

15. CONSISTENCY WITH COMPREHENSIVE PLAN.

Consistency with the LUPC's Comprehensive Land Use Plan

The Comprehensive Land Use Plan (CLUP) provides for sound planning practices in the public interest to encourage and manage multiple uses of land and resources within the LUPC's jurisdiction. The following subsections describe how the proposed rezoning fits within the CLUP, and how the planned Pickett Mountain Mine project would meet the CLUP's goals and policies.

BROAD GOALS

The Pickett Mountain deposit is a unique mineral resource that is ideally situated to allow mineral extraction in an environmentally responsible manner through underground mining while ensuring the following:

- Enhancing the living and working conditions of the people of Maine including property owners and residents by creating an economic benefit in terms of capital investment, training, jobs and enhanced tax base within host and adjacent communities and counties.
- The proposed rezoning will meet the goal of separating incompatible uses. The area that is proposed for rezoning is currently a general management subdistrict (M-GN) that has been used for timber, and outside the proposed activity the logging operations can continue. The proposed rezoning will not impact any great ponds.
- The proposed project is designed to have a small foot-print (approximately 528.2 acres) with a comprehensive water management plan that will ensure protection of adjacent natural resources including groundwater and surface water quality, forest resources, wildlife and other natural resource values such as plant and animal habitat. The current information available indicates no known occurrences of endangered, threatened or special concern species within the project area. The IF&W also has not mapped any significant wildlife habitats within the project area. Based on current information from the MNAP, rare and exemplary botanical features are not present or not expected to be present in the area proposed for rezoning. The MNAP did identify a priority area for a botanical survey on the Wolfden property located between Pleasant and Mud Lakes. This area is a graminoid/shrub fen and a survey is planned to determine the whether or not rare plants or natural community types are present.
- The proposed project will allow continued use of forest resources related to logging for wood and fiber production on Wolfden's property.

DEVELOPMENT GOALS AND POLICIES

Location of Development

The Pickett Mountain Mine project location is dictated by the unique geologic conditions that resulted in the formation of a mineral deposit of economic value. As such there are no alternatives to the project location and the project is exempt from the policy of adjacency. The location and physical relationship of the mineralized zones to surrounding topography and water bodies allows the deposit to be developed by underground mining methods which when combined with carefully managed mine water collection and treatment systems will allow mine development, operation and closure without impacting water quality of these adjacent resources. The manner in which the project will be designed shall be subject to avoidance and mitigation, to the extent possible, of protected natural resources including but not limited to wetlands, vernal pools, rare and endangered species including plants and wildlife. Therefore, aside from adjacency, the project as proposed, meets the LUPC's development goals and polices with respect to project location.

The project is also unique in having a finite duration currently anticipated to be from 10 - 15 years. Therefore, unavoidable impacts to resources such as wetlands are ephemeral or short lived, and resource values and functions can and will be restored upon project completion. The reclamation of the proposed site will sequentially remove all buildings and structures including the water treatment systems when they are no longer required or needed. Once the access to underground workings are permanently sealed and the site is regraded and revegetated it will attain the natural character and values that existed prior to mining. An above ground sub-aerial TMF will remain at closure. The TMF will be designed with a liner in accordance with DEP Chapter 200 requirements. This area will contain tailings that have been stabilized and compacted and which could present some risk to the environment if not managed properly. These risks will however be managed by collection and treatment of water that comes in contact with these materials during operations and capping at closure. The higher sulfide bearing tailings will be stabilized and used as a structural backfill in the underground mine working and will not present any risk. The above ground TMF will be constructed and graded to follow the original upland land surface at an elevation approximately ten feet higher over approximately 42 acres. This approach will preserve the current appearance of the ridgeline post reclamation. This area will also be revegetated and designed to allow regrowth of natural ground cover as discussed in later sections of this Petition.

Thus while meeting many of the goals related to location of development, the project is also consistent with and meets CLUP polices including:

Policy 1 Development that is directed to a suitable area and retains the principal values including a working forest, and integrity of natural resources.

- Policy 2 The project location is near existing towns (the nearest community being Hersey (4.5 miles) and Patton (9.5 miles) with proximity and connectivity by public roads to other organized town and economic centers, with adequate available public infrastructure and services.
- Policy 7 Project allows for (a) planned development dependent on a particular natural feature which is the presence of a metallic mineral resource.

Economic Development

One of the CLUP's goals is to encourage economic development that is connected to local economies, is efficient in its use of existing services and infrastructure and is compatible with existing natural resources and surrounding land uses.

The project will provide direct and substantial economic benefit to the local communities (see **Appendix A-Attachment N**). This benefit is in the form of job skills training, primary wages to local employees, wages that are spent in the local economy, an increase in property tax revenue, and indirect wages at secondary jobs that help support the mining operations (mechanical equipment repair, vehicle maintenance, road maintenance, solid waste management, and other specialized services).

The site is in vegetative regrowth from past logging efforts that are estimated to have occurred from 7 to 10 years ago. Wolfden actively leases its timber rights to a local logging company, preserving productive use of its working forests. The proposed development will be largely self-sufficient and not impose an undue burden on local community services or resources (see **Appendix A-Attachment O**). The project will require importation of approximately 6 megawatts of electrical supply which is larger than is currently available locally. This will require construction of approximately 14.6 miles of new transmission line along Route 11 and the existing private gravel access road.

