.

Adjacent Land Use: The existing adjacent land use, on private land, include single-family homes, pasture, and on the East side of U.S.191 is a bar and sporting goods shop. Public lands are used as described above. It is expected that this subdivision may increase the use of nearby public lands for recreational purposes. Also, it will affect existing private property owners by increasing density within the subject 88.5 acres.

Nuisances: None

Hazards: None.

HOUSING::

Number and Type: Single-family homes (17) and four four-plex buildings are planned. It is anticipated that this development would be primarily a first home subdivision although this can not be specifically determined. It is estimated that the development would be one-half complete by 1980 and completed by 1985.

PARK:

Approximately 10 acres will be dedicated to park. The future use of this will be entirely up to the Beaver Creek South Association as they see fit to develop. To foresee any specific use is merely speculation but stables, tennis courts and playground facilities immediately come to mind.

TAXATION:

Presently there are 56.339 acres taxed as suburban tracts.

FENCES: None