

Department of Health and Environmental Sciences
STATE OF MONTANA HELENA, MONTANA 59601

Office Copy

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DIRECTOR

*Received
Dec 30, 1975*

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Re: Grantland II Subdivision
Missoula County

Honorable Thomas Judge, Governor, State of Montana, Helena
Citizens Advocate, Helena
Environmental Quality Council, Helena
Montana Fish and Game Department, Helena
Department of Highways, Helena
Department of Intergovernmental Relations, Division of Planning, Helena
Department of Natural Resources and Conservation, Helena
Department of State Lands, Helena
Montana State Library, Helena
Board of County Commissioners, Courthouse, Missoula
City-County Planning Board, Missoula
Sanitarian, 301 Alder Street, Missoula
Grant Creek Ranch Corporation, Grant Creek Road, Missoula
The Missoulian, 502 North Higgins, Missoula
Environmental Information Center, Box 12, Helena
C. W. Gonder, 823 East Call Street, Livingston
Mrs. Vel Jansen, 430 South Sixth, Livingston
Mrs. Winifred Lucky, 420 South Sixth, Livingston
Mary Lee Reese, League of Women Voters, 29 South Alta, Helena
Doris Milner, Montana Wilderness Assn., Route 1, Box 1410, Hamilton
Northern Rockies Action Group, #9 Placer Street, Helena
Paul T. Richards, 902 North Park, Helena
John Schillinger, Microbiology Department, Montana State University, Bozeman
Concerned Citizens for a Quality Environment, c/o Ron Erickson, Chairman,
University of Montana, Missoula
Student Environmental Research Center, University of Montana, Room 212,
Venture Center, Missoula
John P. Duke, Assistant Vice President, Land Management, Burlington
Northern, 650 Central Building, Seattle, Washington, 98104
Herb Anderson, P. O. Box 42, Raynesford, MT 59469
Mike Roach, Air Quality Bureau, Environmental Sciences Division
Don Willems, Water Quality Bureau, Environmental Sciences Division
State-Local Relations Project, Commission on Local Government,
State Capitol, Helena
Soil Conservation Service, c/o W. D. Harrison, Missoula
Sorenson & Company, Missoula
Missoula County Surveyor
Missoula County School Board

MONTANA DEPARTMENT OF HEALTH
AND
ENVIRONMENTAL SCIENCES

December 29, 1975

An Agency Impact Determination
for
Grantland 11
A Proposed Subdivision in Missoula County, Montana

Pursuant to the Montana Environmental Policy Act, Section 69-6504 (b) (3); the act controlling both public and private water supply and sewage disposal for subdivisions, Section 69-5001 through 69-5009; and the act to control water pollution, Section 69-4801 through 69-4827, R.C.M. 1947, the following agency impact determination was prepared by the Department of Health and Environmental Sciences, Environmental Sciences Division, concerning the proposed Grantland 11 Subdivision, for which a submittal has been received requesting subdivision plat approval.

Location

The proposed subdivision is situated in Missoula County approximately six miles northwest of Missoula. The tract of land is in the northeast 1/4 of the southwest 1/4 of Section 21, Township 14 North, Range 19 West, Principal Montana Meridian, (See the attached map.)

Description of the Proposed Project

In March 1975, Reed Marbut, secretary of the Grant Creek Ranch Corporation, Grant Creek Road, Missoula, Montana, submitted a proposal to subdivide 27.2 acres into 16 lots.

The largest lots will be two acres and the smallest, an acre. The total subdivided area will be 35.1 acres, with three acres dedicated for park space and 4.9 acres for roads.

The name of the subdivision is Grantland 11, and, as its name implies, it is the eleventh in a series of land developments. The ranch corporation's other subdivisions are situated north of the proposed development and west of the intersection of the Grant Creek Road and the Forest Service road which leads to the Snow Bowl ski area.

The 10 previous subdivisions are small developments, with the largest containing seven lots and the smallest, three.