The project occupies a largely upland area removed from adjacent lakes and ponds and would not impact water quality of such water bodies or affect related fish and wildlife resources during the active period of the project. Plants and natural communities that are located outside of the proposed area of land disturbance would not be impacted. If rare and exemplary botanical features are identified on-site in subsequent surveys impacts will be avoided to the extent possible, and such plant communities would be relocated or protected pending concurrence with the MNAP. The planned grading of the TMF will limit ridgeline impacts which will help mitigate scenic impacts. The presence of cultural resources, including historic logging camps and related structures are not known to be present on the site. A Phase 0 archeological survey will be conducted in the spring of 2020 to assess the presence of cultural features. The Phase 0 survey will also evaluate the potential for prehistoric archeological resources. A known prehistoric archeological site is in close proximity to the east end of Pickett

Pond. Since the extent of the site is limited in size, other mountain areas and other geologic resources would not be impacted.

The site is not in a remote area of the jurisdiction, being located approximately five miles from state highway SR-11 and is accessed by well developed, existing gravel roads on private property. The planned development of the site will occur along a portion of a ridgeline and at project completion the final profile of the ridgeline would be elevated approximately 10 feet from existing ground surface and parallel to the original profile. This slight alteration should not diminish overall character of the area and regrowth of vegetation common to the area is expected as part of the reclamation.

In addition to these goals the project also meets many elements of the CLUP's policies including the following items:

- Policy 1 Encourage other resource-based industries and enterprises which further the jurisdiction's tradition of multiple use without diminishing its principal values.
- Policy 4 Allow new technologies (sub-aerial tailings) which will provide the LUPC the opportunity to evaluate the technology and its effectiveness.

Site Review

A goal of the CLUP is to assure that development fits harmoniously into the existing communities, neighborhoods and the natural environment.

The nature of the proposed project, its location and the proposed reclamation, as discussed in following sections, would ensure a harmonious relationship to the natural environment and local communities.

In addition, the project will meet established noise and lighting requirements of the CLUP as specified under section 10.25F.

Noise. The maximum permissible continuous sound pressure level allowable in a D-PD district is determined by the LUPC. Specified maximum sound levels range from 70 dB(A) in daytime (7 AM to 7 PM) to 65 dB(A) at night (7 PM to 7 AM) for certain subdistricts (commercial-industrial for example) to 55 dB(A) and 45 dB(A) for all unspecified subdistricts. Construction activities conducted between 7 AM and 7 PM are exempt from 10.25F. Other exempt activities include but are not limited to safety and warning signals, traffic on roadways, etc.

During the mine construction phase, noise will be created from construction equipment operating above ground, including drilling and minor blasting. Once the underground development has progressed, blasting will be occurring below ground and will no longer be a source of noise above ground.

During mine operations, the noise source with the largest pressure levels will be the fans used to ventilate the underground workings. Rock crushing is also a source of noise but less so than the ventilation fans. Once crushed, the final milling of the mineralized rock is conducted within a building and is not a large source of noise. The ventilation fans will typically produce 110 decibels (dB) and can be dampened up to 20% to operate at approximately 88 dB.

Reduction in pressure levels with increasing distance from a source is described by an inverse square law. The most conservative assumption would be a free field where sound is traveling over an unobstructed plane with no barriers between the source and receptor. Barriers that would exist at the site include buildings and tree lines. Sound is also dampened (absorbed) by the ground and vegetation.

Assuming a free field condition (unobstructed path) reduction in sound would be described as:

$$\begin{aligned}dL &= Lp2 - Lp1 \\ &= 10 \log (R2 / R1)^2 \\ &= 20 \log (R2 / R1)\end{aligned}$$

where

dL = difference in sound pressure level (dB)

Lp1 = sound pressure level at location 1 (dB)

Lp2 = sound pressure level at location 2 (dB)

R1 = distance from source to location 1 (ft, m)

R2 = distance from source to location 2 (ft, m)

A "free field" is defined as a flat surface without obstructions.

Assume L1 is 1 foot from the source at measured decibels

The nearest property boundary from the preliminary location of the ventilation fans is approximately 3,000 feet to the south, near Fire Road C. The nearest residence is approximately 8,850 feet to the northeast, on the south side of Pleasant Lake. Applying this equation yields the following reduction with distance from the source.

							Nearest Property Boundary			Nearest Residence
Source dB	110	110	110	110	110	110	110	110	110	110
L1 (ft)	1	1	1	1	1	1	1	1	1	1
L2 (ft)	1	10	100	500	1000	2000	3000	4000	5000	8550
dl=	0.0	20.0	40.0	54.0	60.0	66.0	69.5	72.0	74.0	78.6
Receptor dB	110.0	90.0	70.0	56.0	50.0	44.0	40.5	38.0	36.0	31.4
With 20% Dampening	20%									
Receptor dB	88.0	68.0	48.0	34.0	28.0	22.0	18.5	16.0	14.0	9.4

As noise sources can be sometimes unpredictable, confirmatory work for noise in the surrounding area are scheduled to be completed for the next stage of study and permitting. This study will be performed through several avenues and will justify the table above. This study will include a review of similar projects sites related to noise generation and carry as well as a desktop model of noise generation and projection using dampening impacts from trees and hills, etc. The proposed noise prediction model will be developed using the Cadna/A software published by DataKustik GmbH or equivalent software configured to implement ISO 9613-2 environmental noise propagation algorithms.

