Timber Shores RV Resort Environmental Review Prepared by Charles Wolverton: October 1, 2020 Presented to Leelanau Township Planning Commission

NM Investment Company, LLC (the "Applicant") submitted a Special Land Use & Site Plan Review Application on March 20, 2020 for the proposed Timber Shores RV Resort & Campground. The Application was responsive to the various environmental concerns in the Zoning Ordinance. The following is a consolidated and expanded review of these responses and the Zoning Ordinance requirements of the Planning Commission.

Section 15.6 of the Leelanau Township Zoning Ordinance (the Ordinance) requires the Planning Commission to perform an Environmental Review before the approval of a Special Land Use. The Objective of the Environmental Review and assessment as stated in Section 15.6 of the Ordinance is: *"to determine the reasonably foreseeable impacts of a development proposal for the consideration of the Planning Commission and the public, and to encourage the development of those projects in ways that mitigate undesirable impacts and thereby protect and enhance the environmental quality of the project area by conserving its natural resources."*

The standards imposed on the Planning Commission for the Environmental Review in Section 15.6 of the Ordinance include, but are not limited to, the following:

- i. Whether the use proposed may incorporate any potentially harmful chemicals or other suspect products;
- Whether the building site is known or is suspected to host any endangered, threatened, or candidate species of animal, fowl, fish, or vegetation;
- Whether the site is known to be the location of any burial grounds or settlement site, or is otherwise known to be of particular historic, cultural, or archaeological significance, and ;
- iv. Whether there are possible mitigations which might reduce environmental impact. Such mitigations shall be required.

The applicant has engaged Charles L. Wolverton to review the environmental impact of the proposed Timber Shores project and provide advice regarding the site design for the purpose of meeting requirements of the Ordinance and the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as Amended (NREPA), administered by the Department of Environment, Great Lakes and Energy (EGLE).

Mr. Wolverton is a natural resources consultant (Wolverton Consulting, LLC) and has over 45 years of experience in natural resources analysis with an emphasis on wetlands. Mr. Wolverton was employed by the Michigan Department of Natural Resources (MDNR) for 16 years in the lakes, streams, wetlands, and Great Lakes regulatory programs, including Project Leader for the National Wetlands Inventory in Michigan. Following early retirement from MDNR in 1990 Mr. Wolverton has worked in private sector natural resources consulting for the past 30 years. Mr. Wolverton during his career prior to his semi-retirement was a Certified Professional Wetland Scientist by the Society of Wetland Scientists and a Certified Senior Ecologist by the Ecological Society of America. The environmental impact review for the proposed Timber Shores project performed by Mr. Wolverton on behalf of NM Investment Company LLC is provided in the following document.

Introduction

The proposed Timber Shores project ("the Project") is located on land that was once farmed, logged, and developed into the former Timber Shores Resort, which operated from the mid 1960's thru the late 1970's with approximately 700 RV & camping sites. And was the subject of a number of development plans in the past 20-30 years. A plan to offer beachfront land to Leelanau Township for the purpose of creating a public recreation area with funding from the Michigan Natural Resources Land Trust Fund was presented to the Township but it eventually was not approved.

The present Project has come about due, in part, to the resurgence of camping and RV ownership that has made the Project very viable. The Timber Shores property is very well-suited for use as a RV Resort and campground due to the relatively flat terrain and frontage on Grand Traverse Bay. Challenges are present, primarily with the presence of wetlands that make planning and design of the roads, campsites, and recreation infrastructure somewhat difficult. The owner of the property, NM Investment Company, LLC, has always been committed to making the best use of the property in a way that does not cause unacceptable environmental impacts.

The Project site contains some "Environmentally Sensitive Areas" as defined in the Section 15.2 of the Ordinance, specifically wetlands, inland lakes and streams areas, and Lake Michigan shoreland. The following sections describe the "Environmentally Sensitive Areas and other natural resources on the Project site and provide conclusions regarding the probable environmental impact on each natural resource type.

Wetlands

The environmental impact of most concern is the unavoidable impact to 0.90-acre of wetland. A permit from EGLE under the authority of NREPA will be required before any wetland impacts may commence. However, impacts to wetlands must also be considered by the Planning Commission in its Environmental Review. It is important to note that the proposed site plan has taken every effort to avoid impacts to wetlands but some wetland impacts are unavoidable, specifically impacts to wetlands associated with the proposed recreation pond and with roads. Impacts to wetlands from the construction of campsites have been avoided.

Wetlands comprise 10.1 acres within the Project site, which is only 4.7 percent of the total land area within the Project site (213.6 acres).

