

## ENVIRONMENTAL ASSESSMENT

### On an Application for an OPENCUT MINING PERMIT

The Montana Department of Environmental Quality (DEQ) prepared this Environmental Assessment (EA) in accordance with requirements of the Montana Environmental Policy Act (MEPA). An EA functions to identify, disclose, and analyze the impacts of a proposed action. This document may disclose impacts that have no legislatively required mitigation measures, or over which there is no regulatory authority.

The state law that regulates gravel mining operations in Montana is the Opencut Mining Act. This law and the rules adopted thereunder place operational guidance and limitations on a project during its lifetime, and provide for the reclamation of land affected by opencut mining operations.

Local governments and other state agencies may have authority over different resources and activities under their regulations. Approval or denial of this Opencut Application will be based on a determination of whether or not the proposed operation complies with the Opencut Mining Act and the rules adopted thereunder. The DEQ approval of this application would not relieve the operator from the obligation to comply with any other applicable federal, state, or county statutes, regulations, or ordinances. The operator is responsible for obtaining any other permits, licenses, approvals, etc. that are required for any part of the proposed operation.

<b>APPLICANT:</b> Noble Excavating Inc.	<b>SITE NAME:</b>	Steep
<b>LOCATION:</b> Section 1, T22N, R30W	<b>COUNTY:</b>	Sanders
<b>DATE:</b> April 2011	<b>OPENCUT PERMIT:</b>	2088

**PROPOSAL:** The proponent has submitted an application to conduct Opencut mining operations for sand and gravel on 5.5 acres of forest ½ mile east of Blue Slide Road approximately 7 miles northwest of Thompson Falls (See [FIGURE 1 – AREA MAP](#)). The application estimates mining of up to 100,000 cubic yards of sand and gravel. A portable asphalt plant would be operated in the pit for the highway construction project during the summer. A reclamation bond would be held by DEQ to ensure final reclamation to grassland by September 2011.

As part of the permit application, the proponent has submitted a Plan of Operation that provides baseline information, operation plans, and plans for reclamation that would replace soils, plant grasses and return the affected lands to a post-mine land use of grassland. Reclamation is required by the Opencut Mining Act and the operator must comply with that statute and the rules and regulations promulgated under it. Normal working hours would be 7 am – 7 pm, Monday through Friday. Trees would be removed, soils and overburden would be stripped and stockpiled in berms around the perimeter of the site and access would be directly off of a small private ranch road that branches off of Graves Creek Road (See [FIGURE 2 – SITE MAP](#)). Upon final reclamation the berms would be removed and the soil would be used to cover the disturbed site.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	POTENTIAL IMPACTS AND MITIGATION MEASURES
<b>1. TOPOGRAPHY, GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:</b>	<p>The proposed mine is located in a small confined, forested valley that drains down into the Noxon Reservoir from the foothills of the Cabinet Mountains.</p> <p>Up to 8 inches of forest duff and ash cap soil overlies the glacial sands and gravels of this site. Local terrace slopes demonstrate reasonably</p>