Calculated Sound Pressure Levels from Source (unobstructed path)

1. Ventilation Fans - Without dampening the underground ventilation fans, the expected sound levels at the property boundary and nearest residence are below sound levels for "all unspecified subdistricts". Wolfden intends to use enclosures and other means to dampen the source noise levels. Given the presence of other dampening factors (buildings, vegetation and tree lines), a conservative estimate of noise levels at the property line and the nearest seasonal residence (1.1 miles) indicates that expected noise levels will be very low at approximately 31.4 dB. It will be considerably lower at 3 miles, perhaps even undiscernible unless there is a wind from that direction. A value of 10 dB is commonly cited as the noise level of normal breathing.
2. Blasting - Involves the drilling holes into rock then charging or loading the holes with a specified amount of explosives that are numbered according to a firing sequence. When detonated, the firing sequence controls which holes "fire" or detonate in order to distribute the energy throughout the rock in a balanced controlled manner. The overall blasting process during the construction and development phase at Pickett Mountain is as follows:
 - Excavation of overburden and loose rocks from the footprint of the portal.

- Drill a blasting pattern (Typically 3' x 3' square pattern) with 4.5" drill holes for desired blast. Typically, larger excavations such as portal can take 2 – 3 blasts to complete in a very controlled manner.
- Clean all of the holes and measure for accuracy.
- Load explosives and detonators into the holes at design levels and quantities.
- Clear property with sign outs and guards.
- Sound appropriate warnings and alarms
- Detonate the blast.
- Check over the blast to ensure proper detonation and fracturing
- Excavate fractured rock to waste rock storage pad.

It is worth noting that open-air blasting to commence the access (portal) for the underground workings is only expected to last two or three weeks. Once underground, (after two to three more weeks) sound from the underground blasting will no longer be heard at the property boundary.

Lighting. Within the plant operations area, all above ground exterior lights greater than 60 watts or incandescent lights greater than 160 watts will be housed in downward facing full cut-off fixtures as specified in CLUP Standards under 10.25F. Other sources of light will include vehicle headlights and building interior lighting.

In addition, the project would meet other CLUP policies including the following items:

Policy 1(a) A buffer would be established around the proposed area of rezoning and would be far removed from other land use activities. At closure of the project the ridgeline where the TMF is located would be elevated approximately 10 feet above its current topographic profile. Once reclaimed and vegetated this will be a minimal change to the natural appearance of the landforms at the site.

Policy 1(b) The project will provide for parking at the mine operations site and the transportation routes, described in **Appendix J** would not adversely affect traffic circulation.

Policy 1(c) The only signage visible to the public associated with the project would be for transportation safety at the location where vehicles egress and exit from SR-11 to private roads.

Policy 2 The project final design will be permitted through the DEP and efforts will be made to minimize impacts to the principal values of the jurisdiction including avoidance and mitigation of impacts to protected natural resources.

Infrastructure

The project meets the CLUP's goal of ensuring that infrastructure improvements are well planned and do not have an adverse impact on the jurisdiction's principal values. These improvements will include upgrading existing gravel access roads located on private lands and the intersection of the private road with State Highway 11 for public safety purposes. The project will also, separate from this Petition, establish a new power transmission service line to supply additional needed electrical power for the project.

The power transmission route has been discussed with Emera Maine and would run from their substation located on Route 11, located approximately 0.6 miles south of downtown Patten, Maine. The transmission line would run north and northeast along Route 11 for approximately 9.5 miles then follow the same gravel access road proposed for the mine for approximately 5.1 miles. The access road upgrades to be considered in the design for the permit application submittal will be developed concurrently with the transmission line design.

The project also meets other CLUP policies including the following items:

Policy 1 To consider the capacity of existing infrastructure and services to accommodate proposed development. It is Wolfden's objective that primary workforce be employed locally from residents. This will require training for that work force since many unique skills are required of miners working underground. The mine will employ approximately 60 workers, composed of 30 workers per shift with two shifts per day. With a local workforce, the imposition on existing infrastructure and services (housing, schools, roads, medical facilities, fire, police, solid waste, and municipal) is minimized since this population is already using these services. An analysis of the capacity of these services in the local communities is provided in **Appendix A- Attachment O**.

Policy 2 The project will not require construction or establishment of any new public roads that would degrade the natural character of remote areas.

Policy 3 The new utility lines, principally electric power transmission, will be located or co-located within or adjacent to existing utility or public road rights of way to the extent practicable. Where new utilities cannot be established along existing utility corridors, they will be designed to minimize visual and physical impacts that would degrade natural values of the area. The areas contemplated would not be considered remote and would be near or adjacent to existing private roads.