Grantland 11 will be the largest subdivision and restricted to single-family residences.

The subdivision will be serviced by a public water system. Water from two wells, situated in the valley west of the development, will be pumped under the Grant Creek Road and up to a 50,000 gallon storage tank above the subdivision. Water mains will carry the water from the storage tank to the homes.

Septic tanks with subsurface drainfields will be used for sewage disposal. Soil profile descriptions, soil percolation rates and groundwater levels indicate septic tanks can be used on all of the lots.

All septic tanks will meet minimum requirements of the State Department of Health and Environmental Sciences and the Missoula County Health Department. The drainfield and septic tank locations, length of the drainfield and tile distribution lines also will comply with county and state regulations.

According to the proposed restrictive covenants, individual property owners will be responsible for solid waste disposal. Burning or burying solid wastes will be prohibited. Presently a commercial garbage collection firm serves the Grant Creek area.

Colorado Gulch, the road entering the subdivision, will vary from 110 feet to 80 feet wide, while the main road through the subdivision, Saint Vrain, will be 60 feet wide. Both roads will be constructed with adequate culverts and edge ditches to maintain existing natural runoff. The road design has been approved by the county surveyor.

Utility and telephone services are available to the subdivision and power and telephone lines will be buried.

A number of restrictive covenants, in addition to the one pertaining to solid waste, have been proposed. The covenants include restrictions on land use, building, animals, nuisances, water use, sanitary restrictions and enforcement.

Existing Environmental Conditions

The proposed development will be situated on the eastern slope of the Grant Creek Valley. The bottom land traditionally has been farmed and the hillsides used for pasture.

The slopes are grass covered at the mouth of the valley, with Interstate 90 running perpendicular to the Grant Creek Road. Traveling up the valley the grass covered slopes become brush covered, then gradually blend into pine woodlands. Further up the drainage the timber becomes dense as it leads up to Stuart, Mosquito and Point Six peaks.

The agrarian nature of the valley has changed gradually in the last 20 years. The Grant Creek Ranch subdivisions and development north of the ranch have added significantly to the change.

The corporation owns a good deal of bottom land and will continue to use this land for agricultural purposes.

Grantland subdivisions 1-10 are situated in woodlands considered to be marginal for agricultural purposes.

The soil types and percent of slope for the Grantland 11 site were determined by W. D. Harrison, a soil scientist for the Soil Conservation Service in Missoula.

Harrison divided the area into three "mapping units." The predominant unit runs through the middle of the site and comprises about 70 percent of the area. It consists of two soil types, deep gravelly clay and deep gravelly loam, which occur "in an intricate complex pattern."

The landscape is rolling with moderate slopes (8 to 15 percent), he said.

"This unit occurs on most of the subdivision area where dwellings and roads are proposed," Harrison said.

The unit which runs adjacent and parallel to the Grant Creek Road comprises about 10 percent of the land area. According to Harrison, the soils in this unit are similar to those in the first unit, except they occur on steeper slopes, 15 to 30 percent.

The last unit is situated in the upper 20 percent of the site and consists of deep, very gravelly loam soils over fractured bedrock. Harrison described this unit as being on "steep to very steep slopes (15 to 40 percent)."

Percolation tests were conducted by Sorenson & Co., a Missoula engineering consulting firm, to determine the rate of absorption for septic tank drainfields.

The tests were made on each lot and most readings averaged an absorption rate of 14 minutes per inch. The two highest readings were 40 and 34 minutes per inch.

Absorption rates are not considered unusually slow unless they are greater than 60 minutes per inch.

According to the engineering firm, test wells were drilled to a depth of 70 feet on Lots 71 and 78 during the late summer and fall of 1974 and no groundwater seepage occurred.

Well logs from the wells in the valley which will provide water for the private water systems indicate there's more than sufficient water for domestic use. A report written by the engineering firm said the wells, 65 and 75 feet deep, are capable of producing 65 gallons per minute or 93,600 gallons per day--well over the minimum requirement of 9,000 gallons per day.

