



February 10, 2023

VIA EMAIL ONLY

Elmwood Township Planning Commission  
10090 E. Lincoln Road  
Traverse City, MI 49684

Re:

Dear Commissioners:

On behalf of the applicant Wellevity, thank you for your additional time and efforts in reviewing this matter. Please incorporate this letter and enclosures as part of the record. Pursuant to the motion, Wellevity is supplying its response to the items requested. Specifically, the January 18, 2023 motion provides that the planning commission ("PC") will consider only the following information:

- 1) Whether the private roads leading to the proposed special land use will be adequate to Safety accommodate the traffic that will be generated by the proposed special land use.
- 2) Whether the roadways within the proposed special land use will comply with all applicable road slope requirements.

The scoped questions are to be only analyzed in the context of the General Standards of Section 9.3.A.4, 9.3.A.5, 9.3.A.8, and 9.3.A.9.

As a matter of efficiency, I wish to address question 2 above first. The slope requirements for the private drive are regulated, reviewed, and approved by the fire department. Since the date of the motion, Chief Tampa has supplied a plan review letter to the PC, dated January 27, 2023, which confirms compliance with the slope standards and resolves this question.

For the remaining question, Will the private roads leading to the proposed special land use be adequate to safety accommodate the traffic that will be generated by the proposed special land use? The answer to that question is yes. When applying the standards of approval to determine this, it is clear that the criteria has been met.

#### 9.3.A.4

The proposed special land use will be served adequately by essential public utilities, facilities, and services such as water supply, wastewater disposal, highways, roads, police and fire protection, drainage structures, and refuse disposal. Alternatively, such services, if adequate to serve the proposed special land use, may be provided privately or by a combination of public and private providers.

**This criterion is primarily meant to consider the ability of public infrastructure and services to meet the needs of the project. The concern generally is to make sure the public assets and services are not overtaxed by the use. To gain compliance the public entities, agencies, etc. have statutory authority to require compliance by the applicant by requiring additional conditions be met, e.g. the inclusion of a declaration lane on a public road, the requirement to connect to municipal utilities, the inclusion of fire hydrants or apparatuses accommodations, etc. That form of forcing compliance does not exist when an item is privately provided. The fact is that the only analysis if the service is private is that the service exists or is planned for the project. The Township has no ability to force greater compliance with regard to the private road than to require it meet the private road ordinance. Said another way the neighborhood cannot fail to maintain a road and then rely on the roads physical condition to claim its inadequacy under a zoning ordinance and weaponize the PC to deprive a benefitted owner its right to use the road. In this case, private water and well service will be provided and proof of a permit issued by EGLE is all that is required. As for the private roads, “adequacy” is proof of rights to use the road and that it meets the ordinance’s standards. That is because the road is deemed to be an “approved road” under the zoning ordinance, therefore, the adequacy of the road is inherent in that designation. See, section 6 and section 14 of the Elmwood Township Private Road Ordinance which clearly states that any private road that predated the ordinance, such as those proposed to be used, are deemed to be “approved roads” for purposes of the Elmwood Township Zoning Ordinance. Therefore, the criteria must logically be met as the road carries with it all the rights afforded any approved private road, at least as it relates adequacy and any other requirement of the zoning ordinance.**

**Notwithstanding, please see the professional opinion from the applicant’s civil engineer regarding these criteria in the attached letter, see *EXHIBIT A*.**

#### 9.3.A.5

The proposed special land use will not adversely impact existing or future neighboring uses. For example, but without limitation, the proposed special land use shall be designed as to location, size, intensity, site layout, and periods of operation to eliminate any possible conflicts. Additionally, it shall not be detrimental to any persons, property, or the general welfare by reason of excessive smoke, fumes, glare, noise, vibration, and odors, nor have adverse environmental impacts and detrimental effects on the general aesthetics or appearance of the character of existing or future neighborhood uses.

**The trip generation study already provided and the follow-up letter from Fishbeck**

addresses this concern as it relates to the roads, see *EXHIBIT B*. Further, please see the valuation report which was specifically designed to address the impacts of traffic from the resort on property values, see *EXHIBIT C*. The report concluded that:

**Based on the data collected and analyzed, there is very little to no evidence to support a conclusion that residential property values will experience negative value impact as a result of the proposed resort and the anticipated increase in traffic. In regards to roadway traffic, it was shown by the data that there is no notable difference in lot price depending on the location/roadway traffic. It should be noted that the provided traffic study indicates the subject's proposed land uses would generate less than 50 directional trips during the a.m. and p.m. peak hours of the adjacent road network. If all proposed uses peak during the same hour, conservatively the site is forecast to generate a maximum of 69 directional trips. Thus, the anticipated road traffic is not significant. This study does not extend to road traffic impact under scenarios of more significant traffic (i.e. main area/county arterial roads, etc.) or any other property.**

**The criteria for impact should be considered in the context of the zoning district and uses which are permitted for the project. The fact is that every project will have some adverse impact to existing and futures uses. The proper analysis is, will the use have any greater impact than that which are generally customary to such use? It is also important to consider the design of the project and whether it included designs that mitigate any such excessive impacts. Special consideration should be given to designs that exceed what is required under the ordinance or other applicable authority. This includes designs and statement already supplied by Wellevity that adds mitigation of noise, so that it is not excessive. Further, any excessive nuisance can be either enforced in a private civil action or nuisance enforcement by the township through it police powers. As it relates to the roads the evidence shows that the creation is met.**

#### **9.3.A.8**

The proposed special land use has met or will meet all requirements of other Township, County, State, and Federal ordinance and code requirements.

**As stated above, the private roads and drive meet the applicable standards and the criteria is met.**

#### **9.3.A.9**

The following specific requirements shall be met to the extent applicable to the proposed special land use:

- a. Ingress and egress for the special land use shall be controlled to ensure maximum vehicular and pedestrian safety, convenience, and minimum traffic impact on adjacent roads and

highways, drives, and nearby uses including, but not limited to:

- i. Minimization of the number of ingress and egress points through elimination, minimization, and consolidation of drives and curb cuts;
- ii. Proximity and relation of driveway to intersections;
- iii. Minimization of pedestrian and vehicular traffic conflicts;
- iv. Adequacy of sight distances between road and driveway intersections as specified in Section 6.2, Access Management.
- v. Location and accessibility of off-street parking, loading, and unloading for automotive vehicles, including buses and trucks;
- vi. Location and potential use of ingress and egress drives to access special land use parcels for the purpose of possibly reducing the number of access points necessary to serve the parcels.
- vii. Adequate maneuverability and circulation for emergency vehicles.

**In addition to the information already in the record, please see *EXHIBIT B* regarding the specific analysis by the traffic engineer regarding the private roads and drive.**

With regard to the various items raised by the public that are not subject to the public hearing and are not properly before this PC, Wellevity has nevertheless, addressed in the attached report, environmental issues raised by the public and submitted after the motion. I would caution the PC that it is Wellevity's belief that the information, documents, reports or otherwise related to this topic and supplied after the last public hearing are not properly before the PC and should not be considered by the PC in their deliberations. Submission of the attached report, *EXHIBIT D*, is not an acquiescence by Wellevity that the otherwise inapplicable information is now applicable. And further Wellevity reserves its objection to its inclusion. However, Wellevity would be remiss if it did not supply in a timely manner a response to the extent it is required. With regard to the impacts raised by the opposition, the attached report contradicts all the conjecture and alleged factual statements regarding the perceived impacts of the project, and supports the approval of the application. Further, on a more elementary legal note, most if not all the environmental impacts which are alleged are reviewed by, regulated and permitted by other agencies, namely the EGLE and Leelanau County. In fact, these agencies have preemption and sole jurisdiction on the subject matters.

The facts in the record comport with the requirements of the zoning ordinance. Consequently, the application should be approved.

Sincerely,



Marc S. McKellar II

February 10, 2023

Georgina Flower  
Wellevity, LLC  
Traverse City, Michigan

**RE: Wellevity- Existing Road Conditions Memorandum**

Dear Georgina,

As the Civil Engineer responsible for the design of the Wellevity project, please see below a response to a comment by a member of the community regarding the proposed project and its affect on the surrounding roads where the following Elmwood Township Special Use Permit General Standard was referenced. Following that is a response based on our professional experience to provide clarity on the subject.

**Special Use Permit General Standard #4 cited:**

*The proposed special land use will be served adequately by essential public utilities, facilities, and services such as water supply, wastewater disposal, highways, roads, police and fire protection, drainage structures, and refuse disposal. Alternatively, such services, if adequate to serve the proposed special land use, may be provided privately or by a combination of public and private providers.*

**Response:**

East Timberwoods Drive and South Cottonwood Drive, the existing private roads that serve the subject property (zoned as Rural Resort) and existing residential parcels, are constructed of standard asphalt paving over graded road base material. The roads were designed and built to allow for two-way traffic between Mann Road (public) and the residences and resort site.

Both East Timberwoods Drive and South Cottonwood Drive were observed to be in good to fair condition, with alligatoring occurring at the surface along much of East Timberwoods that appear to have been repaired with sealant somewhat recently. No structural deficiencies were observed between Mann Road and Hill Top Drive. Areas in fair condition were observed on the steeper section of South Cottonwood Drive between Hill Top Drive and the subject property. Observations indicated that the roads sufficiently serve residential passenger car traffic and less frequent truck traffic for refuse pick up and deliveries.

Asphalt, a flexible paving material, is subject to wear associated with traffic volume and loading, weather (freeze/thaw) and drainage conditions. Well designed and constructed roads with properly constructed base sections still require periodic maintenance, including pothole repair, resurfacing or sealing cracks as part of normal operations. Road maintenance will increase during periods of higher frequency traffic carrying heavier loads typically associated with construction equipment and deliveries. For properly constructed roads, wear during these periods is usually limited to the asphalt section of the road, evidenced by subsidence, cracking and potholing over time. The base section of the road usually remains unaffected or minimally impacted, unless it was improperly constructed or has been consistently saturated with ground or surface water.

Construction impacts to shared roads (public and private) is typically managed during periods of active construction through ongoing maintenance—filling potholes and patching cracks to maintain a safe and stable driving surface. Based on review of existing conditions, the November 8, 2022 traffic report prepared by Fishbeck Engineering, and substantial experience working with similar types of development, our conclusion is that the existing roads, with adequate maintenance during and after construction, are adequate to serve both existing and proposed development.

Sincerely,

Cody Anderson, P.E.  
Principal Engineer

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## Memo

TO: Georgina Flower – Wellevity, LLC

FROM: Timothy J. Likens, PE, PTOE

DATE: February 10, 2023

PROJECT NO.: 221602

RE: Wellevity Resort – Special Land Use Permit  
Elmwood Township, Michigan

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### Introduction

Wellevity, LLC is proposing to develop a wellness resort in Elmwood Township, Leelanau County, Michigan. Fishbeck completed a trip generation study for this project, which also included information related to the area roadway network and historical crash data. The findings of that study indicate that no improvements to the study area road network nor intersections are expected to be necessary to facilitate the proposed wellness resort, as outlined in the Fishbeck memorandum dated November 8, 2022.

The purpose of this memorandum is to outline the previous study findings with respect to the Township Ordinance for Special Land Use (SLU) permitting. The Standards, Requirements, and Findings for SLU are outlined in Section 9.3 of the Township Ordinance. SLU requirements related to traffic, safety, and access are specified in sub-section A-9.a. The Ordinance requirements and related traffic engineering findings are outlined below.

### Ordinance Requirements

9.a Ingress and egress for the special land use shall be controlled to ensure maximum vehicular and pedestrian safety, convenience, and minimum traffic impact on adjacent roads and highways, drives, and nearby uses including, but not limited to:

- i. Minimization of the number of ingress and egress points through elimination, minimization, and consolidation of drives and curb cuts:

*Response: The Wellevity development will be accessed at a single connection to Cottonwood Drive. This is not a commercial establishment seeking multiple driveways.*

- ii. Proximity and relation of driveway to intersections:

*Response: The Wellevity development will be accessed via an extension of Cottonwood Drive. Driveway spacing to intersections does not apply in this instance.*

- iii. Minimization of pedestrian and vehicular traffic conflicts:

*Response: The applicant recognizes that there is existing pedestrian use of the local road network, and that off-street path/sidewalk does not exist adjacent to these local roads. The applicant further recognizes that this project will add vehicular traffic to the local road network; however, the development is not expected to significantly increase the occurrence of vehicle/vehicle or pedestrian/vehicle conflicts. This conclusion is drawn based on the following information, which is largely presented in the Trip Generation Study by Fishbeck:*

1. *Even under conservative assumptions, the volume of traffic expected to be generated by this project does not exceed accepted traffic engineering thresholds that would require further evaluation. This forecast is based on data and guidelines published by the Institute of Transportation Engineers and MDOT, not the applicant.*
2. *During the a.m. and p.m. peak hours of adjacent street traffic, this expected traffic increase on the local road network is less than one vehicle in each direction per minute over the course of 60 minutes. This would not substantially alter the adequacy of gaps in the traffic stream for vehicles and pedestrians to safely maneuver within the local road network.*
3. *When the proposed development peaks (circa 10AM, 4PM), traffic volumes on the local road network are typically lower. The combination of peak development traffic during off-peak roadway time results in lower impacts and less likelihood of conflict.*
4. *There have been zero reported pedestrian-vehicle crashes in the last 10 years in this area. The nearest bicycle-vehicle crashes (2 in 10 years) occurred at the TART trail crossing of Lake Leelanau Drive (both cyclists failed to stop and entered roadway at fault). This demonstrates that vehicles and pedestrians are safely able to see, perceive, and react to potential conflict.*

iv. Adequacy of sight distances between road and driveway intersections as specified in Section 6.2, Access Management.

Response: *The development will be accessed via an extension of Cottonwood Drive. Access points within the site will be engineered with proper site distance during detailed design.*

v. Location and accessibility of off-street parking, loading, and unloading for automotive vehicles, including buses and trucks;

Response: *All parking / loading will occur on-site. Given the length of roadway within the site providing internal access to the proposed uses, parking/loading activities will not overflow beyond the property.*

vi. Location and potential use of ingress and egress drives to access special land use parcels for the purpose of possibly reducing the number of access points necessary to serve the parcels.

Response: *The development will be accessed at a single connection to Cottonwood Drive. This is not a commercial establishment seeking multiple driveways.*

vii. Adequate maneuverability and circulation for emergency vehicles.

Response: *Turning movement paths for emergency vehicles will be engineered during detailed design in consultation with first responder departments.*

Copy: Sarah Keever – Northview 22  
Kyle Reidsma, PE, PTOE – Fishbeck





**Valbridge**  
PROPERTY ADVISORS

## MARKET STUDY

Proposed Wellevity Resort  
and its Effect on Surrounding Properties  
South Cottonwood Drive, Elmwood Township, Leelanau County, Michigan

Report Date: January 18, 2023



FOR:

**Marc S. McKellar II**  
Kuhn Rogers  
4033 Eastern Sky Drive  
Traverse City, MI 49684

**Valbridge Property Advisors |  
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MI01-23-0006





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January 18, 2023

Mr. Marc S. McKellar II  
Kuhn Rogers  
4033 Eastern Sky Drive  
Traverse City, MI 49684

Re: Market Study  
Proposed Wellevity Resort and its effect on Surrounding Properties  
South Cottonwood Drive, Elmwood Township, Leelanau County, Michigan

Dear Mr. McKellar:

In accordance with your request, we have performed a market study of the impact of a proposed resort and its effects on surrounding properties. This market study sets forth the pertinent data gathered, the techniques employed, and the reasoning leading to my opinions. This letter of transmittal is not valid if separated from the market study.