Policy 5 Although not highly visible, infrastructure at the Site (buildings, water collection and treatment ponds, soil stockpile areas or pens) would be decommissioned, dismantled and removed at the end of the project as part site reclamation. The land surface once occupied by these buildings would be regraded and returned as close to original grades as possible.

Development Rate, Density and Type

The project will be constructed in accordance with plans approved by the DEP with input from LUPC. Since the project will be constructed in one phase the density and type of structures will be known and with input from the LUPC, will be consistent with the jurisdiction's principal values and policies concerning development.

Affordable Housing

The project does not involve construction of housing but as described in **Appendix A – Attachment O** the local employment anticipated by the project will provide employee wages sufficient for those employees to afford available housing in the local market.

Land Conservation

The project will support the long-term conservation of select areas of working forests in the project area as well as protecting high-value natural resources such as surface water bodies, streams, wetlands, vernal pools, flora and fauna. The manner in which these natural resources shall be protected is discussed in **Section B (3)(d)**. Wolfden will continue to work with local logging companies to manage and allow harvesting of forest resources on its property.

The project would meet the CLUP's land conservation policy:

Policy 1 Wolfden has developed cooperative working relationships with local landowners and local timber companies, to ensure continued use of its working forest resources and help maintain public access on private roads to access lakes within its property.

Natural and Cultural Resources and Policies

Air and Climate Resources

The project will not adversely affect air quality since dust will be controlled and processes that utilize chemicals that would be considered air pollutants are not used. On-site emission

sources will be limited to motorized heavy machinery and vehicles for above ground and underground mining related activities.

Rock crushing operations are a potential source of dust, but adequate provisions will be provided for dust management and control. Dust suppression is an important operational safety concern below ground in the mine. Blasted rock is mucked out wet to eliminate dust underground. Rock placed into the crusher is therefore wet and that moisture greatly reduces dust during crushing operations. If dust becomes an issue, dust collection equipment can and would be installed above the crusher and removed via a bag house filter.

Cultural, Architectural and Historical Resources

The Maine Historic Preservation Commission (MHPC) has been consulted and due to the presence of archaeological site 147.001 (MHPC Archeological Survey report 2719- E.C. Jordan 1984) at the headwaters of Pickett Mountain Pond a Phase 0 Archeological survey will be conducted in Spring 2020 as discussed in **Exhibit M**. The scope for the Phase 0 survey has been developed in consultation with the MHPC and is presented the Exhibit M. By working cooperatively with MHPC, the project will meet the CLUP's goal of protecting archaeological and historical resources of cultural significance.

These activities will meet the following CLUP policies:

- Policy 1 Identify and protect unique, rare and representative cultural resources to preserve their educational, scientific and social values.
- Policy 2. Collaborate with other agencies in efforts aimed at the protection of cultural resources.
- Policy 3. Complete an archaeological survey as part of this development proposal.

Energy

The project will further the CLUP's energy goals through designs that favor and incorporate energy efficiency and utilization of technologies such as heat pumps to assist heating and cooling at above ground facilities, when possible. The project will require a new transmission line to provide the needed energy requirements. The project will of course require emergency back-up power in the form of generators, but these would be used only when needed. Any new energy generation will be used exclusively for the project.

Forest Resources

As discussed in **Section B (3)(d)** and **Appendix A-Attachment Q** the project footprint will require only 57 acres of actual development. Only the area occupied by the dry TMF (approximately 42 acres) will be excluded as a future forest resource for lumber and fiber production. Upon final reclamation, all other areas (approximately 15 acres excluding roads) will be returned to current conditions. The balance of Wolfden's property will be accessible for timber harvest, thus meeting the CLUP's goal to conserve, protect and enhance the forest.

The specific policies items that are supported by the proposed project include:

- Policy 1 Encourage active forest management.
- Policy 2 Support uses that are compatible with continued timber and wood fiber production, as well as biodiversity.
- Policy 3 Protect areas identified as environmentally sensitive.
- Policy 5 Support efforts by landowners to manage vehicular access to private roads when necessary to reduce land use conflicts.
- Policy 9. Encourage the use of Maine's best management practices for forestry on its land.

Geologic Resources

The LUPC has established goals of conserving soil and geologic resources by controlling erosion and protecting areas of significance. The CLUP's goal with respect to mineral resources is to allow environmentally responsible exploration and mining of metallic and non-metallic mineral resources where there are not overriding, conflicting public values which require protection.

The Pickett Mountain Site is under extensive exploration for mineral resources and there are no identified important natural geological formations, or geologic hazards such as seismically active faults, high elevations or steep slopes subject to instability or erosion. Based on visual inspection the area proposed for the project features nearly level to gentle slopes with high percentage of vegetative cover and organic matter, and moderate to deeply rooted vegetation in glacially derived soils with a shallow water table. Fragile soils, most subject to erosion, are not known to be present.

As discussed in **Attachment J**, site access is by existing gravel roads that are currently used for logging operations and which are in good condition. Any modification or improvement of these roads will be completed in accordance with a sedimentation and erosion control plan that will be developed during the mine design and permitting phase under DEP rules. Based on current information, soil types are suitable for proposed development, though detailed high intensity soil mapping and geotechnical investigations will be required prior to final design of buildings and the sub-aerial TMF. Any modification of roads or the one existing stream

crossing (outlet from Pickett Mountain Pond) would be completed in conformance with Land Use Standards enumerated in Chapter 10.27D.