The land is not within the 100-year flood plain and is not subject to avalanches, rockfalls or slides.

Several species of game animals frequent the area according to a spokesman from the State Department of Fish and Game's Missoula office. Grouse and white-tailed deer are common to the area, and during times of severe winter weather, mule deer and elk wander into the area. However, the department spokesman said the area isn't considered a prime wintering area for big game animals.

Environmental Impacts

A review of the proposed restrictive covenants for the Grantland 11 subdivision indicates the corporation is interested in developing a subdivision which will create as small an impact as possible. However, it is impossible to totally mitigate the aesthetic impact of a subdivision.

The very basic acts of creating a subdivision, such as putting in roads, septic tanks, a water system and building homes, will substantially change the nature of the area. More specifically, it will accelerate the transition of the traditional pastoral setting to a suburban setting.

The corporation's other developments are clustered at the north end of its property. The proposed development will be the first subdivision on the east slope of the valley from the junction of the Grant Creek Road and Snow Bowl road to Interstate 90.

By its very name, Grantland 11 implies there will be other developments; however, there was no mention of further development in the material submitted for review.

A check with the Missoula County Planning Office revealed the corporation does have future development plans in the area adjacent to Grantland 11, but has not drawn up a master plan. It did submit a color coded map which indicated areas of possible development, but nothing in terms of detailed plans.

Although this review does not require a master plan of the total development, such a plan proves to be helpful to both the developer and the reviewer, particularly in terms of helping the developer insure that future plans are adequate to protect human health and the environment.

The developers did work closely with the Missoula County sanitarian to make certain sewage will be properly disposed. After a review of the plans, the developers agreed to have the sanitarian check the placement of septic tanks and drainfields.

Although the covenants specify that house pets are not permitted to run at large or leave the owner's property except on a leash, the spokesman for the Department of Fish and Game was concerned about the possible increase in the dog population. Dogs harass some wildlife, such as deer, and at times catch and kill animals. Unless owners conscientiously comply with the rules, the problem will increase.

According to the Missoula planning office the addition of 16 families to the community will not place a strain on schools, law enforcement or fire protection.

Based on a random undeveloped lot in Grantland 10, the property tax for a lot in Grantland 11 will increase tax revenues from \$27.30 an acre to \$1,751.00 an acre, according to Sorenson & Co.

Adverse Impacts

The aesthetic impact of a subdivision on undeveloped land cannot be mitigated, but the developer's restrictive covenants will help control the type and source of development.

High density future development could create a number of adverse impacts if proper long range planning is not initiated by the corporation.

Irreversible and Irretrievable Commitment of Resources

The land will be permanently committed to residential use.