The client and intended users in this assignment are Kuhn Rogers and their client and no others. The intended use is for the permitting process of a resort. The opinions reported herein are subject to the definitions, assumptions and limiting conditions, and certification contained in this report.

This market study has been completed to understand the impact of a resort property on the surrounding residential properties. I searched for vacant land sales within and near resorts to discern if the proximity to the resort and the additional traffic has an impact on values.

We developed our analyses, opinions, and conclusions and prepared this report in conformity with the Uniform Standards of Professional Appraisal Practice (USPAP) of the Appraisal Foundation; the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute, and the requirements of our client as we understand them.

The acceptance of this assignment and the completion of the market study submitted herewith are subject to the General Assumptions and Limiting Conditions contained in the report. The findings and conclusions are further contingent upon the following extraordinary assumptions and/or hypothetical conditions which may have impacted the assignment results:

**Extraordinary Assumptions:**

- None

**Hypothetical Conditions:**

- None

Respectfully submitted,

**VALBRIDGE PROPERTY ADVISORS | THE OETZEL – HARTMAN GROUP**



James T. Hartman, MAI, SGA, AI-GRS  
Certified General Real Estate Appraiser  
State of Michigan, License # 1201005950  
[jhartman@valbridge.com](mailto:jhartman@valbridge.com)

JTH:MDM/msn  
File # MI01-23-0006

## Introduction

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### Purpose of Study

This market study has been completed to understand the impact of a resort operation on surrounding residential properties.

### Client and Intended Users

The client and intended users in this assignment are the Kuhn Rogers their client. Under no circumstances, shall any of the following parties be entitled to use or rely on the appraisal or this appraisal report: (i) the borrower(s) on any loans or financing relating to or secured by the subject property, (ii) any guarantor(s) of such loans or financing, or (iii) principals, shareholders, investors, members or partners in such borrower(s) or guarantor(s).

### Intended Use

The intended use of this report is for the permitting process of a resort property.

### Date of Report

The date of this report is January 18, 2023 which is the same as the date of the letter of transmittal.

### List of Items Requested but Not Provided

- None

### Assumptions and Conditions

The acceptance of this assignment and the completion of the market study submitted herewith are subject to the General Assumptions and Limiting Conditions contained in the report. The findings and conclusions are further contingent upon the following extraordinary assumptions and/or hypothetical conditions which may have impacted the assignment results:

#### Extraordinary Assumptions

- None

#### Hypothetical Conditions

- None

## Scope of Work

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This market study has been completed to understand the impact of a resort property on surrounding residential properties. In particular, this study is to address the impact from added traffic. The report addresses general impact and is not property specific. In addition, this study does not extend to road traffic impact under scenarios of more significant traffic (i.e. main area/county arterial roads, etc.) or any other property.

Our research of various residential markets was completed in January 2023. The effective date of this report is January 18, 2023, which is the date of this report.

The first step in this assignment is to evaluate the amount and type of information, research and analysis needed to produce credible assignment results. A thorough analysis of several areas with lots on main or secondary development roads was conducted to ascertain the effects on adjacent residential properties.

In general, there are two forms of data that are collected for a market study; primary and secondary data. Primary data refers to information that is explicitly gathered for the analysis at hand; it is information that is specifically related and pertinent to the subject property. Secondary data refers to the body of existing data that was initially gathered for other purposes, but can be applied to the analysis of the subject property. In other words, secondary data already exists in published form and primary data must be gathered/generated by the analyst.

Primary data can be obtained either through the process of questioning or through the process of observation. A question methodology involves eliciting information directly from people. Observation is based upon identification of the actions or items of interest and then observing and recording what takes place. Observation can be made of people and their actions, or it can be made of secondary data. In this study the process of surveying sales through the various multiple listing services to detect any trends in real estate prices that can be attributed to the presence of a resort property. I have also considered a previous market study that was completed regarding impact from additional traffic due to extension of a roadway.

Based upon the provided traffic study, the subject's proposed land uses will generate less than 50 directional trips during the a.m. and p.m. peak hours of the adjacent road network. If all proposed uses peak during the same hour, conservatively the site is forecast to generate a maximum of 69 directional trips. Thus, the anticipated road traffic is not significant. I identified four case studies that compare lots within resorts that are on the main or secondary entrance versus lots that are on lightly travelled roads. In one instance I was able to compare the more travelled lot sale to lots in an adjacent subdivision outside of the resort development. The scope of this assignment was to look at residential properties only. The case studies outlined in this report were chosen as each has similar, yet varying conditions that help to illustrate the effects we set out to discover.

### Type and Extent of Data Researched

We researched and analyzed market area data and property-specific market data.

## Research and Analysis

The MLS system was searched for residential lot sales in or near most of Northern Michigan resorts. I was able to find four sales that were within a resort and were on main development roadways. In each instance I have compared this sale to other similar sales within the resort that were on lightly travelled roadways. The following three case studies are in Shanty Creek/Schuss Mountain Resort and the fourth is in the Crystal Mountain Resort.



194 Troon South is on a main roadway within the resort, while 20 Schafen Strasse and 151 Olympia Fields are on lightly travelled roadways. 37 Cedar River and 43 Cedar River are on lightly travelled roads in a subdivision near the resort.

Parcel Number	Address	Development	Sale Date	Acres	Sale Price	Location
05-10-155-194-00	194 Troon South	Shanty Creek/Schuss Mountain	3/7/2022	0.75	\$6,500	Main road in resort
05-04-135-151-00	151 Olympia Fields	Shanty Creek/Schuss Mountain	7/1/2021	0.79	\$6,000	Lightly traveled road in resort
05-04-275-020-00	20 Schafen Strasse	Shanty Creek/Schuss Mountain	9/9/2022	0.50	\$6,000	Lightly traveled road in resort
05-04-475-037-00	37 Cedar River Drive	Swiss Village	6/30/2022	0.39	\$5,500	Lightly travelled road outside resort
05-04-475-043-00	43 Cedar River Drive	Swiss Village	10/21/2021	1.20	\$6,400	Lightly travelled road outside resort

It is shown by the data that there is no notable difference in lot price depending on the location of the lot in regards to roadway traffic.





178 Troon South is a golf course lot on a main roadway within the resort, while 92 Oakmont and 51 Troon South are golf course lots on lightly travelled roadways.

Parcel Number	Address		Sale Date	Acres	Sale Price	Location
05-10-155-178-00	178 Troon South	Shanty Creek/Schuss Mountain	1/26/2021	0.97	\$19,900	Main road on golf course
05-10-155-092-00	Lot 92 Oakmont Drive	Shanty Creek/Schuss Mountain	1/21/2021	0.65	\$19,500	Within resort on golf course
05-10-155-051-00	Lot 51 Troon South	Shanty Creek/Schuss Mountain	7/1/2021	0.77	\$15,000	Within resort on golf course

It is shown by the data that there is no notable difference in lot price depending on the location of the lot in regards to roadway traffic.





Valley View/Shanty Creek is on a main roadway within the resort and with restricted golf course view, while 20 Golf Meadows and Golf Meadows (lot 20) are on lightly travelled roadways. Both Golf Meadows have restricted golf course views.

Parcel Number	Address		Sale Date	Acres	Sale Price	Location
05-10-400-001-00	Valley View Road	shanty Creek/ Schuss Mountain	9/21/2022	0.57	\$10,000	Main road across street from golf course
05-10-220-022-00	Golf Meadows Drive	shanty Creek/ Schuss Mountain	7/16/2021	0.38	\$9,000	Lightly traveled road in resort, partially on golf course
05-10-220-020-00	20 Golf Meadows Drive	shanty Creek/ Schuss Mountain	10/14/2022	0.60	\$12,000	Lightly traveled road in resort, partially on golf course

It is shown by the data that there is no notable difference in lot price depending on the location of the lot in regards to roadway traffic.



6 Washtenaw is on a main roadway within the resort, while 48 Otsego and Chippewa are on lightly travelled roadways.

Parcel Number	Address		Sale Date	Acres	Sale Price	Location
10-12-130-006-00	6 Washtenaw Drive	Crystal Mountain	1/2/2004	0.30	\$52,000	Main road in resort
10-12-101-048-00	48 Otsego Court	Crystal Mountain	8/25/2003	0.40	\$47,500	Lightly traveled road in resort
10-12-101-035-00	Chippewa Drive	Crystal Mountain	1/7/2004	0.33	\$54,900	Lightly traveled road in resort

It is shown by the data that there is no notable difference in lot price depending on the location of the lot in regards to roadway traffic.

## Research and Analysis ~ Entrance Road Traffic Market Study

I have also considered a previously completed market study. This market study was completed for a different property, but is similar as it measures the impact from increased traffic. This study was for a proposed roadway which would connect a subdivision with a main road. The proposed road would establish an additional entrance to the subdivision and homes closer to this new entrance would in all likelihood use the new entrance as their primary point of ingress/egress. To complete the study, I analyzed values of homes near a subdivision's entrance and compared them to the value of homes away from a subdivision's entrance. Homes near the entrance would receive significantly more traffic than homes that are deeper within the subdivision.

In each subdivision, it was found that there is a similar price per square foot in the homes near the entrance of the subdivision as compared to homes that are deeper into the subdivision. It can be shown by the data that there is no difference in home price depending on the location of the home in relation to the main access point to the subdivision. This study can be found in the addenda. The following is the study's results:

Development	Average \$/SF Near	Average \$/SF Away	% difference near vs. away Entrance
Sunset Hills Subdivision	\$102.66	\$106.70	-3.79%
Dawn Haven Subdivision	\$98.27	\$98.91	-0.65%
Centennial Farms Subdivision	\$114.29	\$110.62	3.32%
Okemos Preserve Subdivision	\$129.37	\$121.96	6.08%
Strawberry Farm Estates Subdivision	\$122.85	\$129.94	-5.46%
Coventry Woods Subdivision	\$110.78	\$112.94	-1.91%
		Mean	-0.40%

## Conclusion

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Based on the data collected and analyzed, there is very little to no evidence to support a conclusion that residential property values will experience negative value impact as a result of the proposed resort and the anticipated increase in traffic. In regards to roadway traffic, it was shown by the data that there is no notable difference in lot price depending on the location/roadway traffic.

It should be noted that the provided traffic study indicates the subject's proposed land uses would generate less than 50 directional trips during the a.m. and p.m. peak hours of the adjacent road network. If all proposed uses peak during the same hour, conservatively the site is forecast to generate a maximum of 69 directional trips. Thus, the anticipated road traffic is not significant. This study does not extend to road traffic impact under scenarios of more significant traffic (i.e. main area/county arterial roads, etc.) or any other property.

## General Assumptions and Limiting Conditions

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Standards Rule ("S.R.") 2-1 of the "Uniform Standards of Professional Appraisal Practice" requires the appraiser to "clearly and accurately disclose all assumptions, extraordinary assumptions, hypothetical conditions and limiting conditions used in the assignment". In compliance with S.R. 2-1, and to assist the reader in interpreting this report, such limiting conditions, as well as general assumptions, are set forth below. Any extraordinary assumption and/or hypothetical conditions are set forth in the main body section of this report.

### **THE APPRAISER HAS ASSUMED:**

1. The conclusions and opinions expressed in this report apply to the date of value set forth in the letter of transmittal accompanying this report. The dollar amount of any value opinion or conclusion rendered or expressed in this report is based upon the purchasing power of the American dollar existing on the date of value.
2. The appraiser assumes no responsibility for economic, physical, or demographic factors that may affect or alter the opinions in this report if said economic, physical or demographic factors change after the date of value. The appraiser is not obligated to predict future political, economic, or social trends.
3. In preparing this report, the appraiser was required to rely on information furnished by other individuals or found in previous existing records and/or documents. This includes information with regard to price, terms, dates of sale, parties, location, availability of utilities, time on market, zoning, and conditions of sale for the comparables used. This information has been carefully reviewed and, based upon the appraiser's experience and judgment; there is no reason to doubt its accuracy. However, no warranty is neither expressed or implied, nor is given by the appraiser for accuracy of such information. The appraiser assumes no responsibility for information relied upon and later found to have been inaccurate. The appraiser reserves the right to make such adjustments to the analyses, opinions, and conclusions set forth in this report as may be required by consideration of additional data or more reliable data that may become available.
4. Maps, plats, and exhibits included in this report are for illustration only to serve as an aid in visualizing matters discussed within the report. They should not be considered as surveys or relied upon for any other purpose, nor should they be removed from, reproduced, or used apart from the report.
5. No opinion is intended to be expressed for matters, which require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers.
6. The possession of the market study, or any copy or portion thereof, by client or any third party does not include or confer any rights of publication or redistribution of the market study other than to such persons or entities identified in this agreement. All rights, title, and interest in (1) any data gathered by appraiser in the course of preparing the market study (excluding any data furnished by or on behalf of client) and (2) the content of the market study prepared pursuant to this agreement shall be vested in appraiser. Subject to the foregoing, client shall have the right to possess a copy of the market study and to disclose the report to client's attorneys, accountants or other professional advisors in the course of client's business affairs relating to the property that is the object of the market study, provided that such attorneys, accountants or advisors are advised of appraiser's rights under this agreement prior to receipt of such market study. However, neither all nor selected



portions of this market study shall be disseminated to the general public by the use of advertising media, public relations media, news media, sales media or other media for public communication (including without limitation prospectuses, private offering memoranda and other offering material provided to prospective investors) without the prior written consent of the signatories of this market study. The client has the right to use the report in a public meeting for the purposes of land use approval.

7. This market study is subject to the rules and regulations of the Appraisal Institute and may, under certain conditions, be subject to confidential review by a duly constituted committee of that organization.
8. The liability of The Oetzel-Hartman Group, its employees, and/or agents is limited only to the client and to the amount of the fee actually received by the firm. Further, acceptance and use of this report constitutes an agreement that there is no accountability, obligation, or liability to any third party. If this report is given to anyone other than the Client, the Client shall make such party aware of all of the limiting conditions and assumptions of this assignment. The appraiser is not responsible for any costs incurred to discover or correct any deficiencies of any type present in the property, whether physical, financial, and/or legal. In the case of limited partnership, syndication, or stock offering in real estate, Client agrees that in the case of a lawsuit (brought by lender, partner or part owner in any form of ownership, as well as tenant, or any other party), any and all awards of settlements of any type in such suit, regardless of the outcome, the Client and all parties will completely hold harmless The Oetzel-Hartman Group, its employees and/or agents in any such action. Any third party who uses or relies upon any information in this report, without the preparer's written consent does so at his/her own risk. Due to the ever changing nature of market conditions, and the ongoing evolution of additional information, the information in this report is dated and may not be reliable past the date of this report.
9. Client agrees to defend, indemnify and hold harmless The Oetzel-Hartman Group, its employees and/or agents, from any damages, losses or expenses, including attorneys' fees and litigation expenses at trial or on appeal, arising from allegations asserted against the Oetzel-Hartman Group, its employees and/or agents, by any third party that if proven to be true would constitute a breach by client of any of client's obligations, representations or warranties made, or any violation by client of any federal, state, or local law, ordinance or regulation, or common law (a "claim"). In the event of a claim, The Oetzel-Hartman Group, its employees, and/or agents, shall promptly notify client of such claim, and shall cooperate with client in the defense or settlement of any claim. Client shall have the right to select legal counsel to defend any claim, provided that The Oetzel-Hartman Group shall have the right to engage independent counsel at The Oetzel-Hartman Group's expense to monitor the defense or settlement of any claim. Client shall have the right to settle any claim, provided that The Oetzel-Hartman Group shall have the right to approve any settlement that results in any modification of The Oetzel-Hartman Group's rights, which approval will not be unreasonably withheld, delayed or conditioned.
10. The Valbridge Property Advisors office responsible for the preparation of this report is independently owned and operated by The Oetzel-Hartman Group. Neither Valbridge Property Advisors, Inc., nor any of its affiliates, has been engaged to provide this report. Valbridge Property Advisors, Inc., does not provide valuation services and has taken no part in the preparation of this report.