The proposed metallic mineral mining would occur only within the area rezoned for planned development and would not adversely impact competing uses and public values. The proposed facility would minimize water, air, land, noise and visual pollution through operations described in **Section B (3)(d)** and **Appendix A-Attachment Q**. These operations will not affect public safety and health, and will avoid undue adverse impacts on fisheries, wildlife, botanical, natural, historic, archaeological, socioeconomic and other values. The proposed mining operation provides distinct economic and social benefits and would not pose undue burden on existing services as described in **Attachments M, N and O**.

The project will be subject to a long-term post closure monitoring and maintenance program subject to the requirements of DEP Chapter 200 rules and including reclamation of the mine site to restore natural values and protect public health and safety and allow beneficial reuse of the majority of the property.

Specifically, the project would support the following policy items pertaining mineral resources:

- Policy 6 Exploration for mineral resources with minimal disturbance to natural and cultural resources.
- Policy 9. Permit a major metallic mining development in an area zoned for planned development, which broadly considers impacts and benefits, competing uses and public values.
- Policy 10. Regulate the mining operation to minimize water, air, land, noise and visual pollution, to ensure public safety and health, and to avoid undue adverse impacts on fisheries, wildlife, botanical, natural, historic, archaeological, socioeconomic and other values.
- Policy 11. Complete effective monitoring and reclamation of the mining site to protect public health and safety and to promote beneficial reuse where feasible.

Plant and Animal Habitat Resources

The proposed mining activity is not within areas known to contain unique, threatened or endangered plant or wildlife resources and will be able to meet the CLUP goals and policies to preserve and protect aesthetic, ecological, cultural and economic values of plant and wildlife resources. The area proposed for development is primarily upland forested habitat, co-dominated by deciduous trees (i.e., beech, birch, and red maple trees) and coniferous trees (i.e., spruce, fir, cedar and hemlock). The area has been logged in the past and is currently in vegetative re-growth. The proposed mining activities are within an area that is actively logged and would have a lesser short- and long-term effect on habitats than current logging practices.

Since the area is relatively small compared to the surrounding woodland habitat it should not have a negative effect on connectivity of habitats in the area. Wolfden has received preliminary correspondence from the Maine Department of Inland Fisheries and Wildlife concerning potential habitats supporting Rare, Threatened or Endangered (RTE) species. Based on work completed to date habitat supporting rare, threatened, or endangered species are not known to be present in the area. Also, unique habitats such as deer wintering areas, great blue heron nesting sites or habitat for bats, were not observed. Wolfden plans on conducting delineation of wetlands and vernal pools in spring 2020 will at that time conduct a final assessment for potential RTE species.

Wolfden has also met with staff of the MNAP. There is one area, a fen, between Pleasant and Mud Lakes that MNAP has identified as a priority site for a botanical survey. This area is far removed from the proposed site and would not be adversely affected by proposed activities and is outside the area proposed to be re-zoned. The MANP environmental review for the project is presented in Exhibit N. Based on current information RTE plants are unlikely to be present in the upland areas proposed for rezoning. Wolfden plans on conducting additional evaluation in spring 2020 in consultation with the MNAP and if plant resources requiring protection are identified, Wolfden will make appropriate accommodations to avoid impacts where possible.

Specifically, the policy items that would be met by the project include:

- Policy 1. Coordinating with and supporting agencies in the identification and protection of a variety of high-value wildlife habitats, including but not limited to: habitat for rare, threatened or endangered species; rare or exemplary natural community and ecosystem types; native salmonid fish species; riparian areas; deer wintering areas; seabird nesting islands; waterfowl and wading bird habitats; and significant vernal pools.
- Policy 2. Conduct land use activities that are protective of sensitive habitats, including but not limited to habitats for fish spawning, nursery, feeding and other life requirements for fish species.
- Policy 3. Develop the site in a manner that retains connectivity of habitats and minimize road mortality of wildlife by promoting road building practices that facilitate wildlife movement and by directing development to appropriate areas.
- Policy 5. Protect wildlife habitat in a fashion that is balanced and reasonably considers the management needs and economic constraints of project owner (landowner).
- Policy 7. Encouraging sustainable land use (forestry management) over much of the Wolfden parcel which will contribute to maintaining a large tract of undeveloped land, with ecological significance that is important locally to healthy plant and animal populations.

Recreational Resources

See Section 19 of this Petition for a discussion of recreational resources.

The specific recreational resource policies of the CLUP that would be met or supported by the proposed project include:

Policy 6. Cooperative efforts that assure continued public access across any rights of way on Wolfden's property (excepting reasonable restrictions on certain roads that lead to the mine site, if needed for public safety).