Some of the wetlands on this property have been impacted by the original Timber Shores Campground and past logging has altered the habitat on this property. There is no "old growth" timber on the Project site, only second growth forest cover that has grown since logging took place on the property at various times throughout its history. The wetlands are primarily fed by near-surface groundwater and most do not contain surface water except for brief periods in early spring in some areas. Wildlife habitat, while present, is not exemplary or unique and is primarily utilized by white-tailed deer, raccoons, skunks, small rodents, red squirrels, chipmunks, mink (along streams and the lakeshore), and birds such as raptors (hawks and owls inland, bald eagles along the lakeshore), black-capped chickadees, blue jays, American robins, and other species of songbirds, some of which only migrate through the area in the spring and fall migrations.

The proposed recreation pond is 1.83 acres in size and is an integral component of the waterfront recreation area. The floating swimming activity pods that were initially considered to be in Grand Traverse Bay have been relocated to the proposed recreation pond. This was proposed in response to area landowner concerns, safety considerations, and length of season issues associated with water temperatures in Grand Traverse Bay. The proposed recreation pond unavoidably impacts 0.45-acre of wetland. The proposed pond cannot be relocated south due to the desire to maintain the vegetated buffer from the private properties south of the Timber Shores property. Relocating the pond west moves it further from the recreation center which would still impact wetlands and poses management issues with the pond removed from the beachfront recreation area. Relocating the pond to the north also involves wetland impacts and significantly disrupts the proposed main access road and campsite layout.

The proposed road layout is designed for efficient and safe travel by guests of the resort in recreation vehicles, trucks, and cars as well as golf carts and bicycles. In many areas the road layout is also a function of avoiding wetlands and to provide access to campsites that avoid wetland impacts. The geometry of the road curves and intersections also affects the road locations and is a critical component considering the variety of vehicles that will travel on these roads. The 0.45-acre of wetland impact associated with the proposed roads is unavoidable and wetland impacts from roads have been avoided to the greatest practicable extent.

NREPA requires that unavoidable impacts to wetlands must be mitigated at a ratio of at least 1.5:1 for emergent wetland impacts and 2:1 for forested wetland impacts. The proposed wetland mitigation for the Timber Shores project is *restoration* of 3.18 acres of wetland that was filled during the construction of the original Timber Shores Campground in the 1960s. As a result, the proposed Timber Shores RV Resort and Campground project will result in *a net gain of 2.28 acres of wetland for a replacement ratio of 3.5:1*, which well exceeds the 2:1 ratio required by NREPA. Thus, wetland area will <u>increase</u> as a result of the Project by 23 percent.

Conclusion: Wetlands have been avoided with the proposed campground design to the greatest practicable extent and the 0.90-acre of wetland impact will be mitigated by restoration of previously filled wetlands resulting in a net gain of 2.28 acres of wetland on the Timber Shores property. Restoration of wetlands is preferred by EGLE over creation of new wetlands from uplands (i.e. non wetlands) due to the fact that restoration in this case will involve removal of the fill placed in wetlands in the 1960s down to the grade of the adjacent remaining wetlands. The wetland hydrologic condition, which is the primary factor in determining the presence of wetlands, remains under the old fill and ensures that the restored wetland will be successful as mitigation for other unavoidable impacts to wetlands. Native wetland plant communities will be established in the restored wetlands.

The proposed wetland mitigation at Timber Shores will enlarge the existing wetlands in the eight sites where wetland restoration is proposed. It is widely accepted by wetland scientists that larger wetlands have greater intrinsic ecological value than smaller wetlands. As previously stated, wetland area on the Project site will increase by 23 percent as a result of the Project.

It is also important to note that the First Amended Ennis Creek Village Conservation Easement Agreement granted by NM Investment Company LLC to Leelanau Township on 16 May 2007 not only permanently protects Ennis Creek from its headwaters to Camp Haven Road, but also preserves wetlands within the Ennis Creek Conservation Easement corridor as well as 53.44 acres of high quality wetland west of M-22 on property owned by NM at the time the easement was granted, which includes the headwaters of Ennis Creek. The 53.44 acres of wetland contains highly diverse wetlands and includes old-growth Northern white cedar trees.

As a result, the total of the wetland mitigation package described serves to increase wetland resources and protect these wetlands in perpetuity.

Inland Lakes and Stream Areas

There are no inland lakes on the Project site. Two streams are present; Ennis Creek and an unnamed drainage ditch. There are no direct impacts to Ennis Creek that will result from the proposed project. The only crossing of Ennis Creek will be for the proposed emergency access road that is located on an existing 20-foot wide one lane road that crosses Ennis Creek as shown on the revised site plan.