11. If any claim is filed against any of Valbridge Property Advisors, Inc. a Florida Corporation, its affiliates, officers or employees, or the firm providing this report, in connection with, or in any way arising out of, or relating to, this report, or the engagement of the firm providing this report; then 1) under no circumstances shall such claimant be entitled to consequential, special or other damages, except only for direct compensatory damages and 2) the maximum amount of such compensatory damages recoverable by such claimant shall be the amount actually received by the firm engaged to provide this report.
  
12. This report and any associated work files may be subject to evaluation by Valbridge Property Advisors, Inc., or its affiliates, for quality control purposes. If client is unwilling to waive confidentiality for this purpose, client must inform Valbridge Property Advisors | The Oetzel-Hartman Group upon acceptance of this assignment.

## Certification

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In Michigan, appraisers are required to be licensed/certified and are regulated by the Michigan Department of Licensing and Regulatory Affairs, P.O. Box 30018, Lansing, Michigan 48909. James T. Hartman, MAI, SGA, AI-GRS is currently licensed as a Certified General Real Estate Appraiser with the State of Michigan, Number 1201005950. Mr. Hartman is also licensed in the State of Indiana, the State of Ohio, and the State of Illinois.

James T. Hartman, MAI, SGA, AI-GRS are members of the Society of Golf Appraisers (SGA). The Society of Golf Appraisers is an organization of real estate appraisers and consultants specializing in the valuation, market analysis, and feasibility analysis of golf courses and golf related properties.

The undersigned do hereby certify that to the best of our knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no present or prospective interest in the property that is the subject of this report, and no personal interest with respect to the parties involved.
- I have not performed any appraisal, either as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment is not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event related to the intended use of this appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- As of the date of this report, James T. Hartman, MAI, SGA, AI-GRS has completed the continuing education program for Designated Members of the Appraisal Institute.
- I have not made a personal inspection of the property that is the subject of this report.
- A thorough research project whose objective has been the discovery, confirmation, inspection, and analysis of data pertinent to this valuation situation has been completed.
- Mitchell D. Marvin, limited real estate appraiser with the State of Michigan, License Number 1201078243, provided significant real property appraisal assistance to the person signing this certification. Mr. Marvin assisted in the market analysis and research of comparable sales.

- The reported analyses, opinion, and conclusions were developed, and this report has been prepared, in conformity with the requirements of the Code of Professional Ethics & Standards of Professional Appraisal Practice of the Appraisal Institute and the Uniform Standards of Professional Appraisal Practice.
- The appraisers signing this report are competent to complete the assignment. The appraisers have the knowledge and experience to complete the assignment competently or have disclosed the lack of knowledge and/or experience to the client, taken all steps necessary or appropriate to complete the assignment competently and have described in the report the lack of knowledge and/or experience and the steps taken to complete the assignment competently.
- The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.

This appraisal is not to be used by the addressee or any recipient as a part of a presentation of a real estate syndicate.

A real estate syndicate means a general or limited partnership, joint venture, unincorporated association or similar organization formed for the purpose of, and engaged in, investment for gain from an interest in real property, including but not limited to, a sale, exchange, trade or development of real property, on behalf of others, or, which is required to be registered with the United States Securities and Exchange Commission or any state regulatory agency, which regulates investments made as a public offering.



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## Addenda

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Glossary  
Proposed Improvements Drawings and studies  
Prior entrance road market study  
Qualifications of Appraisers  
Information on Valbridge Property Advisors  
Office Locations

## Glossary

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Definitions are taken from the Dictionary of Real Estate Appraisal, 5<sup>th</sup> Edition (Dictionary), the Uniform Standards of Professional Appraisal Practice (USPAP) and Building Owners and Managers Association International (BOMA).

### Absolute Net Lease

A lease in which the tenant pays all expenses including structural maintenance, building reserves, and management; often a long-term lease to a credit tenant. (Dictionary)

### Additional Rent

Any amounts due under a lease that is in addition to base rent. Most common form is operating expense increases. (Dictionary)

### Amortization

The process of retiring a debt or recovering a capital investment, typically through scheduled, systematic repayment of the principal; a program of periodic contributions to a sinking fund or debt retirement fund. (Dictionary)

### As Is Market Value

The estimate of the market value of real property in its current physical condition, use, and zoning as of the appraisal date. (Dictionary)

### Base (Shell) Building

The existing shell condition of a building prior to the installation of tenant improvements. This condition varies from building to building, landlord to landlord, and generally involves the level of finish above the ceiling grid. (Dictionary)

### Base Rent

The minimum rent stipulated in a lease. (Dictionary)

### Base Year

The year on which escalation clauses in a lease are based. (Dictionary)

### Building Common Area

The areas of the building that provide services to building tenants but which are not included in the rentable area of any specific tenant. These areas may include, but shall not be limited to, main and auxiliary lobbies, atrium spaces at the level of the finished floor, concierge areas or security desks, conference rooms, lounges or vending areas food service facilities, health or fitness centers, daycare facilities, locker or shower facilities, mail rooms, fire control rooms, fully enclosed courtyards outside the exterior walls, and building core and service areas such as fully enclosed mechanical or equipment rooms. Specifically excluded from building common areas are; floor common areas, parking

spaces, portions of loading docks outside the building line, and major vertical penetrations. (BOMA)

### Building Rentable Area

The sum of all floor rentable areas. Floor rentable area is the result of subtracting from the gross measured area of a floor the major vertical penetrations on that same floor. It is generally fixed for the life of the building and is rarely affected by changes in corridor size or configuration. (BOMA)

### Certificate of Occupancy (COO)

A statement issued by a local government verifying that a newly constructed building is in compliance with all codes and may be occupied.

### Common Area (Public) Factor

In a lease, the common area (public) factor is the multiplier to a tenant's useable space that accounts for the tenant's proportionate share of the common area (restrooms, elevator lobby, mechanical rooms, etc.). The public factor is usually expressed as a percentage and ranges from a low of 5 percent for a full tenant to as high as 15 percent or more for a multi-tenant floor. Subtracting one (1) from the quotient of the rentable area divided by the useable area yields the load (public) factor. At times confused with the "loss factor" which is the total rentable area of the full floor less the useable area divided by the rentable area. (BOMA)

### Common Area Maintenance (CAM)

The expense of operating and maintaining common areas; may or may not include management charges and usually does not include capital expenditures on tenant improvements or other improvements to the property.

CAM can be a line-item expense for a group of items that can include maintenance of the parking lot and landscaped areas and sometimes the exterior walls of the buildings. CAM can refer to all operating expenses.

CAM can refer to the reimbursement by the tenant to the landlord for all expenses reimbursable under the lease. Sometimes reimbursements have what is called an administrative load. An example would be a 15 percent addition to total operating expenses, which are then prorated among tenants. The administrative load, also called an administrative and marketing fee, can be a substitute for or an addition to a management fee. (Dictionary)

### Condominium

A form of ownership in which each owner possesses the exclusive right to use and occupy an allotted unit plus an undivided interest in common areas.

A multiunit structure, or a unit within such a structure, with a condominium form of ownership. (Dictionary)

### Conservation Easement

An interest in real property restricting future land use to preservation, conservation, wildlife habitat, or some combination of those uses. A conservation easement may permit farming, timber harvesting, or other uses of a rural nature to continue, subject to the easement. In some locations, a conservation easement may be referred to as a conservation restriction. (Dictionary)

### Contributory Value

The change in the value of a property as a whole, whether positive or negative, resulting from the addition or deletion of a property component. Also called deprival value in some countries. (Dictionary)

### Debt Coverage Ratio (DCR)

The ratio of net operating income to annual debt service ( $DCR = NOI/Im$ ), which measures the relative ability to a property to meet its debt service out of net operating income. Also called Debt Service Coverage Ratio (DSCR). A larger DCR indicates a greater ability for a property to withstand a downturn in revenue, providing an improved safety margin for a lender. (Dictionary)

### Deed Restriction

A provision written into a deed that limits the use of land. Deed restrictions usually remain in effect when title passes to subsequent owners. (Dictionary)

### Depreciation

- 1) In appraising, the loss in a property value from any cause; the difference between the cost of an improvement on the effective date of the appraisal and the market value of the improvement on the same date. 2) In accounting, an allowance made against the loss in value of an asset for a defined purpose and computed using a specified method. (Dictionary)

### Disposition Value

The most probable price that a specified interest in real property is likely to bring under the following conditions:

- Consummation of a sale within a exposure time specified by the client;
- The property is subjected to market conditions prevailing as of the date of valuation;
- Both the buyer and seller are acting prudently and knowledgeably;

- The seller is under compulsion to sell;
- The buyer is typically motivated;
- Both parties are acting in what they consider to be their best interests;
- An adequate marketing effort will be made during the exposure time specified by the client;
- Payment will be made in cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
- The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale. (Dictionary)

### Easement

The right to use another's land for a stated purpose. (Dictionary)

### EIFS

Exterior Insulation Finishing System. This is a type of exterior wall cladding system. Sometimes referred to as dry-vit.

### Effective Date

The date at which the analyses, opinions, and advice in an appraisal, review, or consulting service apply. 2) In a lease document, the date upon which the lease goes into effect. (Dictionary)

### Effective Gross Income (EGI)

The anticipated income from all operations of the real property after an allowance is made for vacancy and collection losses and an addition is made for any other income. (Dictionary)

### Effective Rent

The rental rate net of financial concessions such as periods of no rent during the lease term and above- or below-market tenant improvements (TIs). (Dictionary)

### EPDM

Ethylene Diene Monomer Rubber. A type of synthetic rubber typically used for roof coverings. (Dictionary)

### Escalation Clause

A clause in an agreement that provides for the adjustment of a price or rent based on some event or index. e.g., a provision to increase rent if operating expenses increase; also called an expense recovery clause or stop clause. (Dictionary)

### Estoppel Certificate

A statement of material factors or conditions of which another person can rely because it cannot be denied at a later date. In real estate, a buyer of rental property typically requests estoppel certificates from existing tenants. Sometimes referred to as an estoppel letter. (Dictionary)



### Excess Land

Land that is not needed to serve or support the existing improvement. The highest and best use of the excess land may or may not be the same as the highest and best use of the improved parcel. Excess land may have the potential to be sold separately and is valued separately. (Dictionary)

### Expense Stop

A clause in a lease that limits the landlord's expense obligation, which results in the lessee paying any operating expenses above a stated level or amount. (Dictionary)

### Exposure Time

1) The time a property remains on the market. 2) The estimated length of time the property interest being appraised would have been offered on the market prior to the hypothetical consummation of a sale at market value on the effective date of the appraisal; a retrospective estimate based on an analysis of past events assuming a competitive and open market. (Dictionary)

### Extraordinary Assumption

An assumption, directly related to a specific assignment, which, if found to be false, could alter the appraiser's opinions or conclusions. Extraordinary assumptions presume as fact otherwise uncertain information about physical, legal, or economic characteristics of the subject property; or about conditions external to the property such as market conditions or trends; or about the integrity of data used in an analysis. (Dictionary)

### Fee Simple Estate

Absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat. (Dictionary)

### Floor Common Area

Areas on a floor such as washrooms, janitorial closets, electrical rooms, telephone rooms, mechanical rooms, elevator lobbies, and public corridors which are available primarily for the use of tenants on that floor. (BOMA)

### Full Service (Gross) Lease

A lease in which the landlord receives stipulated rent and is obligated to pay all of the property's operating and fixed expenses; also called a full service lease. (Dictionary)

### Going Concern Value

- The market value of all of the tangible and intangible assets of an established and operating business with an indefinite life, as if sold in aggregate; more accurately termed the market value of the going concern.
- The value of an operating business enterprise. Goodwill may be separately measured but is an integral

component of going-concern value when it exists and is recognizable. (Dictionary)

### Gross Building Area

The total constructed area of a building. It is generally not used for leasing purposes (BOMA)

### Gross Measured Area

The total area of a building enclosed by the dominant portion (the portion of the inside finished surface of the permanent outer building wall which is 50 percent or more of the vertical floor-to-ceiling dimension, at the given point being measured as one moves horizontally along the wall), excluding parking areas and loading docks (or portions of the same) outside the building line. It is generally not used for leasing purposes and is calculated on a floor by floor basis. (BOMA)

### Gross Up Method

A method of calculating variable operating expense in income-producing properties when less than 100 percent occupancy is assumed. The gross up method approximates the actual expense of providing services to the rentable area of a building given a specified rate of occupancy. (Dictionary)

### Gross Retail Sellout

The sum of the appraised values of the individual units in a subdivision, as if all of the units were completed and available for retail sale, as of the date of the appraisal. The sum of the retail sales includes an allowance for lot premiums, if applicable, but excludes all allowances for carrying costs. (Dictionary)

### Ground Lease

A lease that grants the right to use and occupy land. Improvements made by the ground lessee typically revert to the ground lessor at the end of the lease term. (Dictionary)

### Ground Rent

The rent paid for the right to use and occupy land according to the terms of a ground lease; the portion of the total rent allocated to the underlying land. (Dictionary)

### HVAC

Heating, ventilation, air conditioning. A general term encompassing any system designed to heat and cool a building in its entirety.

### Highest and Best Use

The reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value. The four criteria the highest and best use must meet are 1) legal permissibility, 2) physical possibility, 3) financial feasibility, and 4) maximally profitability. Alternatively, the probable use of land or improved –specific

with respect to the user and timing of the use—that is adequately supported and results in the highest present value. (Dictionary)

### Hypothetical Condition

That which is contrary to what exists but is supposed for the purpose of analysis. Hypothetical conditions assume conditions contrary to known facts about physical, legal, or economic characteristics of the subject property; or about conditions external to the property, such as market conditions or trends; or about the integrity of data used in an analysis. (Dictionary)

### Industrial Gross Lease

A lease of industrial property in which the landlord and tenant share expenses. The landlord receives stipulated rent and is obligated to pay certain operating expenses, often structural maintenance, insurance and real estate taxes as specified in the lease. There are significant regional and local differences in the use of this term. (Dictionary)

### Insurable Value

A type of value for insurance purposes. (Dictionary)  
(Typically this includes replacement cost less basement excavation, foundation, underground piping and architect's fees).