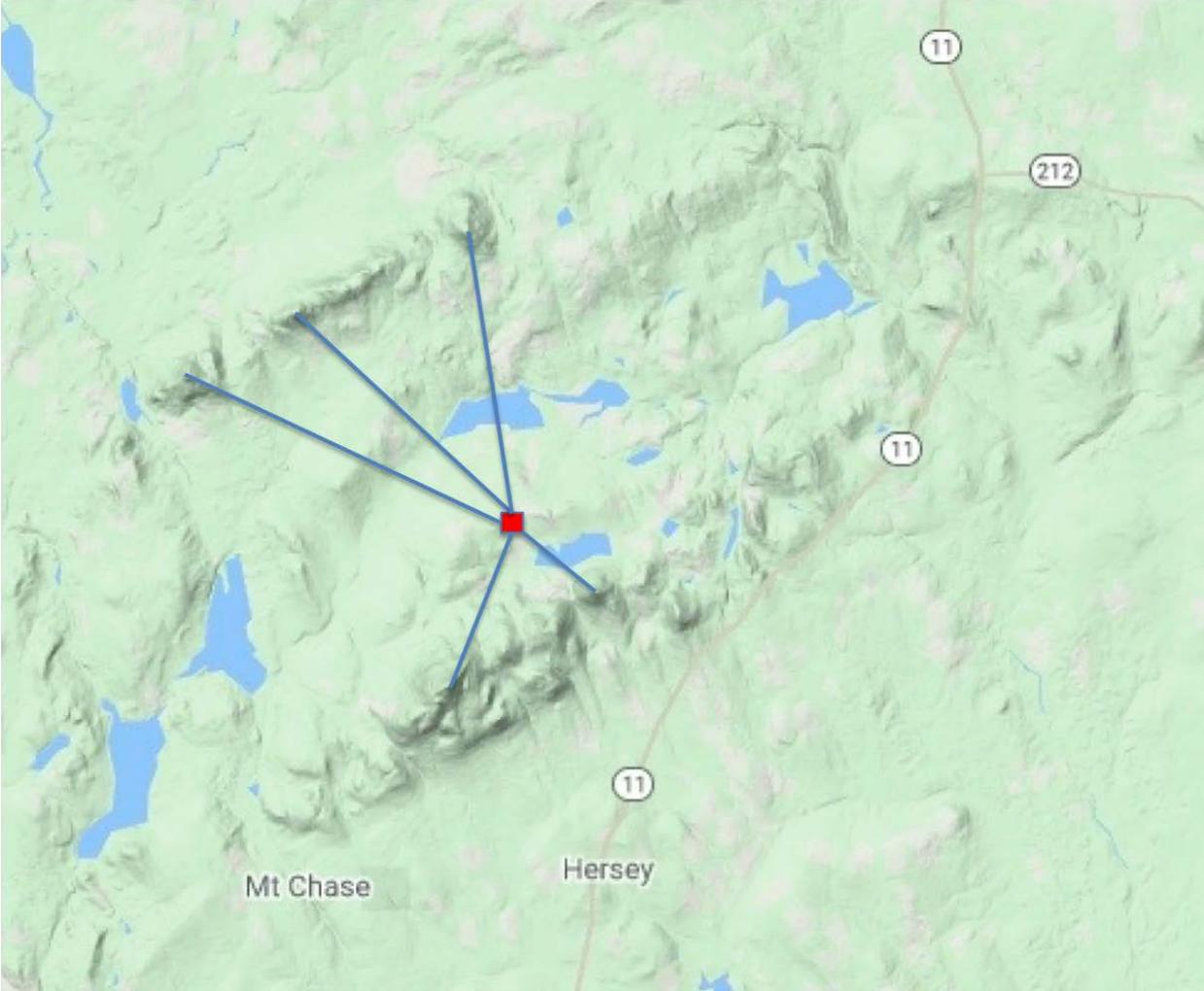
Policy 7. Efforts on the part of Wolfden that ensure continued public access to public waters .

Policy 8. Responsible use of Wolfden's property.