**IMPACTS ON THE PHYSICAL ENVIRONMENT**

<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
	<p>good stability. All soil material will be salvaged and stockpiled away from the affected land. Following mining, grading and ripping, the soils will be replaced, disked and seeded to stabilize the soil and prevent erosion. Microbes will re-colonize the soil.</p> <p><i>Impacts:</i> Irreversible and irretrievable removal of gravel from the site will leave a permanent alteration to the topography. Small impact to the quantity and quality of soils from salvaging, stockpiling, and re-soiling activities, but this would not impair the capacity of the soils to support full reclamation. There are no unusual topographic or geologic considerations that would lead to reclamation failure.</p>
<p><b>2. WATER QUALITY, QUANTITY AND DISTRIBUTION</b></p>	<p>The nearest surface water is Thorne Creek located up over a ridge and down to the north of the site. Groundwater in the area is fairly deep. The site is above the anticipated depth of the water table, estimated to be at least 225 feet below the finished surface.</p> <p>No fuel will be stored onsite. Any accidental spills or major leaks from equipment operating in the pit will immediately be excavated and removed from the site.</p> <p><i>Impacts:</i> The proposed activities would have a minimal effect on the quantity and quality of the surface and groundwater resources.</p>
<p><b>3. AIR QUALITY</b></p>	<p>Air quality standards are based upon the Clean Air Act of Montana and pursuant rules and are administered by the DEQ Air Resources Management Bureau (ARMB). Its program is approved by the Environmental Protection Agency (EPA). These rules and standards are designed to be protective of human health and the environment.</p> <p>Air quality permits would be required on the processing equipment before installment. Machinery, such as generators, crushers and asphalt plants, are individually permitted for allowable emissions. Best Available Control Technology (BACT) is the usual standard applied. Fugitive dust is that which blows off the pit floor, stockpiles, gravel roads, farm fields, etc. It is considered to be a nuisance but not harmful to health.</p> <p><i>Impacts:</i> Air quality standards as set by the federal government and enforced by the ARMB would allow minimal detrimental air impacts.</p>
<p><b>4. VEGETATION COVER, QUANTITY AND QUALITY</b></p>	<p>Vegetation in the area consists of a conifer forest with Douglas and Grand fir with ground cover including pine grass, Oregon grape and Kinnikinnick the dominant species with other exotic species including invaders such as Spotted knapweed. Vegetation covers 85% of the ground. All vegetation will be removed and planted again following mining. While all plant species will be destroyed during mining, the areas will be re-vegetated following mining. A county weed control plan is in place to control noxious weeds.</p>
<p><b>5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:</b></p>	<p>The site is primarily forest that supports populations of deer, rodents, song birds, coyotes, raptors, insects and various other animal species. Population numbers for these species are not known. According to the State Natural Heritage Program, species of concern in this area include</p>

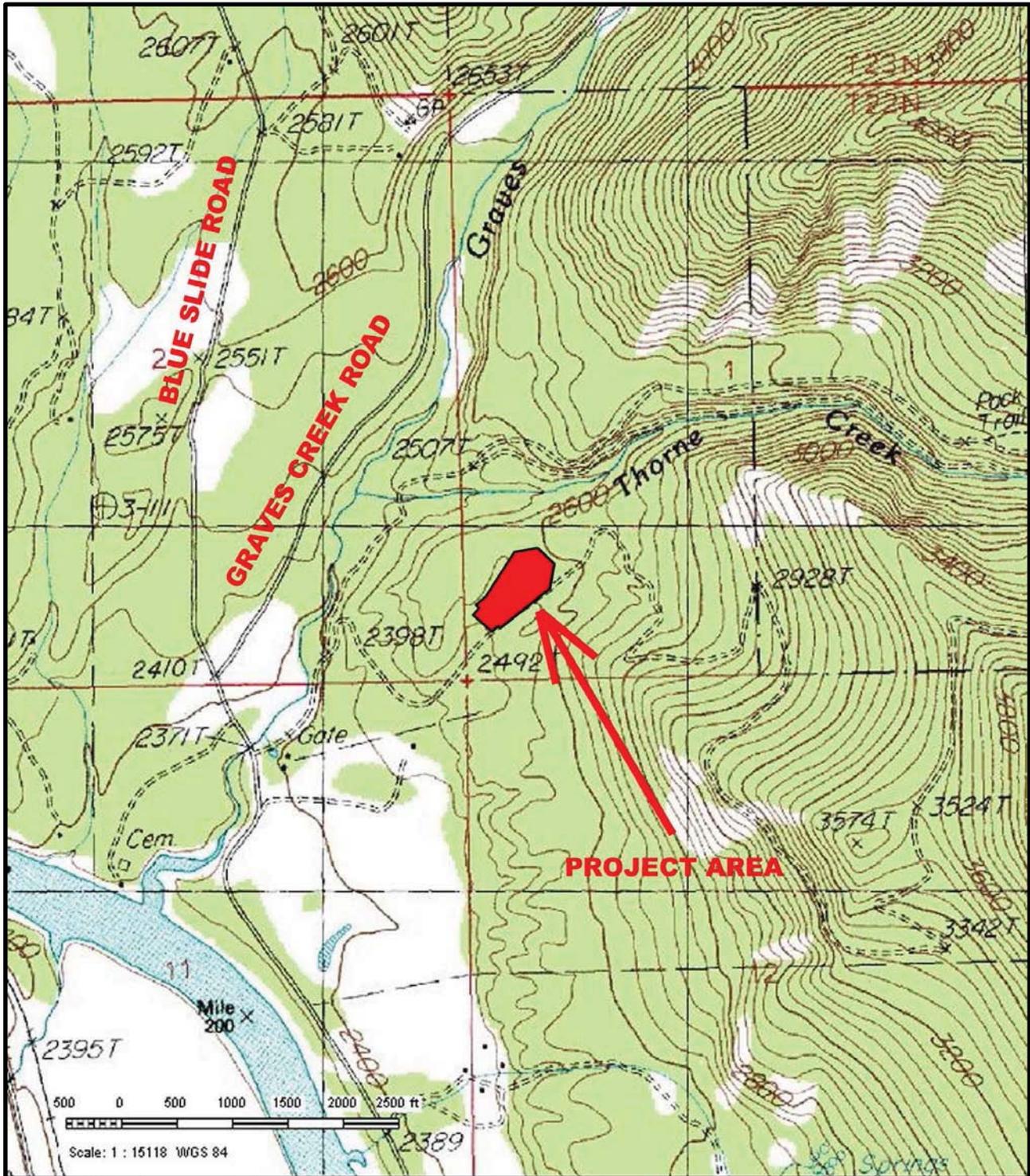
<b>IMPACTS ON THE PHYSICAL ENVIRONMENT</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
	<p>the Coeur d'Alene Salamander, Harlequin Duck, Bald Eagle, Bobolink, Westslope Cutthroat Trout, Bull Trout, Lake Trout, Gray Wolf, Grizzly Bear, Fisher, Wolverine and Canada Lynx.</p> <p><i>Impacts:</i> The proposed mine is expected to temporarily displace some individual species and it is likely that the site would be re-inhabited following reclamation to forest.</p>
<b>6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:</b>	There are no known sensitive environmental resources at this specific site.
<b>7. HISTORICAL AND ARCHAEOLOGICAL SITES</b>	<p>There are no known historical or archaeological resources at this site. A walkover of the area by DEQ personnel did not reveal any artifacts or signs of occupation.</p> <p><i>Impacts:</i> If during operations, resources were to be discovered, activities would be temporarily moved to another area or halted until SHPO was contacted and the importance of the resources was determined.</p>
<b>8. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY</b>	Energy in the form of diesel fuel for dozers, loaders and trucks would be consumed while this site is operated and material is hauled to the Blue Slide Road project. Water in minimal amounts will be utilized as necessary for dust control.

