

ENVIRONMENTAL ASSESSMENT

Project Name: Titan **Proposed Implementation Date:** Summer 1996

Proponent: John Roberts DBA: Titan Construction

Type and Purpose of Action: The proponent proposes to mine, crush, stockpile, and transport 32,000 cubic yards of sand and gravel from a 2.5 acre site for the local Ennis market; reclaim the site by recontouring, respread the topsoil, and reseeding the site with grasses.

Location: NE¹/₄NW¹/₄ & SW¹/₄SW¹/₄, Sec. 8, T6S, R1W **County:** Madison

N = Not present or No Impact will occur.

Y = Impacts may occur (explain under Potential Impacts).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
<p>1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactible or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations?</p>	<p>[N] The proposed operation is located in the foothills of the Tobacco Root Mountains 1.0 mile southwest of Ennis. The gravels are located in Tertiary valley fill. The site has been mined extensively in the past and with reclamation having been performed on a portion of the site. The proponent will use the existing floor of the pit, which is devoid of soils, for facility and material stockpile areas and will extend the pit to the north. The soils, which exist, are of a sandy silty loam with pebbles texture and are approximately 6" deep. All available soil materials will be salvaged, stockpiled, and respread on the site upon completion of regrading. Soil microbes will recolonize the soils. There is no overburden.</p>
<p>2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?</p>	<p>[N] There is no surface water located within 1,000 feet of the site. The existing pit is approximately 20' deep. The depth to ground water is estimated to be 100 feet plus below the existing pit floor. The proposed operation will have a maximum depth of 20 feet. There are no water wells within 1000'. Any bulk fuel storage tanks would be lined and bermed and be of sufficient size to contain any leaks or spills. The proponent will not need to obtain a Stormwater Discharge Permit from the Montana Dept. of Environmental Quality, but will implement best management practices to prevent any off site erosion or sedimentation.</p>
<p>3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?</p>	<p>[Y] Air quality will be degraded, but the proponent must comply with air quality standards and an Air Quality Permit obtained from the Montana Dept. of Environmental Quality.</p>
<p>4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present?</p>	<p>[N] The vegetation on the site consists of green needle grass, bluebunch wheatgrass, prairie junegrass and crested wheatgrass on the area north of the existing pit which has not been disturbed by previous mining activity. The cover is approximately 30%. The site will be seeded with native grasses. A literature search was done by the Montana Natural Heritage Program and no rare plants or cover types were identified and none were identified during a ground search.</p>

<p>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish?</p>	<p>[N] The site may be utilized to some extent by deer, rodents, and various species of land birds.</p>
<p>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?</p>	<p>[N] A ground and literature search were conducted and no threatened or endangered species or identified habitat were found on the site. No wetlands were present.</p>
<p>7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?</p>	<p>[N] The site has been totally disturbed by previous mining and has been cultivated in the past. Any cultural resources which would have been present would have been destroyed by previous mining activities.</p>
<p>8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?</p>	<p>[N]</p>
<p>9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project?</p>	<p>[N]</p>
<p>10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other studies, plans or projects on this tract?</p>	<p>[N]</p>
<p>IMPACTS ON THE HUMAN POPULATION</p>	
<p>RESOURCE</p>	<p>POTENTIAL IMPACTS AND MITIGATION MEASURES</p>
<p>11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?</p>	<p>[Y] There will be increased hazards because of the equipment activity and hauling of the sand and gravel. The applicant must comply with OSHA and MSHA regulations however, proper precautions will be taken to avoid accidents.</p>
<p>12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?</p>	<p>[N] The additional mining on the site and subsequent reclamation will result in the site being revegetated with grass species more conducive with livestock grazing.</p>

13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number.	[N]
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	[N]
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed?	[N] The site will require periodic site evaluations, but these will be done in conjunction with other operations in the area
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] County zoning clearance has been obtained.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	[N]
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	[N]
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N]
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N]
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	[N]

22. Alternatives Considered: No action: pit would not be permitted and impacts would not occur at this location. Sand and gravel would be hauled from a greater distance increasing fuel use, gaseous emissions and project costs.

23. Public Involvement, Agencies, Groups or Individuals contacted: State Historic Preservation Office, Montana Heritage Program, Madison County Commissioners and Weed Management Board.

24. Other Governmental Agencies with Jurisdiction, List of Permits Needed: Montana Dept. of Environmental Quality for Air Quality Permit; Mine Safety and Health Administration for safety permit; Montana Labor and Industry, Bureau of Safety for safety permit.

25. Magnitude and Significance of Potential Impacts: Impacts are unlikely to be significant because of the small amount of disturbance, short duration of the project, and mitigated measures proposed.

Recommendation for Further Environmental Analysis:

EIS More Detailed EA No Further Analysis

EA Checklist Prepared By: Jerry Burke Title: Mine Reclamation Specialist

Approved By: Steve Welch Title: Opencut Mining Bureau Chief

Signature

Date