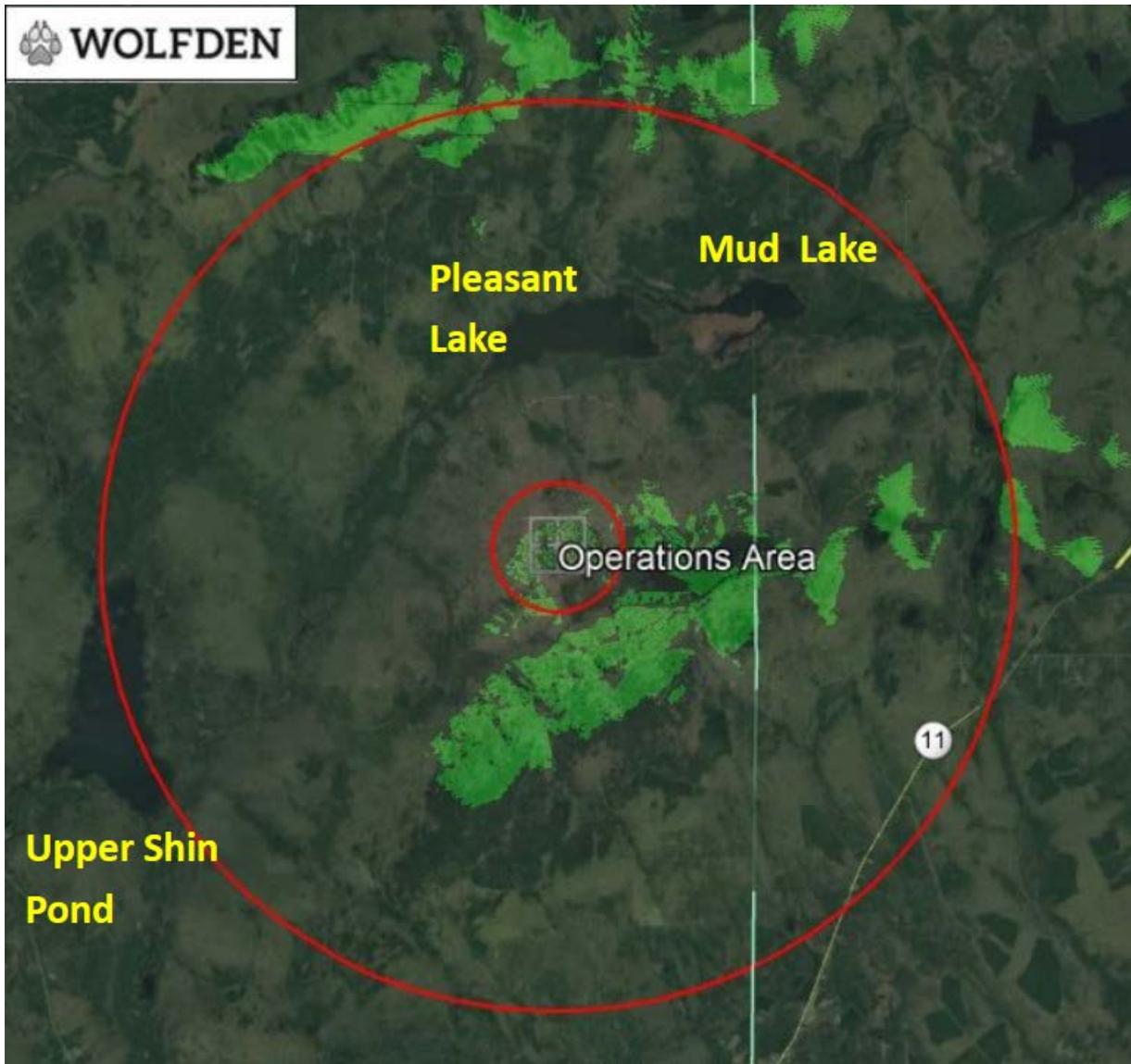
Scenic Resources

The topography surrounding the site provides the area proposed for rezoning a high degree of visual screening from public roads (Route 11 and Route 159) and the established high use recreation areas located to the west of the site. The area proposed for rezoning has a prominent ridgetop immediately west of the areas where proposed buildings would be constructed screening those buildings from view from that direction. A ring of higher elevation peaks is present south of Picket Mountain Pond and north and west of Pleasant Lake. While an unobstructed line of site exists from Pickett Mountain Pond, Pleasant Lake, Mud Lake and Grass Pond, the visibility of the site would likely be obscured by tree lines that would be left in place around the developed areas. The most visible portion of the site would be the northern and northeastern corners of the dry stacked tailings area.

The landforms surrounding the site are complex rolling hills and moderate elevation mountain peaks with mixed forests, that would be more tolerant to visual impacts from the site. Based on the topography, landforms and forested nature of the area, the proposed site is a reasonably harmonious fit with the surrounding environment and generally meets the CLUP's goal of protecting the high-value scenic resources of the surrounding area.