### Investment Value

The value of a property interest to a particular investor or class of investors based on the investor's specific requirements. Investment value may be different from market value because it depends on a set of investment criteria that are not necessarily typical of the market. (Dictionary)

### Just Compensation

In condemnation, the amount of loss for which a property owner is compensated when his or her property is taken. Just compensation should put the owner in as good a position as he or she would be if the property had not been taken. (Dictionary)

### Leased Fee Interest

A freehold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e., a lease). (Dictionary)

### Leasehold Interest

The tenant's possessory interest created by a lease. (Dictionary)

### Lessee (Tenant)

One who has the right to occupancy and use of the property of another for a period of time according to a lease agreement. (Dictionary)

### Lessor (Landlord)

One who conveys the rights of occupancy and use to others under a lease agreement. (Dictionary)

### Liquidation Value

The most probable price that a specified interest in real property should bring under the following conditions:

- Consummation of a sale within a short period.
- The property is subjected to market conditions prevailing as of the date of valuation.
- Both the buyer and seller are acting prudently and knowledgeably.
- The seller is under extreme compulsion to sell.
- The buyer is typically motivated.
- Both parties are acting in what they consider to be their best interests.
- A normal marketing effort is not possible due to the brief exposure time.
- Payment will be made in cash in U.S. dollars or in terms of financial arrangements comparable thereto.
- The price represents the normal consideration for the property sold, unaffected by special or creative financing or sales concessions granted by anyone associated with the sale. (Dictionary)

### Loan to Value Ratio (LTV)

The amount of money borrowed in relation to the total market value of a property. Expressed as a percentage of the loan amount divided by the property value. (Dictionary)

### Major Vertical Penetrations

Stairs, elevator shafts, flues, pipe shafts, vertical ducts, and the like, and their enclosing walls. Atria, lightwells and similar penetrations above the finished floor are included in this definition. Not included, however, are vertical penetrations built for the private use of a tenant occupying office areas on more than one floor. Structural columns, openings for vertical electric cable or telephone distribution, and openings for plumbing lines are not considered to be major vertical penetrations. (BOMA)

### Market Rent

The most probable rent that a property should bring in a competitive and open market reflecting all conditions and restrictions of the lease agreement including permitted uses, use restrictions, expense obligations; term, concessions, renewal and purchase options and tenant improvements (TIs). (Dictionary)

### Market Value

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the

consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

- a. Buyer and seller are typically motivated;
- b. Both parties are well informed or well advised, and acting in what they consider their own best interests;
- c. A reasonable time is allowed for exposure in the open market;
- d. Payment is made in terms of cash in United States dollars or in terms of financial arrangements comparable thereto; and
- e. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

### Market Value As If Complete

Market value as if complete means the market value of the property with all proposed construction, conversion or rehabilitation hypothetically completed or under other specified hypothetical conditions as of the date of the appraisal. With regard to properties wherein anticipated market conditions indicate that stabilized occupancy is not likely as of the date of completion, this estimate of value shall reflect the market value of the property as if complete and prepared for occupancy by tenants.

### Market Value As If Stabilized

Market value as if stabilized means the market value of the property at a current point and time when all improvements have been physically constructed and the property has been leased to its optimum level of long term occupancy.

### Marketing Time

An opinion of the amount of time it might take to sell a real or personal property interest at the concluded market value level during the period immediately after the effective date of the appraisal. Marketing time differs from exposure time, which is always presumed to precede the effective date of an appraisal. (Advisory Opinion 7 of the Standards Board of the Appraisal Foundation and Statement on Appraisal Standards No. 6, "Reasonable Exposure Time in Real Property and Personal Property Market Value Opinions" address the determination of reasonable exposure and marketing time). (Dictionary)

### Master Lease

A lease in which the fee owner leases a part or the entire property to a single entity (the master lease) in return for a stipulated rent. The master lessee then leases the property to multiple tenants. (Dictionary)

### Modified Gross Lease

A lease in which the landlord receives stipulated rent and is obligated to pay some, but not all, of the property's operating and fixed expenses. Since assignment of expenses

varies among modified gross leases, expense responsibility must always be specified. In some markets, a modified gross lease may be called a double net lease, net net lease, partial net lease, or semi-gross lease. (Dictionary)

### Operating Expense Ratio

The ratio of total operating expenses to effective gross income (TOE/EGI); the complement of the net income ratio, i.e., OER = 1 – NIR (Dictionary)

### Option

A legal contract, typically purchased for a stated consideration, that permits but does not require the holder of the option (known as the optionee) to buy, sell, or lease real property for a stipulated period of time in accordance with specified terms; a unilateral right to exercise a privilege. (Dictionary)

### Partial Interest

Divided or undivided rights in real estate that represent less than the whole (a fractional interest). (Dictionary)

### Pass Through

A tenant's portion of operating expenses that may be composed of common area maintenance (CAM), real estate taxes, property insurance, and any other expenses determined in the lease agreement to be paid by the tenant. (Dictionary)

### Potential Gross Income (PGI)

The total income attributable to real property at full occupancy before vacancy and operating expenses are deducted. (Dictionary)

### Prospective Future Value Upon Completion

Market value "upon completion" is a prospective future value estimate of a property at a point in time when all of its improvements are fully completed. It assumes all proposed construction, conversion, or rehabilitation is hypothetically complete as of a future date when such effort is projected to occur. The projected completion date and the value estimate must reflect the market value of the property in its projected condition, i.e., completely vacant or partially occupied. The cash flow must reflect lease-up costs, required tenant improvements and leasing commissions on all areas not leased and occupied.

### Prospective Future Value Upon Stabilization

Market value "upon stabilization" is a prospective future value estimate of a property at a point in time when stabilized occupancy has been achieved. The projected stabilization date and the value estimate must reflect the absorption period required to achieve stabilization. In addition, the cash flows must reflect lease-up costs, required tenant improvements and leasing commissions on all unleased areas.

### Replacement Cost

The estimated cost to construct, at current prices as of the effective appraisal date, a substitute for the building being appraised, using modern materials and current standards, design, and layout. (Dictionary)

### Reproduction Cost

The estimated cost to construct, at current prices as of the effective date of the appraisal, an exact duplicate or replica of the building being appraised, using the same materials, construction standards, design, layout, and quality of workmanship and embodying all of the deficiencies, superadequacies, and obsolescence of the subject building. (Dictionary)

### Retrospective Value Opinion

A value opinion effective as of a specified historical date. The term does not define a type of value. Instead, it identifies a value opinion as being effective at some specific prior date. Value as of a historical date is frequently sought in connection with property tax appeals, damage models, lease renegotiation, deficiency judgments, estate tax, and condemnation. Inclusion of the type of value with this term is appropriate, e.g., "retrospective market value opinion." (Dictionary)

### Sandwich Leasehold Estate

The interest held by the original lessee when the property is subleased to another party; a type of leasehold estate. (Dictionary)

### Sublease

An agreement in which the lessee (i.e., the tenant) leases part or all of the property to another party and thereby becomes a lessor. (Dictionary)

### Subordination

A contractual arrangement in which a party with a claim to certain assets agrees to make his or her claim junior, or subordinate, to the claims of another party. (Dictionary)

### Substantial Completion

Generally used in reference to the construction of tenant improvements (TIs). The tenant's premises are typically deemed to be substantially completed when all of the TIs for the premises have been completed in accordance with the plans and specifications previously approved by the tenant. Sometimes used to define the commencement date of a lease.

### Surplus Land

Land that is not currently needed to support the existing improvement but cannot be separated from the property and sold off. Surplus land does not have an independent highest and best use and may or may not contribute value to the improved parcel. (Dictionary)

### Triple Net (Net Net Net) Lease

A lease in which the tenant assumes all expenses (fixed and variable) of operating a property except that the landlord is responsible for structural maintenance, building reserves, and management. Also called NNN, triple net lease, or fully net lease. (Dictionary)

(The market definition of a triple net lease varies; in some cases tenants pay for items such as roof repairs, parking lot repairs, and other similar items.)

### Usable Area

The measured area of an office area, store area or building common area on a floor. The total of all of the usable areas or a floor shall equal floor usable area of that same floor. The amount of floor usable area can vary over the life of a building as corridors expand and contract and as floors are remodeled. (BOMA)

### Value-in-Use

The value of a property assuming a specific use, which may or may not be the property's highest and best use on the effective date of the appraisal. Value in use may or may not be equal to market value but is different conceptually. (Dictionary)

# Proposed Improvements and studies

## WELLEIVITY

Connection. Healing. Learning. Growing.

### Written Impact Statements and Standards of Approval

**Current Zoning:** Rural-Resort  
**Proposed Zoning:** Rural-Resort Special Use Permit  
**Parcel Id:** 004-113-014-29, 014-15, 014-16, 014-26  
**Owner:** Steven Brock  
**Applicant:** Wellevity, LLC  
**Date of Text:** August 18, 2022, rev. November 8, 2022

### Introduction and Narrative

Wellevity is a full-service wellness resort<sup>1</sup> that will address the core components of health, wellness and thriving to create an environment of self-care and healing. Amenities will be owned and operated by one entity.

What makes Wellevity unique is that it provides all facets of holistic wellness in one place. You no longer need to go to a gym, a special grocery store, and a spa to achieve balance. It is a place of learning, support, relaxation, connection with nature, movement, and tranquility.

Our goal is to create a place where the community can gather with friends and family and make healthy decisions together. As many studies have shown, we are much more likely to succeed with our health goals if we are surrounded by a community that understands and supports those goals.

There is no one experience for people visiting Wellevity. We will celebrate the individuality of every client, allowing them to create their own journey.

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<sup>1</sup> **Elmwood Township Ordinance (Page 2-17) Resort:** A full-service lodging facility that provides access to or offers a range of amenities and recreation facilities. Resorts may provide services for meetings, business, and events.

**Project Recreational and accessory uses:****The Core Components of Wellevity<sup>2</sup>**

Spa with science backed offerings  
Access to sauna, steam, and pools  
Fitness center with certified personal trainers  
Studio Classes  
Restaurant & Cafe  
Cooking Classes  
Retail Space  
Meditation Dome  
Multi-Use Space  
Pavilion  
Trails for hiking, biking, cross-country skiing, & snow shoeing  
Outdoor contemplation spaces  
Bird Watching  
Star Gazing  
Greenhouse  
Outdoor gardens  
Foraging  
Kid's Club  
Outdoor natural play area  
On-site sleeping accommodations

**The Lodge**

- Guestrooms
- Reception
- Multi-use space
- Restaurant and bar
- Retail Market
- Recreational equipment rental
- Outdoor lawn
- Club room
- Greenhouse

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<sup>2</sup> **Elmwood Township Master Plan** (Page 42) Timberlee - This area has historically been used as a resort area and should be planned for the continued use as such. To take advantage of the extremes in elevation, the area lends itself naturally to both outdoor recreation and residential land uses. Non-residential uses, including restaurants, shops and services geared toward the local market are recommended to support the primary uses.



**CABINS & COTTAGES**

- Nestled within the campus community, a variety of cabins and cottages are strategically placed to offer lodging to families and friends who come to Wellevity to focus on health and wellness.
- Each cabin and cottage are designed to be substantially net-zero.
- Cabins and cottages will be placed amongst the existing vegetation, reducing unnecessary clearing. These structures are shown on the plan but may vary by a few feet to preserve sensitive trees, shrubs, and plants.
- Cottages 3-4 bedrooms each
- Cabins 1-3 bedrooms each

**FOOD & NUTRITION: RESTAURANT, CAFÉ, RETAIL SPACE, & COOKING CLASSES**

Incorporated in the Wellevity program are places for:

- Restaurant
  - Cafe
  - Retail market
  - Cooking Kitchen
- The market will primarily support local farmers and community products and allows guests to acquire ingredients and products that align with health goals. Local goods will allow for optimal freshness, seasonality, and support of the local economy.
  - All areas that will provide beverage will be under a Michigan Liquor Control License

**MEDITATION DOME**

- The meditation space will be open for both overnight guests and for the community to come in whenever they would like for a quiet space, and there will be guided meditations to allow for building of that skill.

**SPA AND MOVEMENT CENTER: FITNESS, STUDIO, & POOLS**

- The spa will offer a sanctuary from everyday life. Medically and scientifically backed treatments offered include, but are not limited to, lymphatic massage, red light therapy, floatation therapy, sauna, steam, VO2 max testing, body composition scanning and cold pool.
- As we all age, maintaining movement becomes critical to living a mobile and healthy life. Movement doesn't have to mean going to the gym every day. By offering a plethora of movement and exercise options, the hope is that everyone will find something that appeals to them.
  - Mobility assessments for training



- Studio classes like yoga and HIIT
- Pools for low-impact cardio workouts
- Outdoor recreational spaces for workouts and various forms of exercise.

#### **MULTI-USE SPACE, LAWN/GARDENS, GREENHOUSE & PAVILION**

- These spaces will be a multi-dimensional used to bring people together for meetings, business, and events<sup>3</sup>. Uses include, but are not limited to, family reunions, business conventions, retreats, weddings, and classes.
- Temporary tents located in designated areas (on the Site Plans) may be used as part of the multi-use space.
  - The use of luxury style portable restrooms will be an option for tented events
- Musical options, such as a DJ, acoustic or amplified bands may be offered in these spaces. The ethos of our project is rejuvenation, restoration, and appreciation for nature. As such, we intend to maintain a peaceful and serene environment on campus. We will align our outdoor music hours with other venues in Elmwood Township.
- There will be no fireworks allowed on the property.
- Native vegetation will be planted (see Landscape Plans) to aid with noise attenuation.

#### **KIDS CLUB**

- Guests will be able to drop off their children for a day of adventure and connection at the Kid's Club. In line with the mission of Wellevity, there will be a strong outdoor orientation with programming that focuses on the tenets of wellness. Programs will include but won't be limited to physical activities, mindfulness and breathwork, yoga, arts and crafts, sustainability, culinary pursuits, and social experiences.

#### **ENVIRONMENT, CONSERVATION DESIGN, HABITAT PRESERVATION**

- One of the things that attracted the Wellevity team to Northern Michigan for this concept is its immense natural beauty. It is difficult to not immediately feel a sense of awe when experiencing the Leelanau County area. In line with the Elmwood Township Master Plan<sup>4</sup>, we have an environmental consultant to advise us in conservation design and habitat preservation/restoration. Every choice we make will be with the lens of sustainability and conservation<sup>5</sup>.

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<sup>3</sup> **Elmwood Township Ordinance (page 2-17) Resort:** A full-service lodging facility that provides access to or offers a range of amenities and recreation facilities. Resorts may provide services for meetings, business, and events.

<sup>4</sup> **Elmwood Township Master Plan (Page 23) – Planning and Growth Management**

Goal: To guide future growth and development in a manner that respects both the natural environment and the Township's rural atmosphere, promotes an efficient and well-ordered land use pattern, and economized community facilities.

<sup>5</sup> **Elmwood Township Master Plan (Pages 24 – 25) - Environmental Features and Agricultural Land**

## COMMUNITY

- Although we are hoping to have guests come and stay at Wellevity for the reasons listed above, the campus will be open to guests on a shorter-term basis, as well. Opportunities to walk the trails, participate in a class, or have a spa treatment are open to all guests. We are excited by the idea of redefining the concept of a community center. This can be a space where the community can come to have a healing and transformative experience.
- When building our programming, we are looking at opportunities, with community support, to create a place that enhances the wellness environment of the area.
- The foundation of Wellevity is built on the belief that with the right support, education, resources, and facilities, we can all live happier and healthier lives, for the citizens of the township and surrounding community.

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Goal: protect environmentally sensitive area such as agricultural and orchard lands, wetlands, bodies of water, steep slopes, and groundwater recharge areas.

Strategies: Encourage the retention of productive agricultural and forest lands through available mechanisms such as open space and farmland agreements, forest stewardship programs, and conservation easements, as well as local zoning incentives. Discourage development on slopes greater than 18%. Encourage development to conserve scenic views.