The main access road to the Project will cross the drainage ditch, which qualifies as a "stream" under Part 301 of NREPA (Inland Lakes and Streams), and may require the installation of a new culvert if the existing culvert is determined to be of inadequate length for the proposed entry road. Once final engineering is completed, the status of the existing road crossing over the drainage ditch will be determined and if a new crossing is necessary, it will be included in the Application for Permit to be submitted to EGLE for the Project. It is expected that the culvert replacement would qualify as a Minor Project under Part 301 of NREPA.

The drainage ditch has no direct permanent connection to Ennis Creek. The drainage ditch, when water flows in it, flows southerly and easterly and outlets to Grand Traverse Bay near the south boundary of the Project site.

The 2007 Conservation Easement includes the land 50 feet on both sides of Ennis Creek (100 feet total width) from M-22 to Camp Haven Road and serves to protect Ennis Creek from develop perturbations on the property in perpetuity.

Conclusion: Impacts to the two streams located on the Timber Shores property will be very minimal to non-existent. Nonetheless, mitigation for stream impacts is more than adequately compensated by the Conservation Easement that was placed for the purpose of buffering Ennis Creek from development, ensuring that development will not negatively impact Ennis Creek.

Lake Michigan Shorelands

The initial plan iterations for the Project had floating recreation pods some distance out in Grand Traverse Bay ("the Bay"). Upon hearing comments from local residents and others regarding this concept it was decided to abandon that plan and instead construct a 1.83-acre pond on the property just west of the beachfront. In fact, there is no construction proposed in the Bay except for the removal of eight (8) steel pilings from the small boat basin that were once part of the docks at the former Timber Shores Resort which will be removed for public safety reasons.

The Project proposes to restore the beach located from the boat basin on the north to just south of the rock jetty on the south, a distance of approximately 500 feet. Presently the beach is sand in the wave-wash zone and landward of that zone the beach is vegetated by various species of shrubs, primarily willows and balsam poplar, and herbaceous vegetation like grasses and goldenrods. The beach restoration would entail removing the vegetation, sifting the sand to remove woody debris, plant parts and stones and possibly augmenting the beach with clean sand from another source. All work on the beach restoration would take place above the water line and above the Ordinary High Water Mark as defined by State and Federal laws and would not involve work in any wetlands. In other words, the proposed beach restoration is not regulated by State or Federal statutes.

Conclusion: Beaches are very common on the Great Lakes and the restored beach will provide an important recreation amenity for the Project. The removal of the vegetation and restoration of a clean beach is not a regulated activity as proposed and will have minimal impact to wildlife and other environmental impacts would be almost non-existent. In regard to aesthetics, the beach will be visually appealing from the Bay and from neighboring properties and in conformance with other beaches on the Bay. Due to the fact that there will be no recreation pods in the Bay, the beach will provide open space along the shoreline. The maintenance of the beach during varying water levels of the Bay will conform to applicable State and Federal laws.

Great Lakes Impacts

There only regulated activity proposed in Grand Traverse Bay is the removal of the eight (8) old steel pilings that are remnants of the docks in the existing boat basin at the former Timber Shores campground. The removal of these eight steel pilings that extend about eight feet out of the water requires a permit under Part 325 (Great Lakes

Submerged Lands) of NREPA. The activity comes under the Minor Project Categories and as such will routinely be permitted by EGLE. Removal of the pilings is being proposed due to public safety concerns.

There will be swimming, kayaking, paddle boarding, sailing, and similar activities expected in the Bay. Such activities will have no deleterious impacts on water quality, fisheries, or wildlife associated with that area and is consistent with similar uses all along the shoreline of the Bay in Leelanau County.

Conclusion: Any environmental impacts to Grand Traverse Bay that result from the Timber Shores project are expected to be non-existent or extremely minimal.

Wildlife Habitat Impacts

Vegetation on the project site is varied and primarily successional plant communities in response to past land uses. There are several major plant community types on the site as described below.

- Evergreen trees such as Eastern white pine, Red pine, Northern white cedar, and Eastern hemlock;
- Deciduous trees such as red oak, sugar maple, red maple, trembling aspen, balsam poplar, white birch, and American basswood;
- Shrub species or shrub-size tree species such as red-osier dogwood, gray dogwood, sandbar willow, black willow, balsam poplar, and trembling aspen;
- Openings dominated by a variety of species of perennial grasses, goldenrods, Queen Anne's lace, and other herbaceous plants.

Wildlife habitat on the subject property, while present, is not exemplary or unique due to past developments and disturbances. An example of an exemplary vegetation community is found in the 53.44 acre wetland that was placed in Conservation Easement in 2007 as a component of the former proposed housing project at Timber Shores. This wetland is high quality wetland wildlife habitat.