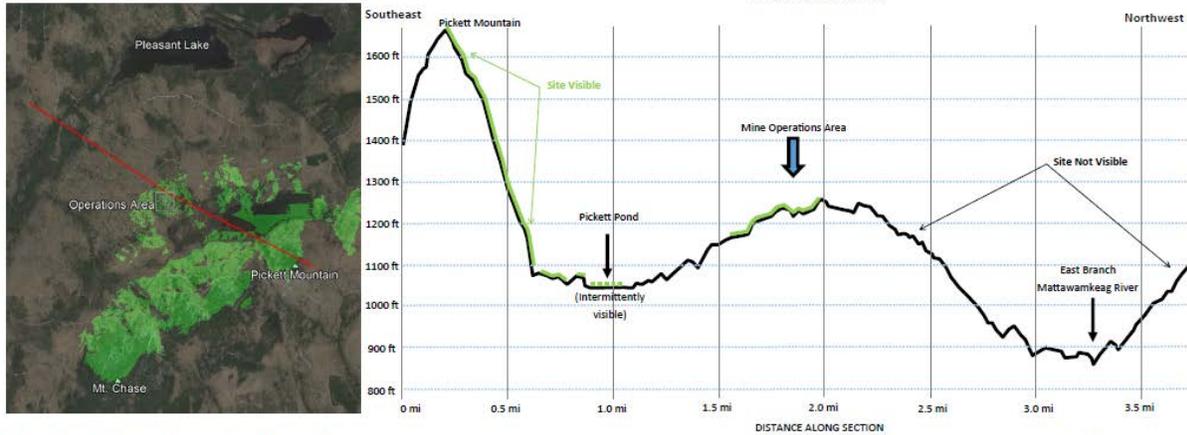
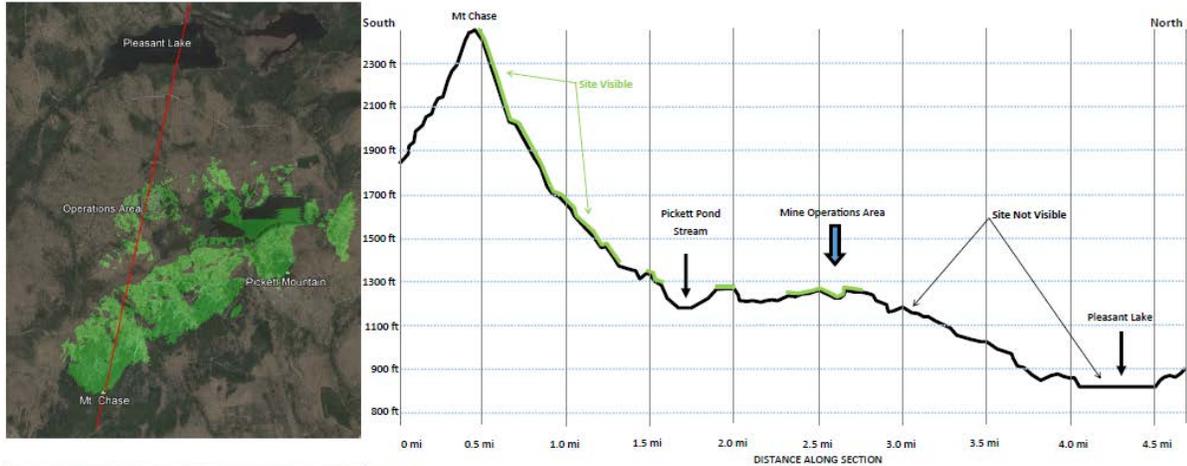
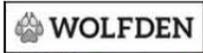
Peaks Surrounding Pickett Mountain Project Site



Three Mile Radius Analysis

The inner circle of the image above represents a 0.5 mile radius which encompasses the proposed site boundary. The outer circle is a 3.5 mile radius to show a net 3 mile radius from the boundary of the property. The view height is 10 meters above ground level (average tree height) therefore the highlighted areas (and those highlighted on surrounding peaks map) are potential areas with a line of site to the property. It should be noted, that to obtain a line of site to the property from the surrounding areas, one has to be above the tree line to have an unobstructed view. The property will not be visible from anywhere along Route 11 nor from any State park or State managed trail. There are no official trails within the proposed area, however, within a 3.0 mile radius of the site boundary, there are several ATV, snowmobile and hiking trails as shown in attachment L. Hiking trails are along the south face of the mountain belt and a snowmobile/ATV trail travels along the north face of the mountain belt. Based on the sections

below, trails that are travelled along the north face of Mount Chase are likely to have visual line of site to the property if standing on a cleared area. The tallest building on the property is estimated at 60 feet tall and would rise above the tree line and therefore would be the visible point.



Viewshed of Operations Area (Green)

Topographic Profiles Across Site

Viewshed Sections

Water Resources

Appendix A Section B(3)(d) provides a discussion of Potential Impacts to Existing Uses and Natural Resources and provides an overview of mine water management, involving the collection and treatment of precipitation that contacts mined rock materials and tailings. The project description in Section 4 of this Petition describes the operations and reclamation phases of the project. Collectively these environmentally responsible mine-management practices would prevent degradation or impacts to groundwater and surface water and protect water quality in adjacent aquatic habitats including wetlands, vernal pools, streams, lakes and ponds.

These actions would meet the CLUP's goal of protecting the quality and quantity of surface waters and groundwater.

The project will have no direct impact on shorelands since the project location is removed from such features.

The specific CLUP policies that will be advanced through the planned development and regulatory framework include the following:

- Policy 1 Regulate uses of land and water in order to prevent degradation of the jurisdiction's excellent water quality and undue harm to aquatic habitat.
- Policy 2 Protect the recreational and aesthetic values associated with water resources.
- Policy 4 Conserve and protect lakes, ponds, rivers, streams and their shorelands, which provide significant public recreational opportunities.
- Policy 8 Control land uses on identified aquifers and their recharge areas in order to prevent adverse effects on water quality or quantity
- Policy 10 Protect ground water quality throughout the jurisdiction through proper controls on potentially polluting activities.
- Policy 12 Conserve the quality and quantity of public and certain private water supplies by managing land use in source protection areas.

Wetland Resources

See Appendix A Section B(3)(d) of this Petition for a discussion of wetland resources.

The specific wetlands resource policies of the CLUP that would be met or supported by the proposed project include:

- Policy 1 Support the nationwide goal of no net loss of wetland functions and values by avoidance or minimization of impacts.
- Policy 2 Provide compensation to offset loss or degradation of wetland functions, while recognizing that such losses may not be avoidable in every instance.
- Policy 3 Plan development to avoid alteration of wetland areas. If avoidance is not feasible, ensure that development minimizes alteration. If loss of wetland functions is unavoidable, require actions to restore, reduce or gradually eliminate lost or degraded wetland functions. If necessary, require compensation for lost or degraded wetland functions through protection of wetlands of equal or greater value.