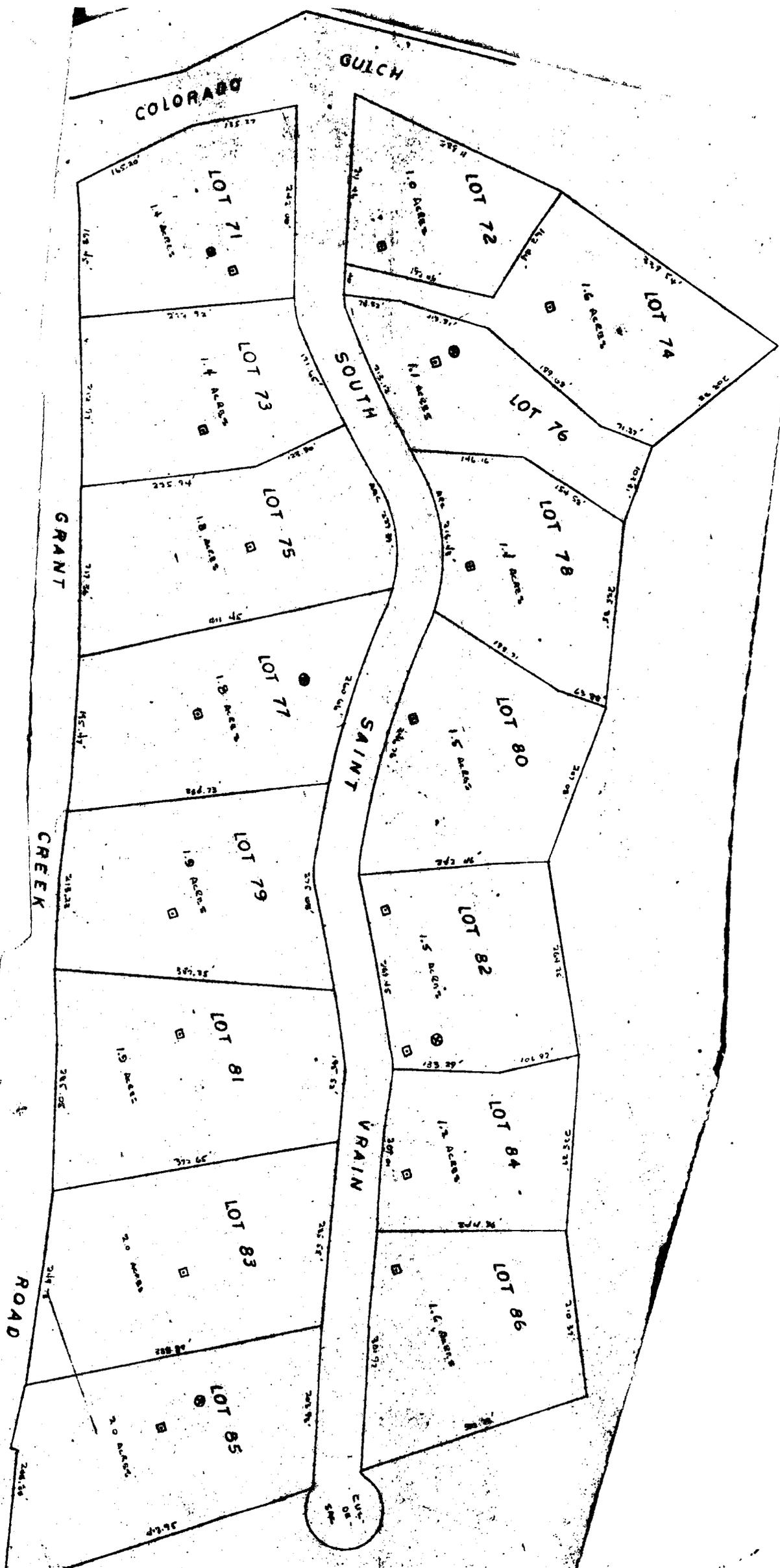
Available Alternatives

- A. Approve the subdivision plat as originally submitted.
- B. Approve the proposal subject to (1) approval of the plans for the public water system by the State's Water Quality Bureau, (2) biological tests to insure that the water meets the U.S. Public Health Service Drinking Water Standards and (3) the county sanitarian's approval of the placement of each septic tank and drainfield.
- C. Refuse to approve the plat.

Conclusion

This agency impact determination will be circulated until January 15, 1976, after which a certificate will be approved for a subdivision plat in accordance with the conditions given in alternative B.

This report was prepared by Tom Ellerhoff, with information supplied by Alfred Keppner, State Subdivision Bureau; Cliff Foy, Missoula County sanitarian; Sorenson & Company; W.D. Harrison, Soil Conservation Service; various county and state officials, and the developer.



COLORADO

GULCH

LOT 71

LOT 72

LOT 74

LOT 73

LOT 76

LOT 75

LOT 78

LOT 77

LOT 80

LOT 79

LOT 82

LOT 81

LOT 84

LOT 83

LOT 86

LOT 85

SOUTH

SAIN T

VRAIN

GRANT

CREEK

ROAD

CUT OR SINK