**HISTORICAL USE OF SUBJECT PARCEL (ZONED RURAL RESORT RR)**

- The Timberlee area has played an important role in Northern Michigan recreational activities for almost 60 years and has created a well-established part in the Rural-Resort zoning district.
- In 1964, Timberlee Hill began operating as a ski hill. Over the years, the resort expanded to a year-round operation, offering memberships to Timberlee Hills Four Seasons Club.
- Some amenities and offerings included tennis, sailing, horseback riding trails, golf driving range. Snowmobile trails were open to the public.
- The resort included a Bar/Lounge with live music and night entertainment. A cafeteria, ski school, sports shop and hosted ski racing events.
- Weddings and receptions were hosted at the lodge, along with events and meetings. The site hosted farmers markets and luncheons.
- Financial struggles hit the resort and ultimately closed in 1976.



**TimberLee Hills Inc.** 

**FUN!**  
farmers daughter  
MONDAY John Garthe  
TUESDAY Joe Taschetta  
WEDNESDAY Jam Session  
THURSDAY John Garthe  
FRIDAY and SATURDAY "Asylum"  
SUNDAY Michael Camp

**FOOD!**  
GOLD BRICK SALOON  
MONDAY Singles Night  
TUESDAY 2 for 1  
(2 eat for price of 1)  
WEDNESDAY Italian Night  
(all you can eat)  
THURSDAY Prime Rib Special  
FRIDAY Authentic Southern  
Fish Fry  
SUNDAY Family Specials

**DRINK!**  
the farmers daughter  
is an intimate drinking spot located in the west end of TimberLee's banner room. Open every day at 5 a.m., the farmer's daughter features the finest in contemporary rock entertainment.  
GOLD BRICK SALOON features a warm, friendly atmosphere, personal service, and the finest food at reasonable prices.

**SLEEP!**  
Sun Perch Condominiums  
Sun Perch Condominium Motel — Excellent modern accommodations (catering and banquet facilities available).  
Call 946-2500 for Reservations or further information.

**TIMBERLEE HILLS  
TIMBERLEE VILLAGE  
TRAVERSE CITY, MICHIGAN**

## Article 8.5 - Standards for Site Plan Review

1. **All required site plan and application information has been provided as specified in this Article.**  
Yes, see Site Plans provided.

2. **All required permits and approvals from outside agencies have been secured, or have been made a condition of site plan approval.**  
All local and state agency reviews will be provided and shall be a condition of approval.

3. **Adequate essential facilities and services including highways, streets, police, fire protection, drainage structures, refuse disposal, water and sewage facilities, and schools are available, or the provision of such facilities and services has been assured.**

Water Supply: The project will include a private, Type IIa potable well with storage and distribution of domestic, irrigation and fire water to meet the new special land uses demands.

Wastewater Disposal: The project will include an onsite advanced wastewater treatment system with a combination of low-pressure soils disposal and drip irrigation disbursal systems. This system will be permitted through the Michigan Department of Environment, Great Lakes and Energy (EGLE).

Access: Deeded access through Cottonwood and Timberwoods Drive to existing deeded entrance at the South side of the property, which will accommodate all emergency, site operational and guest vehicles.

Drainage: Grading will be conducted in a manner that maintains the existing drainage patterns where possible, incorporating a decentralized stormwater management strategy to maximize infiltration across the site, while allowing for adequate landscape-based detention and snow management measures.

Refuse: Will be managed carefully and discreetly, with refuse containment that is protected from the elements and from view of guests.

Police and Fire Protection: The property is located in the Leelanau County Sheriff's Department jurisdiction and Elmwood Township Fire and Rescue Department provides service to the area.

4. **All applicable standards of agencies including, but not limited, to the Township Fire Department, Michigan Department of Transportation, Leelanau County Road Commission, Leelanau County Drain Commission, Health Department, and the Michigan Department of Environmental Quality (MDEQ) have been met.**

All local and state agency reviews will be provided and shall be a condition of approval.

5. **Compliance with all non- zoning ordinances adopted by the Township, including, but not limited to the private road ordinance.**

None applicable

6. **All buildings and structures shall be designed, constructed, operated, and maintained so as to be harmonious, compatible, and appropriate in appearance with the existing or intended character of the general vicinity.**

Each structure has been carefully placed within the natural topography and vegetation on the Timberlee property. The design and operation are integral to the wellness resort's methodology and will be harmonious to nature. The central placement and existing and proposed vegetative screening further expand the compatibility of this project with the community.

**7. The buildings, structures, and entryway thereto proposed are situated, designed, and screened/buffered so as to minimize any adverse effects upon owners and occupants of adjacent properties and the neighborhood.**

Screening is essential to the project. With the existence of heavy natural vegetation, the campus has been created to make that the advantage point to both the adjacent neighbors and Wellevity. Further vegetation is proposed (see Landscape plans) to provide further buffering from view and sound.

**8. All buildings and structures are accessible to emergency vehicles.**

Yes. Plans have been submitted to the Elmwood Township Fire Chief.

**9. Complete and safe pedestrian, non-motorized and vehicular circulation is provided.**

Provided through a low-speed network of private drive and sidewalks, guests are able to safely navigate the campus. Carts are used to transport individuals within the resort, as well.

**10. The percentage of impervious surface has been limited on the site to the extent practicable.**

Yes, see Site Plans provided.

**11. Efforts have been made to protect the natural environment to the greatest extent possible.**

Site programming was developed with the natural environment as the top priority. Previously cleared areas from the days of Timberlee Resort are the same areas that will be used for Wellevity. Other small structures are nestled throughout the existing vegetation and terrain, with minimal impact to the environment. Preservation and restoration are key components that are found throughout the campus.

**12. There exists within the site plan sufficient protection to accommodate storm water runoff on the site location.**

Plans have been prepared to meet the Leelanau County Soil Erosion, Sedimentation and Stormwater Runoff Control (SESSRC) Ordinance and are subject to review and permitting by Leelanau Conservation District.

**13. The proposal furthers the goals and objectives of the Master Plan.**

***Elmwood Township Master Plan (Page 23) – Planning and Growth Management***

*Goal: To guide future growth and development in a manner that respects both the natural environment and the Township's rural atmosphere, promotes an efficient and well-ordered land use pattern, and economized community facilities.*

*Objective: Accommodate future growth within the Township while maintaining its existing rural/residential character. Guide development in a manner that conserves natural features and environmentally sensitive areas and meets the long-term needs of the community."*



The ethos of our project is rejuvenation, restoration, and appreciation for nature. Our landscape architect is highly experienced with adding natural vegetation to enhance the natural beauty of the land as well as promote native species to inhabit our land.

The architectural aesthetic of the buildings is designed to minimize the visual interruption from the beautiful natural setting.

***Elmwood Township Master Plan (Pages 24 – 25) - Environmental Features and Agricultural Land***

*Goal: protect environmentally sensitive area such as agricultural and orchard lands, wetlands, bodies of water, steep slopes, and groundwater recharge areas.*

*Strategies: Encourage the retention of productive agricultural and forest lands through available mechanisms such as open space and farmland agreements, forest stewardship programs, and conservation easements, as well as local zoning incentives. Discourage development on slopes greater than 18%. Encourage development to conserve scenic views.*

Working with the forested topography, each structure has been placed primarily in areas where the land was already disrupted from past development uses. A large portion of the site will remain untouched.

Slopes greater than 18% are preserved and identified in the Site Plan packet.

***Elmwood Township Master Plan (Page 42) Timberlee***

*This area has historically been used as a resort area and should be planned for the continued use as such. To take advantage of the extremes in elevation, the area lends itself naturally to both outdoor recreation and residential land uses. Non-residential uses, including restaurants, shops and services geared toward the local market are recommended to support the primary uses.*

Wellecity is a full-service resort with outdoor recreation (outlined in the narrative), restaurants, and retail geared toward the local market and tourists.

When building our programming, we are looking at opportunities, with community support, to create a place that enhances the wellness environment of the area.

The foundation of Wellecity is built on the belief that with the right support, education, resources, and facilities, we can all live happier and healthier lives. That is what we want to provide for the citizens of Elmwood Township.



### **Article 9.3- Special Use Permit General Standard**

**1) The proposed special land use meets the objectives, intent, and purposes of this Article and the zoning district in which the proposed special land use is to be located.**

Wellevity, a proposed wellness resort, is to be located on a 100-acre parcel within the Rural Resort zoning district. This wellness focused campus has focused on protecting the area's atmosphere by keeping with the essential character of the area. The critical component of the master design plan of Wellevity is to have all the structures seamlessly blend with the existing environment and to focus on an ecologically sound balance between the activities within the Wellevity campus and the surrounding environment. The plan has been created to eliminate disturbance to neighboring properties, yet incorporating a mix of uses that complement the Elmwood Township character. We have carefully curated the services that Wellevity will offer to satisfy the needs of the community and guests to the area. Our programming focuses on improving modifiable lifestyle factors that affect our health, wellness, and happiness. We have identified those factors as: nutrition & hydration, movement & fitness, sleep & restoration, and connections & relationships. This project was created to maximize the ability to analyze and modify all of those factors. It is our strong belief that the only way to achieve optimal health is to connect with nature, therefore our resort will be primarily focused on outdoor activities. Please see the narrative for our complete program.

**2) The proposed special land use is designed, and is intended to be constructed, operated, maintained, and managed so as to be consistent with the existing or intended character of parcels within the zoning district.**

The Wellevity campus has been developed in keeping with the essential character of the area. A critical component of our master design plan is to have the buildings blend into the environment around them, to focus on an ecologically sound balance between the activities within the Wellevity campus and the surrounding environment, and to reduce both the resident capacity and the disturbance to neighboring properties and the natural surroundings.

**3) The proposed special land use meets or exceeds the minimum requirements for the zoning district in which it is requested to be located.**

The proposed plan exceeds the minimum requirements for the R-R zoning district. The parcel(s) combined contain 100 acres. (5 acre is the minimum) The width exceeds 235 feet and all setbacks exceed the minimums and are noted on the submitted site plan. All buildings are less than 35' in height (accessory building limited to 25') as defined in Elmwood Township zoning ordinance (page 5-10 and 5-11). Wellevity will create approximately 50 full-time and part-time jobs for both seasonal and year-round employees for the entire operation.

**4) The proposed special land use will be served adequately by essential public utilities, facilities, and services such as water supply, wastewater disposal, highways, roads, police and fire protection, drainage structures, and refuse disposal. Alternatively, such services, if adequate to serve the proposed special land use, may be provided privately or by a combination of public and private providers.**

Water Supply: The project will include a private, Type IIa potable well with storage and distribution of domestic, irrigation and fire water to meet the new special land uses demands.

Wastewater Disposal: Due to the anticipated wastewater flows greater than 10,000 gallons/day, the project will include an onsite advanced wastewater treatment system to achieve EBNR (Effluent-Based Nitrogen Removal) treatment levels with a combination of low-pressure soils disposal and drip irrigation disbursal systems. This system will be permitted through the Michigan Department of Environment, Great Lakes and Energy (EGLE).

Access: Deeded access through Cottonwood and Timberwoods Drive to existing deeded entrance at the South side of the property, which will accommodate all emergency, site operational and guest vehicles.

Drainage: Grading will be conducted in a manner that maintains the existing drainage patterns where possible, incorporating a decentralized stormwater management strategy to maximize infiltration across the site, while allowing for adequate landscape-based detention and snow management measures.

Refuse: Will be managed carefully and discreetly, with refuse containment that is protected from the elements and from view of guests.

**5) The proposed special land use will not adversely impact existing or future neighboring uses. For example, but without limitation, the proposed special land use shall be designed as to location, size, intensity, site layout, and periods of operation to eliminate any possible conflicts. Additionally, it shall not be detrimental to any persons, property, or the general welfare by reason of excessive smoke, fumes, glare, noise, vibration, and odors, nor have adverse environmental impacts and detrimental effects on the general aesthetics or appearance of the character of existing or future neighborhood uses.**

The ethos of the Wellevity project is about rejuvenation, restoration, and appreciation for nature. As such, we intend to maintain a peaceful and serene environment on campus. The site has established vegetation throughout the 100 acres and each proposed structure is located carefully to preserve the natural environment. The overall distances to surrounding neighbors will exceed the zoning district minimums and each structure will be significantly screened from neighboring views. These distances and significant vegetation protect the area from adverse impacts. Sound emanating from the campus is minimal; screening of existing and proposed vegetation will assist in noise attenuation.

**6) The proposed special land use shall not have an adverse effect on the natural environment beyond the normal impacts of permitted principal uses in the same zoning district, and shall not result in impairments, pollution or destruction of the air, surface, ground water, vegetation, and other natural resources.**

Environment:- Conservation design, sustainability, and habitat preservation/restoration is the primary focus of Wellevity.

Building placement will be selected to minimize existing vegetation loss.

Native vegetation will be added to encourage wildlife.

An onsite advanced wastewater treatment system to achieve EBNR (Effluent-Based Nitrogen Removal) treatment levels with a combination of low-pressure soils disposal and drip irrigation disbursal systems will be implemented to limit any impact to ground-water.

Building materials: - Will be vetted to confirm they are ethically sourced and produced. Materials selected will have been audited to reduce impacts on human and environmental health. - Minimize VOCs - Less hazardous cleaning products will be used.  
Waste Management: - A plan will be created and executed (during construction and operation) that optimizes the safe management and minimization of wastes associated with hazardous chemicals present in commonly used products.

**7) The proposed special land use will not create excessive additional requirements or costs for public facilities, utilities and services.**

The project will provide all of its own utilities (water and sewer) and the demand for energy will be supplemented through the design and construction as well as sustainable resources. The low impact nature of the project and its programming will not increase the demand for public services.

**8) The proposed special land use has met or will meet all requirements of other Township, County, State, and Federal ordinance and code requirements.**

All applicable ordinances and code requirements will be met and shall be a condition of approval.

**9) The following specific requirements shall be met to the extent applicable to the proposed special land use:**

- a) **Ingress and egress for the special land use shall be controlled to ensure maximum vehicular and pedestrian safety, convenience, and minimum traffic impact on adjacent roads and highways, drives, and nearby uses including, but not limited to:**
  - i.* **Minimization of the number of ingress and egress points through elimination, minimization, and consolidation of drives and curb cuts;**
  - ii.* **Minimization of the number of ingress and egress points through elimination, minimization, and consolidation of drives and curb cuts;**
  - iii.* **Minimization of pedestrian and vehicular traffic conflicts;**
  - iv.* **Adequacy of sight distances between road and driveway intersections as specified in Section 6.2, Access Management.**
  - v.* **Location and accessibility of off-street parking, loading, and unloading for automotive vehicles, including buses and trucks;**
  - vi.* **Location and potential use of ingress and egress drives to access special land use parcels for the purpose of possibly reducing the number of access points necessary to serve the parcels.**
  - vii.* **Adequate maneuverability and circulation for emergency vehicles.**

The intent of this wellness resort is to bring guests to the campus, to use the facilities, to stay overnight and/or hike the trails and attend a wellness class or two. Frequent ingress and egress are limited due to the length of time spent by visitors.

In addition, to reduce the traffic coming to and from the property, electrically powered courtesy vehicles will be provided to all guests of Wellevity.

On-demand shuttles running to Traverse City, the airport and surrounding communities are available and will be encouraged, greatly reducing ingress and egress to the property.