<b>IMPACTS ON THE HUMAN POPULATION</b>	
<b>RESOURCE</b>	<b>POTENTIAL IMPACTS AND MITIGATION MEASURES</b>
<b>9. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS</b>	This area is not zoned and the site complies with Sanders County's zoning regulations. A Zoning Form was signed by the County Planner on December 29, 2010.
<b>10. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING</b>	None of these resources will be affected.
<b>11. AESTHETICS</b>	<p>This site is not visible by anyone except the landowner. Eventual reclamation by December 2011 will return the area to a visually acceptable landscape.</p> <p>Impacts of noise and dust from the crusher and other equipment would be intermittent and of relatively short duration but are in addition to the noise created by the increased truck traffic and heavy equipment used on this road project.</p> <p><i>Impacts:</i> There would be mining and hauling activity at this site during normal work hours in the summer. These impacts would be minimal.</p>
<b>12. QUANTITY/ DISTRIBUTION OF EMPLOYMENT</b>	<i>Impacts:</i> No impact on employment; the same crews will be utilized for all operations.
<b>13. INDUSTRIAL, COMMERCIAL, AGRICULTURAL ACTIVITIES AND PRODUCTION</b>	<p>This would be an industrial site with periods of stripping, mining, processing and hauling during the summer until the project is completed.</p> <p><i>Impacts:</i> This site would be taken out of forest land during the life of the mine and would be returned to productive forest within several</p>