Past land uses, including the development of the former Timber Shores Resort in the 1960s; demolition and removal of infrastructure from the former Timber Shores Resort (including a number or large buildings, paved areas, underground utilities, tennis courts, etc.); logging of portions of the property (both clear cutting and selective logging); clearing to restore roads and former development sites as part of the 2006 proposed housing development; and other perturbations on the landscape over time have resulted in the mixture of vegetation types and wildlife habitats that are present today.

The Timber Shores property is primarily inhabited by white-tailed deer, raccoons, skunks, opossums, small rodents, red squirrels, black and grey squirrels, chipmunks, mink (along streams

and the lakeshore), and birds such as raptors (hawks and owls inland, bald eagles along the lakeshore), ruffed grouse, several species of woodpeckers, black-capped chickadees, blue jays, American robins, cardinals, and other species of songbirds, some of which only migrate through the area in the spring and fall migrations, such as many species of warblers and related species. Shorebirds such as sandpipers, killdeer, dunlins, and Herring gulls, Ring-billed gulls, and Common terns will utilize the near-shore and beach habitats along Grand Traverse Bay.

There are many dead/dying trees on the Timber Shores property, primarily ash trees that have been infected by Emerald ash borers and over-mature aspen trees that have died of old age. While these trees have provided, or some may still provide food source for woodpeckers, removal of many of these dead/dying trees is necessary for public safety purposes when in proximity to roads, campsites, walking trails, or other areas frequented by guests at the resort. Dead/dying trees located in wetlands that must be removed will have their stumps remain in order to protect the wetland substrate from disturbance.

Any development that alters the landscape is likely to have some impact on the species of wildlife that inhabit that area. In some cases, development provides a different habitat that may favor other species of wildlife. The key point with the proposed Timber Shores project is that substantial wildlife habitat will remain after the construction of the resort and such habitat will be interspersed throughout the site in the form of wetlands, both natural and restored, and in the wooded buffers on the south and east borders of the property.

It is important to note that "clear cutting" will not occur on the Project site; the only tree clearing will be to remove dead/dying trees that pose a danger to the public and clearing necessary for the construction of roads, campsites, and buildings. The total area of the 213.6 acres within the Project site that will be cleared for campsites is 20.88 acres; roads, sidewalks, parking lots, and buildings comprise 13.01 acres for a total of 33.89 acres, which is only 15.8 percent of the total land within the Project site.

Conclusion: Although some impacts to wildlife habitat will unavoidably result from the development of the Timber Shores project, the existing wildlife species will still find suitable habitat and the overall impact to wildlife that frequent the site is not considered significant. As stated above, only 15.8 percent of the total land area within the Project site will be cleared which will minimize impacts to wildlife species.

Fish Impacts

The aquatic resources on the property include Ennis Creek, the unnamed ditch, and Grand Traverse Bay. Ennis Creek provides habitat for several species of fish, including some brook trout, suckers, and forage species as evidenced by stream surveys conducted for the 2006 project on the property. The drainage ditch may have forage species of fish, but the lack of stream flow is likely a significant detriment to fish inhabiting that stream. Grand Traverse Bay contains many species of fish but most are in the offshore areas and not directly affected by activities proposed at Timber Shores.

Conclusion: The proposed Timber Shores project will have essentially no impact on fish as a result of the construction and operation of the resort due to the fact that Ennis Creek is protected by the Conservation Easement and expected activities in Grand Traverse Bay will have minimal effect on fisheries.

Use of Potentially Harmful Chemicals

The only chemicals that are planned for use on the Timber Shores project are those to be used to maintain safe water quality in the lined recreation pond. Only those chemicals labeled for such use in public swimming areas will be used and will be applied only by people licensed and trained in such chemical applications. Fuel storage areas will be constructed and operated to safely store and dispense of fuels needed for maintenance vehicles according to state regulations and best management practices.

Conclusion: The types of chemicals to be used at the Timber Shores Resort are not considered hazardous or harmful if used in accordance with the labeling of the chemicals. For management to use chemicals in the recreation pond or other locations on the property that are harmful is absolutely contrary to the public uses of the resort and is extremely unlikely to occur.

Presence of Listed Species

The Ordinance requires a finding whether a project "site is known or suspected to host any endangered, threatened, or candidate species of animal, fowl, fish, or vegetation". During the project review and permitting by the State of Michigan for the 2006 project, there were no species listed as identified by the Michigan Natural Features Inventory (MNFI). MNFI maintains a database of endangered, threatened, and species of special concern in Michigan. During the review of the Application for Permit to be submitted to EGLE it is expected that inquiries will be made to confirm the lack of listed species on the project site.