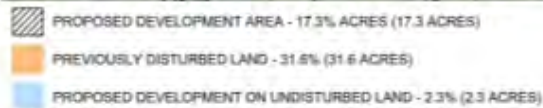
Access is centrally located to allow for overnight and day guests to a streamlined ingress and egress to the site.



Internal parking lots and spaces are located contiguous to the structures they service, with overflow parking available if needed. Bikes and electrical carts will also be provided on the property to reduce the amount of vehicular traffic.

**b) Screening shall be provided along all sides and rear property lines by a buffer area, and along the front property line by a greenbelt in accordance with Section 6.4, unless it can be demonstrated that the proposed special land use can be adequately controlled through some other means, such as restrictions on the hours of operation, or reducing the impact by the type and level of activity to be conducted on the site.**

One of the best features about this 100-acre site is the well-established vegetation located throughout the property. In order to shelter and screen, the proposed structures are located internally, to benefit from the natural screening aesthetic of the property. The proposed structures are situated on the areas that were originally cleared for other uses in the Timberlee Resort days, which has greatly diminished the need for clearing any additional vegetation of the natural buffer.



## Article 8.4 - Requirements for Site Plan Approval

1-7) See site plan packet

**8) Statement of proposed use of land, project completion schedule, and any proposed development phasing.**

Proposed use of land is rural resort. This project is to be constructed in one phase, anticipated to begin construction in Summer 2023 and completion estimated within two years.

**9) Statements regarding the project impacts on existing infrastructure, including traffic, schools, existing utilities, and the natural environments on and adjacent to the site.**

Infrastructure and Utilities: Existing utilities will not be impacted by this proposed development. A proposed wastewater sanitary system will be constructed on site. The use of the existing well will service the development. Stormwater management will handle all onsite runoff and be contained within a series of detention basins and retention systems.

Traffic: Considerable effort has been made to consolidate traffic to and from the site, along with minimizing onsite traffic, as well. The intent of the wellness resort is for overnight and day guests to come and relax, to enjoy recreation, nature and the amenities offered to support that. This reduces the number of guests coming and going. Shuttle vans are to be utilized to transport guests around the area.

10-37) See site plan packet



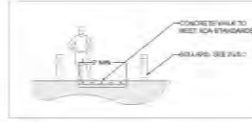




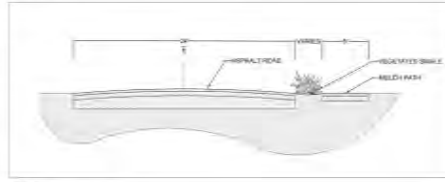


**CIRCULATION TYPES**

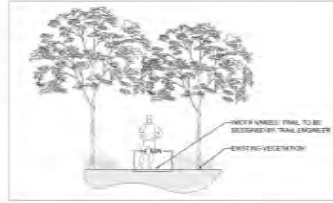
- ADA ACCESSIBLE ROUTES
- PARKING
- BUILDING FOOTPRINT
- TRAIL
- SNOWBIDE TRAIL



1 ADA ACCESSIBLE ROUTE TO BEE FOR STRENGTH



2 ADA ACCESSIBLE ROUTE TO BEE FOR STRENGTH



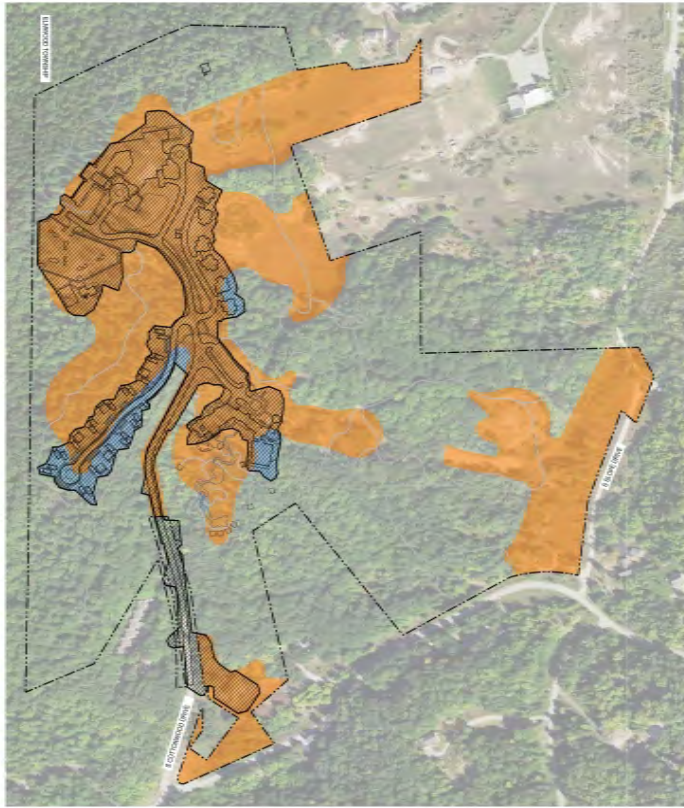
3 ADA ACCESSIBLE ROUTE TO BEE FOR STRENGTH

**WELLEIVITY**  
SPECIAL USE PERMIT APPLICATION

environmentarchitects

LANDSCAPE PLAN  
CIRCULATION  
L1.2





1 DISTURBED LAND  
FOR  
L2.0 DISTURBED LAND CAPABILITY

**SITE INFO**  
OVERALL ACREAGE: 88 ACRES  
PROPOSED DEVELOPMENT AREA - 18.1 ACRES  
PREVIOUSLY DISTURBED LAND - 43.3 ACRES  
PROPOSED DEVELOPMENT ON UNDISTURBED LAND - 2.4 ACRES

REVISIONS  
01/2024  
02/2024  
03/2024  
04/2024

**WELLEIVITY**  
SPECIAL USE PERMIT APPLICATION

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DISTURBED LAND  
MAP  
L2.0





**LEGEND**

- PROPERTY LINE
- PROPOSED DEVELOPMENT AREA
- TRAILING PATH (TO BE DESIGNED BY TRAIL ENGINEERS)
- EXISTING WETLANDS

**SITE INFO**

- OVERALL ACREAGE: 98.86 ACRES
- TOTAL PROVIDED OPEN SPACE: 12.2 ACRES
- RECREATIONAL SPACE THAT IS UNDEVELOPED AND UNDESIGNED UNDER CONCEPT
- PROVIDED: 2.8 ACRES



DATE: 11/15/2022

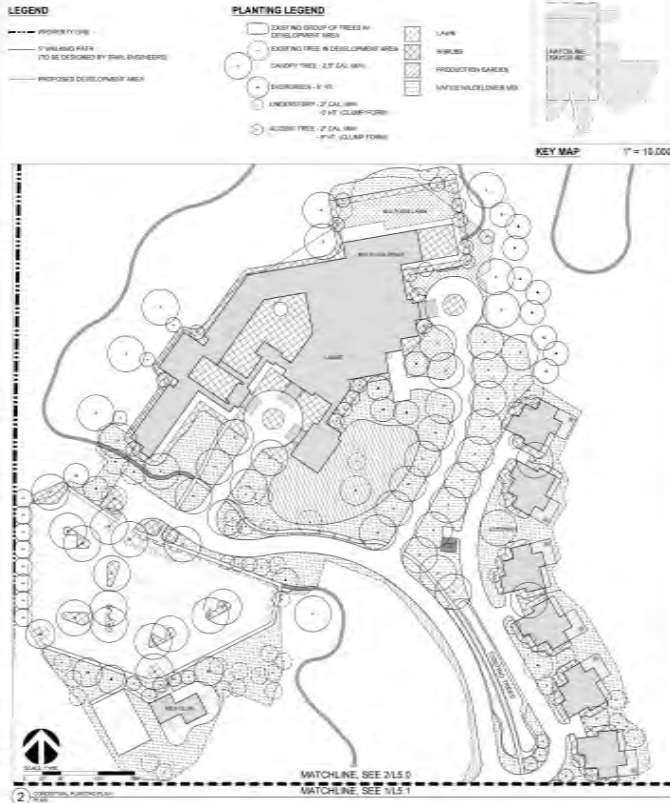
**WELLEIVITY**  
SPECIAL USE PERMIT APPLICATION

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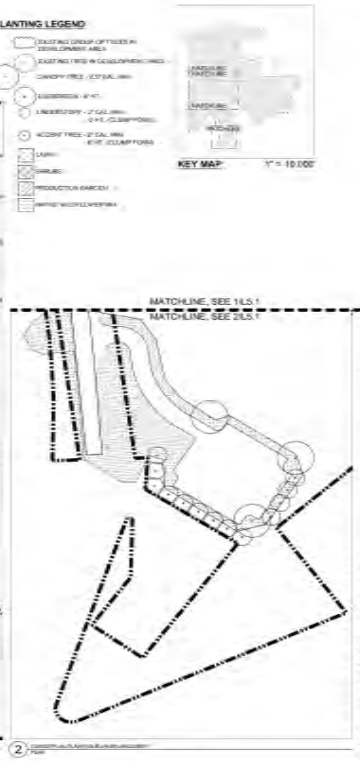
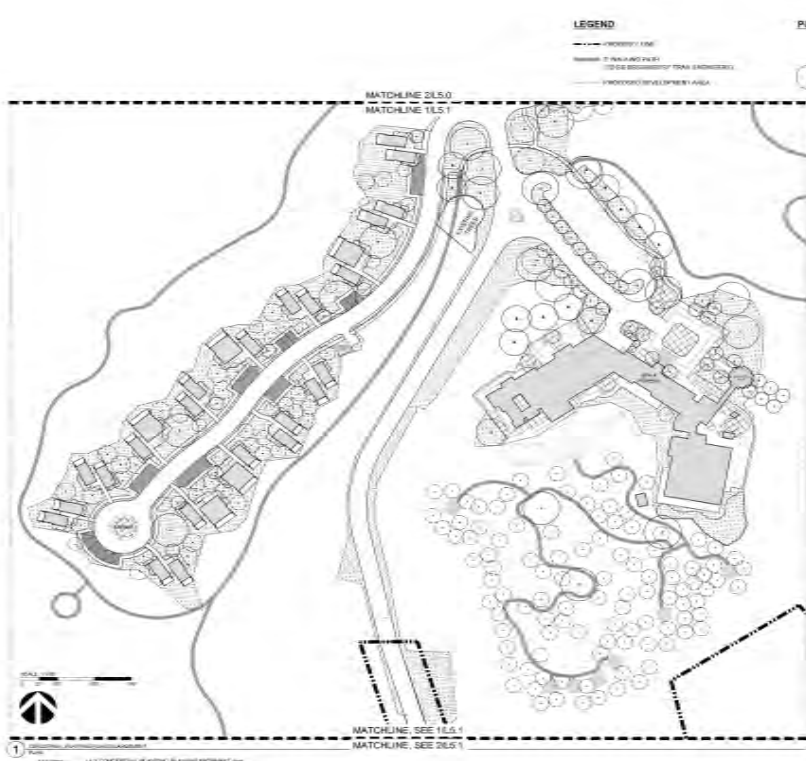
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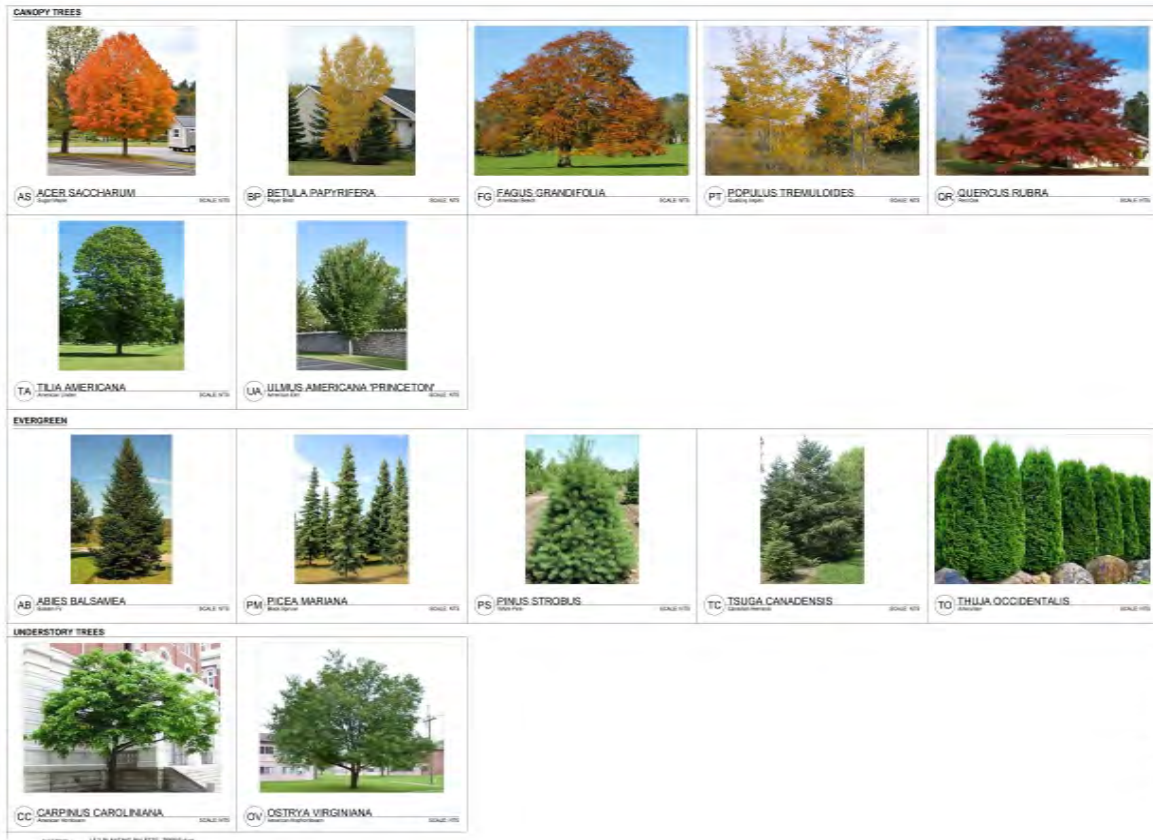




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**WELLEIVITY**  
 SPECIAL USE PERMIT APPLICATION  
 L5.0



environmentalarchitects  
**WELLEIVITY**  
 SPECIAL USE PERMIT APPLICATION  
 L5.1



← TREE →  
 1" = 10' (Scale for Photo)  
 1" = 20' (Scale for Plan)

© 2023

WELLEVIETY  
SPECIAL USE PERMIT APPLICATION

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PLANTING PALETTE  
L5.2





1510 Ambrosum Drive, SE  
Grand Rapids, Michigan 49548  
(616) 570-3000 | [fishbeck.com](http://fishbeck.com)

## Memo

**TO:** Georgina Flower – Wellevity, LLC

**FROM:** Timothy J. Likens, PE, PTOE

**DATE:** November 8, 2022

**PROJECT NO.:** 221602

**RE:** Wellevity Resort – Trip Generation Study  
Elmwood Township, Michigan

### Introduction

Wellevity, LLC is proposing to develop a wellness resort in Elmwood Township, Leelanau County, Michigan. The approximate 100-acre site occupies a portion of the former TimberLee ski resort property and is zoned Rural-Resort. Local access for the Wellevity resort will be provided via Cottonwood Drive and Timberwoods Drive, which are private. Connection to the collector/arterial network is provided by Mann Road, which connects Timberwoods Drive to Fouch Road. The public roadways are under jurisdiction of the Leelanau County Road Commission (LCRC), and site plan review falls under Township jurisdiction.