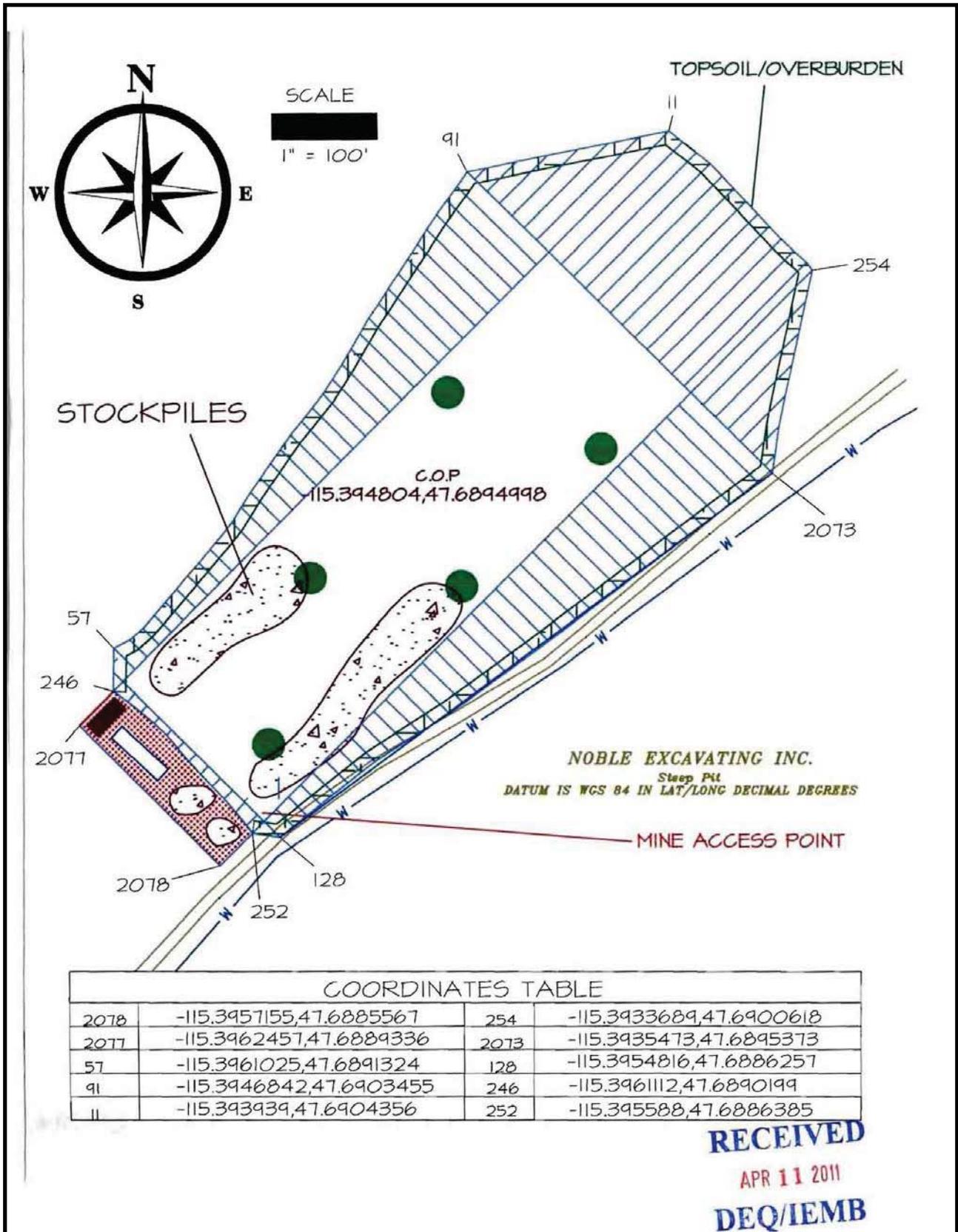
# FIGURE 1 – AREA MAP

[\(go back\)](#)



# FIGURE 2 – SITE MAP

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PRIVATE PROPERTY ASSESSMENT ACT (PPAA) CHECKLIST

**PROPERTY DESCRIPTION: Section 1, T22N, R30W, Sanders County**

**COMPANY NAME: Noble Excavation, Inc., Steep Site**

DOES THE PROPOSED AGENCY ACTION HAVE TAKINGS IMPLICATIONS UNDER THE PPAA?

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deprive the owner of all economically viable uses of the property?
	X	4. Does the action deny a fundamental attribute of ownership?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 5a and 5b and continue with question 6.)
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property?
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally? (If the answer is NO, skip questions 7a-7c)
		7a. Is the impact of government action direct, peculiar, and significant?
		7b. Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?
		7c. Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?

Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b.

If taking or damaging implications exist, the agency must comply with § 5 of the Private Property Assessment Act, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.