Conclusion: At this time, based on prior investigations and inquiries on this property, there is no reason to believe that any species listed by MNFI exist at the Timber Shores project site.

Presence of Historic or Archaeological Sites

The Ordinance requires a finding in regard to "the location of any burial grounds or settlement site, or is otherwise known to be of particular historic, cultural, or archaeological significance". As with the prior discussion regarding listed species, the prior permit issued by what was then the Michigan Department of Environmental Quality (MDEQ) involved queries being submitted to the Michigan State Historic Preservation Office (SHPO). SHPO maintains an extensive database on state historic sites, of which there are about 2,700 sites in Michigan, 25 of which are located

in Leelanau County (SHPO). None of the listed historic sites is located on or near the Timber Shores property.

In regard to burial grounds or settlement sites, or sites of archaeological significance none have been identified on or near the Timber Shores property in previous extensive reviews by State agencies responsible for these sites.

Conclusion: The presence of the items listed in the preceding discussion has not been confirmed during extensive previous reviews for projects proposed on the Timber Shores property and these types of sites being of historic or archaeological significance are extremely unlikely to appear or be discovered now.

Mitigation of Environmental Impacts

As documented in the preceding discussions, the primary environmental impact that requires mitigation is the unavoidable impact to 0.90-acre of wetland. A mitigation plan is proposed that will restore wetlands filled during the construction of the prior Timber Shores campground. A *net gain* of 2.28 acres of wetland will result from the project. Only 15.8 8 percent of the total land area within the Project site will be cleared which will minimize impacts to wildlife species.

Conclusion: There will be some impacts to wildlife species as a result of the proposed project, but documentation of the specific impacts on each species that may inhabit or seasonally use the Timber Shores property is nearly impossible and mitigating those types of impacts is not feasible. The proposed wetland mitigation will more than compensate for the unavoidable impacts to wetlands that will occur on the Timber Shores project site.

In addition it is important to note that significant mitigation was provided for the project that was permitted by Leelanau County and MDEQ in 2006 in the form of the Conservation Easement placed on the Ennis Creek corridor and the 53.44 acres of exemplary wetland and headwaters of Ennis Creek. Due to the fact that the 2006 project was not undertaken by NM Investment Company LLC due to economic conditions beyond its control, the mitigation (i.e. Conservation Easements) was provided but no impacts for which mitigation was required were imparted on the property.

Summary Findings

It is the applicant's contention that this environmental review by Wolverton Consulting, LLC provides sufficient documentation to satisfy the provisions of Section 15.6 of the Ordinance, specifically that *"the reasonably foreseeable impacts"* of the development have been evaluated, that the *"undesirable impacts"* will be mitigated by the Project and that *"the cumulative impact"* of the proposed Project *"on the environmental quality of the project area and adjacent lands and waters"* have been addressed *"to ensure that necessary attention is devoted to the prevention of environmental damage"*.

The Planning Commission is charged by Article 15.6 B. of the Ordinance with making a finding in regard to whether the project "poses an unresolved environmental risk", then an Environmental Assessment must be required of the Applicant. Article 15.6C. of the Ordinance further defines the standards for requiring an Environmental Assessment, stating "if the environmental review reveals the likelihood of a development polluting, impairing, degrading or destroying the environmentally sensitive natural features on the subject parcel, and mitigations of those impacts have not been achieved, an Environmental Assessment...shall be required...".

In regard to these standards stated in the Ordinance, the Applicant concludes the following from its objective analysis during the Environmental Review:

1. There will be minimal or no likelihood of the proposed Project *"polluting"* the environment during the construction or operation of the Project. To do so would be a direct detriment to the intended use of the property as a family resort and campground.

2. There will be no unacceptable "degradation or destroying" of "the environmentally sensitive natural features on the subject parcel". The "environmentally sensitive natural features" that are present on the Project site are defined in the Ordinance as Wetlands, Inland Lakes and Streams Areas, and Great Lakes Shorelands. This Environmental Review has fully analyzed and explained the "reasonably foreseeable impacts" on these environmentally sensitive natural features and has objectively concluded that the Project does not pose "an unresolved environmental risk" and therefore requiring the Applicant to conduct an Environmental Assessment is not justified and would, in fact, lend little to the environmental evaluation of the proposed Project.

In addition, the Project design takes into strong consideration the concerns of area landowners and has incorporated vegetated buffers from those properties to the north, east, and south of the Project. Where necessary, additional tree plantings will be conducted to further buffer activities on the Timber Shores RV Resort from neighboring properties.