The proposed resort is intended to provide a variety of holistic wellness resources within one campus. Lodging options will be available for guests, and some amenities will be open to the community at-large. The purpose of this study is to establish an understanding of the trip generation potential of these uses, as well as to provide an investigation of the road network servicing the site.

### Trip Generation

Fishbeck has completed a trip generation forecast for the Wellevity wellness resort based on the land uses that are proposed to comprise the development. This forecast was completed using the data and methodologies published in the latest version of the Institute of Transportation Engineers (ITE) *Trip Generation, 11th Edition*. Trip forecasts were calculated for the typical weekday a.m. and p.m. peak periods of adjacent street traffic (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) as well as the peak hours of the generator (site).

Key land uses included in the proposed wellness resort plan include a variety of lodging options, restaurant space, outdoor recreation, and a spa/fitness center. Additional uses on the site will largely support the key land uses, including multi-purpose space, children's programming, and a café within the spa.

Due to the variety of land uses proposed for this development, an extensive comparison of the site with land use categories as defined by ITE was completed. For each space proposed for the resort, the most applicable ITE land use category was identified for trip generation forecast calculations. Key ITE land use definitions include #330 Resort Hotel, #411 Public Park, #492 Health/Fitness Club, and #932 Sit-Down Restaurant. Other supporting land uses are defined by ITE to be inherent to the operational and trip generating characteristics of the key land uses. Details for the proposed land uses, size, ITE classifications, and assumptions are outlined in the attached Table 1.

ITE publishes average peak hour trip generation rates which are referenced for each of the key land uses. The resultant trip generation forecasts for the a.m. and p.m. hours of adjacent street traffic, as well as the peak hours



of the site, are outlined in the attached Tables 2 and 3, respectively. The peak hour of the generator forecast conservatively assumes that all land uses on the site will peak simultaneously.

In addition to the trip generation potential for the proposed land uses, a trip generation forecast was estimated for the peak hours of the former ski resort. Research on the historical occupancy of the site was completed to identify the key land uses, which included review of web pages, news publications, and information provided by Wellevity regarding the history of the property. The former land uses are defined by ITE to include #496 Snow Ski Area, #492 Health/Fitness Club, #932 Sit-Down Restaurant, and #975 Drinking Place. The resultant trip generation forecast is shown in the attached Table 4.

### Roadway Characteristics

Fishbeck reviewed the road network in the immediate vicinity of the site to gather information related to traffic volumes, lane configurations, and crash history. The roadways reviewed which service this site include the following, with national functional classifications listed:

Cottonwood Drive	Non-certified (local)
Timberwoods Drive	Non-certified (local)
Mann Road	Local road
Fouch Road	Major Collector
Bugai Road/Lake Leelanau Drive	Minor Arterial

Review of Google Earth aerial imagery indicates that each of these roadways are paved with two travel lanes (one in each direction) and variable shoulder width. The minor approaches at each intersection are stop-controlled, including the approaches of Fouch Road at Bugai Road/Lake Leelanau Drive. At this intersection, each approach also has dedicated left-turn lanes.

Traffic volume data for these roads was researched via the LCRC and Michigan Department of Transportation (MDOT) websites. Average daily traffic (ADT) volumes were found published by MDOT on the Transportation Data Management System (TDMS) and non-trunkline ADT maps. Data are published for Fouch Road and Bugai Road/Lake Leelanau Drive which indicate that these roads carry approximately 1,000 vehicles per day or less, which equates to approximately 100 vehicles during the peak hour (based on a published K-factor of 10%). A single travel lane has a typical capacity of 1,800 to 2,000 vehicles per hour.

Historical crash data were reviewed, as published on the Michigan Traffic Crash Facts (MTCF) website, which references the Michigan State Police database. Crash data were used for the most recent available 5-year period from 2017 to 2021, inclusive, for the roadway network surrounding the proposed site. A map of the reviewed area and the crash locations can be found attached. Crashes were filtered to remove animal (deer) crashes. Thirty-five non-animal crashes were reported on the area roadways for an average of seven non-animal crashes per year for the surrounding area. The majority (22; 63%) were single vehicle crashes, mostly occurring during snowy/icy/wet pavement conditions. The majority of crashes resulted in property damage only (28; 80%). Two A-level serious injury crashes occurred in the site vicinity, including one angle crash and one single vehicle crash. The angle crash involved a motorcycle being struck at the intersection of Fouch Road and Bugai Road/Lake Leelanau Drive. The single vehicle crash involved an intoxicated driver departing the roadway in wet pavement conditions.

Memo – Wellevity Resort – Trip Generation  
November 8, 2022

Fishbeck | Page 3

## Conclusions

The research and analyses completed for this study and outlined herein is summarized by the following key findings:

1. The proposed land uses will generate less than 50 directional trips during the a.m. and p.m. peak hours of the adjacent road network. If all proposed uses peak during the same hour, conservatively the site is forecast to generate a maximum of 69 directional trips.
2. The former ski resort is estimated to have generated over 100 directional trips during the peak hours of the site, with a maximum of 205 directional trips.
3. Comparison of the proposed site trip generation forecast versus the former resort and versus the available roadway capacity indicates that the wellness resort would not have any significant impact on traffic operations on the area road network and intersections.
4. Evaluation of historical crash data indicates no pattern of crashes on these roadways in the vicinity of the subject site. This condition is not expected to change based on the relatively low volume of traffic forecast to be generated by the site versus the available network capacity.
5. The order of magnitude for traffic volumes expected to be generated by the proposed resort use are consistent with the rural-resort zoning and environment of the subject site.

Based on these findings, no improvements to the study area road network nor intersections are expected to be necessary to facilitate the proposed wellness resort.

Attachments: Trip Generation Tables 1-4  
ITE Trip Generation Land Use Information  
MDOT TDMS Traffic Volume Data  
MTCF Historical Crash Data

Copy: Kyle Reidsma, PE, PTOE – Fishbeck  
Asa de Vries, EIT – Fishbeck

**Table 1 – Proposed Land Uses and ITE Land Use Codes**

Building	Use	Size	ITE Information	Assumptions
Lodge	Guestrooms	20 rooms	Resort Hotel: ITE #330 Sleeping, restaurant, lounges, retail shops, guest services, recreation; not convention center	Main building for resort, assume standard guestroom: ITE trip generation inherently includes many of the supporting services marked N/A on this table
	Multi-Use Room	2,400 sq. ft.	N/A	business/event space accounted for by overall resort calculations
	Restaurant	1,875 sq. ft. 75 seat capacity	Sit-Down Restaurant: ITE #932 60-minute or less seating time, moderately priced, casual dining. Better fit than fine dining restaurant	The restaurant will be open for guests and the public: conservatively assume 50 seats occupied by external guests
	Market	Not specified	N/A	Supportive service for resort guests/restaurant to source local products
	BOH/Offices	Not specified	N/A	Included in resort functions
Kid's Club	Children's programming	2,050 sq. ft.	N/A	Service provided for resort guests: assume employees would be on resort in some capacity regardless of this specific service
Cottages	Guestrooms	6 cottages 24 rooms	Resort Hotel: ITE #330	Cottages are 2,500 sq. ft.+ each, will host multiple guests (family, friends)
Cabins	Guestrooms	14 cabins 34 rooms	Resort Hotel: ITE #330	Cabins are 1,030 to 1,545 sq. ft., will host 1 family with some shared occupancy
Spa + Fitness	Guestrooms	10 rooms	Resort Hotel: ITE #330	standard guestroom
	Spa	24,975 sq. ft. (excluding guestrooms)	Health/Fitness Club: ITE #492 fitness, weights, spa, lockers, small restaurant/snack bar; may also include pool, sauna, retail, racquet sports	ITE trip generation inherently includes many of the supporting services. Assume open to guests and public; 60%/40% split = 10,000 sq. ft. external trips
	Fitness	3,750 sq. ft.	N/A	use included in health/fitness
	Pool	2,500 sq. ft.	N/A	use included in health/fitness
	Cafe	Not specified	N/A	use included in health/fitness
Pavilion	Outdoor	1,025 sq. ft.	N/A	Ancillary outdoor use
Service Hut	Outdoor	400 sq. ft.	N/A	housekeeping services
Park/Trail	Outdoor	5 acres	Public Park: ITE #411	conservatively assume 5 acres generating public demand

**Table 2 - Weekday Trip Generation: Peak Hour of Adjacent Street Traffic**

ITE Code	ITE Rate Description	Unit	Amount	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
330	Resort Hotel	Rooms	88	20	8	28	15	21	36
411	Public Park	Acres	5	0	0	0	0	1	1
492	Health/Fitness Club	sq. ft.	10,000	7	6	13	20	15	35
932	Sit-Down Restaurant	Seats	50	12	11	23	11	9	20
<b>Total Trips</b>				<b>39</b>	<b>25</b>	<b>64</b>	<b>46</b>	<b>46</b>	<b>92</b>

**Table 3 - Weekday Trip Generation: Peak Hour of the Generator**

ITE Code	ITE Rate Description	Unit	Amount	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
330	Resort Hotel	Rooms	88	23	13	36	22	22	44
411	Public Park	Acres	5	8	5	13	6	10	16
492	Health/Fitness Club	sq. ft.	10,000	6	8	14	20	19	39
932	Sit-Down Restaurant	Seats	50	18	12	30	20	18	38
<b>Total Trips</b>				<b>55</b>	<b>38</b>	<b>93</b>	<b>68</b>	<b>69</b>	<b>137</b>

**Table 4 - Weekday Trip Generation: Former Ski Resort (Estimated): Peak Hour of the Generator**

ITE Code	ITE Rate Description	Unit	Amount	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
466	Snow Ski Area	Lifts	4	96	3	99	16	119	135
492	Health/Fitness Club	sq. ft.	25,000	16	19	35	51	47	98
932	Sit-Down Restaurant	Seats	80	28	19	47	31	29	60
975	Cocktail Lounge	sq. ft.	2,000	0	0	0	21	10	31
<b>Total Trips</b>				<b>140</b>	<b>41</b>	<b>181</b>	<b>119</b>	<b>205</b>	<b>324</b>



## Land Use: 330 Resort Hotel

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### Description

A resort hotel is similar to a hotel (Land Use 310) in that it provides sleeping accommodations, full-service restaurants, cocktail lounges, retail shops, and guest services. The primary difference is that a resort hotel caters to the tourist and vacation industry, often providing a wide variety of recreational facilities/programs (e.g., golf courses, tennis courts, beach access, or other amenities) rather than convention and meeting business. Hotel (Land Use 310), all suites hotel (Land Use 311), business hotel (Land Use 312), and motel (Land Use 320) are related uses.

### Additional Data

It is recognized that some resort hotels cater to convention business as well as the tourist and vacation industry. The sites in the database do not have convention facilities. A resort hotel with convention facilities is likely to have a different level and pattern of trip generation than is presented in the data plots.

Nine studies provided information on room occupancy at the time of data collection. The average occupancy rate for these sites was approximately 88 percent.

Some properties in this land use provide guest transportation services (e.g., airport shuttle, limousine service, golf course shuttle service) which may have an impact on the overall trip generation rates.

The sites were surveyed in the 1980s and the 1990s in California, Florida, and South Carolina.

***For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.***

### Source Numbers

270, 381, 436

## Land Use: 411 Public Park

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### Description

A public park is owned and operated by a municipal, county, state, or federal agency. The parks surveyed vary widely as to location, type, and number of facilities, including boating or swimming facilities, beaches, hiking trails, ball fields, soccer fields, campsites, and picnic facilities. Seasonal use of the individual sites differs widely as a result of the varying facilities and local conditions, such as weather. For example, some of the sites are used primarily for boating or swimming; others are used for softball games. Soccer complex (Land Use 488) is a related use.

### Additional Data

The percentage of the park area that is used most intensively varies considerably within the studies contained in this land use. Therefore, caution should be used when using acres as an independent variable.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITE TripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, New Jersey, New York, North Carolina, and Oregon.

### Source Numbers

186, 392, 407, 709, 729, 852, 905

## Land Use: 492 Health/Fitness Club

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### Description

A health/fitness club is a privately-owned facility that primarily focuses on individual fitness or training. It typically provides exercise classes, fitness equipment, a weight room, spa, lockers rooms, and a small restaurant or snack bar. This land use may also include ancillary facilities, such as a swimming pool, whirlpool, sauna, limited retail, and tennis, pickle ball, racquetball, or handball courts. These facilities are membership clubs that may allow access to the general public for a fee. Racquet/tennis club (Land Use 491), athletic club (Land Use 493), and recreational community center (Land Use 495) are related uses.

### Additional Data

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), Connecticut, New Jersey, Pennsylvania, Vermont, and Wisconsin.

### Source Numbers

253, 571, 588, 598, 728, 926, 959, 971

## Land Use: 932

### High-Turnover (Sit-Down) Restaurant

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#### Description

This land use consists of sit-down, full-service eating establishments with a typical duration of stay of 60 minutes or less. This type of restaurant is usually moderately priced, frequently belongs to a restaurant chain, and is commonly referred to as casual dining. Generally, these restaurants serve lunch and dinner; they may also be open for breakfast and are sometimes open 24 hours a day. These restaurants typically do not accept reservations. A patron commonly waits to be seated, is served by wait staff, orders from a menu, and pays after the meal.

Some facilities offer carry-out for a small proportion of its customers. Some facilities within this land use may also contain a bar area for serving food and alcoholic drinks.

Fast casual restaurant (Land Use 930), fine dining restaurant (Land Use 931), fast-food restaurant without drive-through window (Land Use 933), and fast-food restaurant with drive-through window (Land Use 934) are related uses.

#### Additional Data

*Users should exercise caution when applying statistics during the AM peak periods, as the sites contained in the database for this land use may or may not be open for breakfast. In cases where it was confirmed that the sites were not open for breakfast, data for the AM peak hour of the adjacent street traffic were removed from the database.*

If the restaurant has outdoor seating, its area is not included in the overall gross floor area. For a restaurant that has significant outdoor seating, the number of seats may be more reliable than GFA as an independent variable on which to establish a trip generation rate.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Florida, Georgia, Indiana, Kentucky, Massachusetts, Minnesota, New Hampshire, New Jersey, New York, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Vermont, and Wisconsin.

#### Source Numbers

126, 269, 275, 280, 300, 301, 305, 338, 340, 341, 358, 384, 424, 432, 437, 438, 444, 507, 555, 577, 589, 617, 618, 728, 868, 884, 885, 903, 927, 939, 944, 961, 962, 977, 1048.

## Land Use: 466 Snow Ski Area

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### Description

A snow ski area typically includes chair lifts, ski runs, and a lodge facility. A snow ski area may also contain equipment rental facilities, refreshment areas, locker rooms, and small commercial/office space.

### Additional Data

*Future data submissions are encouraged to provide information on lift capacity in terms of seats or persons per hour in order to account for singles, doubles, quads, gondolas, and high-speed lifts.*

The sites were surveyed in the 2010s and 2020s in Maine and Montana.

### Source Numbers

723, 1085



## Land Use: 975 Drinking Place

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### Description

A drinking place contains a bar, where alcoholic beverages and food are sold, and possibly some type of entertainment, such as music, television screens, video games, or pool tables. Establishments that specialize in serving food but also have bars are not included in this land use.

### Additional Data

All data for this land use were collected on Mondays through Thursdays.

The sites were surveyed in the 1980s, the 1990s, and the 2010s in Colorado, Florida, Oregon, Pennsylvania, and South Dakota.

### Source Numbers

291, 358, 583, 1020, 1053

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Transportation Data Management System

Disclaimer: The Michigan Department of Transportation (MDOT) works with individual agencies (cities/villages, counties, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), and other areas of MDOT) to identify existing traffic count programs and/or traffic data. [more](#)

List View All DIRs Report Center

Record 1 of 1 Gold Records go

Location ID	45-5013	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	
LRS ID	1150108	LRS Loc Pt.	4.859
SF Group	Rural Non State	Route Type	
AF Group	NoFactor	Route	
GF Group	Rural Non State	Active	Yes
Class Dist Grp	NTL_5	Category	Primary
Seas Class Grp			
WIM Group			
QC Group	Default		
Fact'l Class	(5) Major Collector	Milepost	
Located On	FOUCH RD		
Loc On Alias	County Road 614		
	E OF PARKER W OF TIMBERLEE		

More Detail

STATION DATA

Directions: 2-WAY EB WB

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2021	651 <sup>3</sup>				610 (94%)	41 (6%)	Grown from 2020
2020	589 <sup>3</sup>				548 (93%)	41 (7%)	Grown from 2019
2019	675 <sup>3</sup>				647 (96%)	28 (4%)	Grown from 2018
2018	674 <sup>3</sup>				656 (97%)	18 (3%)	Grown from 2017
2017	669 <sup>3</sup>				640 (96%)	29 (4%)	Grown from 2016

1-5 of 6

VOLUME COUNT

Date	Int	Total
No Data		

VOLUME TREND

Year	Annual Growth
2021	11%
2020	-13%
2019	0%
2018	1%
2017	4%

CLASSIFICATION

Date	Int	Total
No Data		

NOTES/FILES

Note	Date
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https://mdot-public.ms2soft.com/tcds/tsearch.asp?loc=mdot

1/1

11/4/22 10:59 AM

Transportation Data Management System



Transportation Data Management System

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List View All DIRs Report Center

Record	1 of 1		Go
Location ID	45-5015	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	
LRS ID	3450058	LRS Loc Pt	1.055
SF Group	Rural Non State	Route Type	
AF Group	NoFactor	Route	
GF Group	Rural Non State	Active	Yes
Class Dist Grp	NTL_5	Category	Primary
Seas Class Grp			
WIM Group			
QC Group	Default		
Frct'l Class	(5) Major Collector	Milepost	
Located On	CHERRY BEND RD		
Loc On Alias	County Road 633		
	BETWEEN STRANG AND BREITHAUPT (ELMWOOD TWP)		
More Detail	▶		
STATION DATA			

Directions: 2-WAY NB SB

EDIT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2021	1,009 <sup>3</sup>				948 (94%)	61 (6%)	Grown from 2020
2020	913 <sup>3</sup>				850 (93%)	63 (7%)	Grown from 2019
2019	1,047 <sup>3</sup>				1,006 (96%)	41 (4%)	Grown from 2018
2018	1,045 <sup>3</sup>				1,019 (98%)	26 (2%)	Grown from 2017
2017	1,038 <sup>3</sup>				990 (95%)	48 (5%)	Grown from 2016

1-5 of 6

VOLUME COUNT		
Date	Int	Total
No Data		

VOLUME TREND

Year	Annual Growth
2021	11%
2020	-13%
2019	0%
2018	1%
2017	4%

CLASSIFICATION

11/4/22 11:02 AM

Transportation Data Management System



Transportation Data Management System

Disclaimer: The Michigan Department of Transportation (MDOT) works with individual agencies (cities/villages, counties, metropolitan planning organizations (MPOs), regional planning organizations (RPOs), and other areas of MDOT) to identify existing traffic count programs and/or traffic data. [more](#)

List View All DIRs Report Center

Record	1	of 1	Sort records	go
Location ID	45-5018	MPO ID		
Type	SPOT	HPMS ID	12_2_89_003	
On NHS	No	On HPMS	Yes	
LRS ID	1148506	LRS Loc Pt	5.717	
SF Group	Rural Non State	Route Type		
AF Group	NoFactor	Route		
GF Group	Rural Non State	Active	Yes	
Class Dist Grp	NTL_4	Category	Primary	
Seas Class Grp				
WIM Group				
QC Group	Default			
Frct'l Class	(4) Minor Arterial	Milepost		
Located On	LAKE LEELANAU DR			
Loc On Alias	County Road 641			
	N OF LAKEVIEW HILLS			
More Detail				
STATION DATA				

Directions: 2-WAY NB SB

ADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2022	3,107				2,992 (96%)	114 (4%)	
2021	254 <sup>3</sup>		10	55	243 (96%)	11 (4%)	Grown from 2020
2020	230 <sup>3</sup>		10	55	219 (95%)	11 (5%)	Grown from 2019
2019	264 <sup>3</sup>		10	55	254 (96%)	10 (4%)	Grown from 2018
2018	263 <sup>3</sup>		10	55	256 (97%)	7 (3%)	Grown from 2017

1-5 of 7

Date	Int	Total
Wed 9/28/2022	15	3,115
Tue 9/27/2022	15	3,098

Year	Annual Growth
2022	1123%
2021	10%
2020	-13%
2019	0%
2018	1%
2017	4%



**Crashes for the Years 2021 and 2020 and 2019 and 2018 and 2017 on 88 selected road segments filtered by Crash: Animal Type Involved/Associated (2016+) (Uncoded & Errors)**

Crash Type	Road Conditions	Worst Injury in Crash: Suspected Serious Injury (A)	Worst Injury in Crash: Suspected Minor Injury (B)	Worst Injury in Crash: Possible Injury (C)	Worst Injury in Crash: No Injury (O)	Total
Single Motor Vehicle	Dry	0	0	1	2	3
Single Motor Vehicle	Wet	1	0	0	2	3
Single Motor Vehicle	Ice	0	0	0	9	9
Single Motor Vehicle	Snow	0	0	0	6	6
Single Motor Vehicle	Slush	0	0	0	1	1
Angle	Dry	2	0	1	2	5
Angle	Wet	0	1	0	0	1
Angle	Snow	0	0	0	2	2
Rear-End	Dry	0	0	1	1	2
Rear-End - Left Turn	Snow	0	0	0	1	1
Rear-End - Right Turn	Dry	0	0	0	1	1
Sideswipe - Opposite Directions	Snow	0	0	0	1	1
<b>Total Crash Count</b>		<b>3</b>	<b>1</b>	<b>3</b>	<b>28</b>	<b>35</b>















## Prior Entrance Road market Study

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This market study has been completed to understand the impact of completion of the proposed roadway which will connect a subdivision with a main roadway. The proposed road would establish an additional entrance to the subdivision and homes closer to this entrance would in all likelihood use the new entrance as their primary point of ingress/egress. To complete the study, I have analyzed values of homes near a subdivision's entrance and compared them to the value of homes away from a subdivision's entrance. Homes near the entrance would receive significantly more traffic than homes that are deeper within the subdivision. My research of various residential markets was completed in October of 2016.

The first step in this assignment is to evaluate the amount and type of information, research and analysis needed to produce credible assignment results. A thorough analysis of several residential subdivisions was conducted to ascertain the values of homes near and away from the entrance to a subdivision. Homes near each entrance of the subdivision are similar in size and style as those away from the entrance and have been matched to compare price per square foot.

I identified five case studies that compare and contrast nearly identical residential areas with the only variable being the location of the home in relation to the neighborhood entrance. The case studies outlined in this report were chosen as each has similar, yet varying conditions that help to illustrate the effects I set out to discover.

In general, there are two forms of data that are collected for a market study; primary and secondary data. Primary data refers to information that is explicitly gathered for the analysis at hand; it is information that is specifically related and pertinent to the subject property. Secondary data refers to the body of existing data that was initially gathered for other purposes, but can be applied to the analysis of the subject property. In other words, secondary data already exists in published form and primary data must be gathered/generated by the analyst.

Primary data can be obtained either through the process of questioning or through the process of observation. A question methodology involves eliciting information directly from people. Observation is based upon identification of the actions or items of interest and then observing and recording what takes place. Observation can be made of people and their actions, or it can be made of secondary data. In this study the process of surveying sales through the various multiple listing services to detect any trends in real estate prices that can be attributed to the presence of fee simple residential properties.

### Type and Extent of Data Researched

I researched and analyzed market area data and property-specific market data.

## Research and Analysis ~ Primary Data ~ Eaton County

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### Sunset Hills Subdivision



This is a subdivision whose major road would continue into the proposed project area. Sunset Hills would continue into the area that is being planned for development. The houses in this subdivision were mostly constructed in the early to mid-2000s and average 1,412 square feet above grade. I researched sales in this subdivision starting October 1, 2014. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS. I have separated the sales between those near the entrance and those further away from the entrance.

Sunset Hills Subdivision Near Entrance										
Address	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
4890 Pine Hill	1,223	1/25/2026	\$162,000	\$132.46	2005	4	2	1 story	78376	1223 sf finished basement
4920 Sunset Drive	1,357	3/12/2015	\$135,000	\$99.48	1996	3	2	walkout	63822	355 sf partially finished walkout basement
4901 Pine Hill	1,120	7/10/2015	\$149,500	\$133.48	2011	3	2	Split level	70022	920 sf finished basement
4908 Pine Hill	1,483	4/17/2015	\$160,000	\$107.89	2005	3	2	2 story	62081	350 sf finished basement
4979 Pine Hill	1,520	12/8/2015	\$92,500	\$60.86	2005	3	2	2 Story	77532	718 sf finished basement
4936 Pine Hill	1,567	12/11/2015	\$151,400	\$96.62	2005	3	2	2 Story	74682	720 sf unfinished basement
4885 Pine Hill	1,617	10/17/2014	\$142,000	\$87.82	2005	3	2	2 Story	63040	693 sf basement, unfinished
Away from Entrance										
Address	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
4610 Sunset	1,260	9/4/2015	\$152,000	\$120.63	2002	3	2	1 story	71984	full unfinished basement 1000 sf finished walkout basement
4507 Sunset	1,390	2/26/2016	\$158,000	\$113.67	2006	4	3	1 story	75917	1098 sf finished basement
4091 Scenic View	1,398	7/13/2015	\$157,000	\$112.30	1998	3	3	1 story	70439	1400 sf finished basemaent
4764 Sunset	1,452	12/9/2015	\$149,900	\$103.24	1998	3	2	1 story	74626	full unfinished basement
4069 Scenic View Ct	1,248	12/28/2015	\$139,000	\$111.38	2001	3	2	1 story	76644	1250 sf basement, unfinished
4564 Sunset Drive	1,250	10/30/2014	\$139,000	\$111.20	2003	3	2	1 Story Ranch	59873	1000 sf finished walkout basement
4611 Sunset Drive	1,375	7/1/2015	\$129,900	\$94.47	2003	4	2	walkout	65356	650 sf finished basement
4056 Scenic View	1,145	6/22/2015	\$156,000	\$136.24	2002	4	2	Split level	68776	718 sf unfinished basement
4543 Sunset	1,441	5/19/2015	\$148,300	\$102.91	2004	3	2	2 story	66090	475 sf finished basement
4515 Sunset	1,452	5/31/2016	\$159,000	\$109.50	2014	3	2	2 story	79076	691 sf unfinished basement
4585 Sunset	1,454	7/17/2015	\$150,900	\$103.78	2004	3	2	2 story	71130	600 sf finished basement
4842 Pine Hill	1,497	8/22/2016	\$168,900	\$112.83	2005	3	2	2 story	82734	408 sf finished basement
4618 Sunset	1,500	9/1/2016	\$148,000	\$98.67	2004	4	2	2 story	83279	780 sf basement, not finished
4636 Sunset Drive	1,560	8/31/2015	\$138,000	\$88.46	2003	3	2	2 Story	69482	full unfinished basement
4644 Sunset	1,712	12/2/2015	\$162,500	\$94.92	2002	4	2	2 story	71966	700 sf finished basement, corner lot, fenced yard
4575 Hilltop	2,000	7/8/2015	\$186,000	\$93.00	2003	4	3	2 story	70001	

All of the sales were constructed between 1996 and 2014 and all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$60.86 to \$133.48 per square foot with an average of \$102.66 per square foot. The range of prices of those away from the entrance is \$88.46 to \$136.24 per square foot with an average of \$106.70 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	1996	1,120	\$60.86
Max	2011	1,617	\$133.48
Average	2005	1,412	\$102.66
Away	Year Built	Size	Price
Min	1998	1,145	\$88.46
Max	2014	2,000	\$136.24
Average	2003	1,446	\$106.70

Dawn Haven Subdivision



Dawn Haven Subdivision is located on the north side of Saginaw Highway and has an entrance on a major roadway. A majority of the houses in this subdivision were constructed in the 1950s to 1960 and average 1,557 square feet above grade. I researched sales from this subdivision starting October 1, 2016. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS.



Dawn Haven Subdivision Near Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
12080	Dawnhaven	1,265	8/19/2015	\$129,900	\$102.69	1954	3	2	1 Story	67890	Full unfinished basement
12017	Madonna	1,404	12/3/2014	\$150,390	\$107.12	1987	3	2	1 Story	64300	Full unfinished basement
12082	E Greenfield	2,094	8/29/2016	\$178,000	\$85.00	1948	3	2.5	2 Story	85405	475 sf finished basement
Away from Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
12479	W Greenfield	1,347	8/5/2016	\$133,000	\$98.74	1954	3	1.5	1 Story	80849	912 sf finished basement
12374	Madonna	1,348	11/21/2014	\$135,000	\$100.15	1958	3	1.5	1 Story	63044	full finished basement
12419	E Greenfield	1,376	9/6/2016	\$124,900	\$90.77	1955	3	1	1 Story	83349	Full unfinished basement
7721	Philwood	1,594	3/30/2016	\$179,900	\$112.86	1964	3	2.5	1 Story	76128	850 sf finished basement
12294	Madonna	1,686	8/26/2016	\$175,000	\$103.80	1956	3	1.5	1 Story	83627	Full unfinished basement
12444	Lawrence J	1,899	8/25/2015	\$165,500	\$87.15	1962	4	2.5	2 Story	71812	612 sf finished basement

All of these sales were constructed between 1948 and 1987, all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$85.00 to \$107.12 per square foot and the average is \$98.27 per square foot. The range of prices of those away from the entrance is \$87.15 to \$112.86 per square foot and the average is \$98.91 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	1948	1,265	\$85.00
Max	1987	2,094	\$107.12
Average	1963	1,588	\$98.27
Away	Year Built	Size	Price
Min	1954	1,347	\$87.15
Max	1964	1,899	\$112.86
Average	1958	1,542	\$98.91

## Conclusions ~ Eaton County Subdivisions

Sunset Hills Subdivision is set adjacent to a possible subdivision development, continuing a road currently in the Sunset Hills Subdivision. Dawn Haven is located in a similar area, but is a much older subdivision with most houses being built around the time period of the 1950s. Although the age difference is present, the data showed similar trends in the cost per square foot in house size depending on site in the subdivision. It can be seen in both subdivisions that there are similar ranges in the cost of a house, both near the entrance and away from the entrance. The average sales price is also similar in neighborhoods no matter the location of the individual house.

# Ingham County

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## Centennial Farms Subdivision



Centennial Farms Subdivision is located on the east side of Aurelius Road and has an entrance on a major roadway. Houses in this subdivision were built between the late 1990s into the 2000s and average 1,491 square feet above grade. I researched sales from this subdivision starting October 1, 2016. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS.

Centennial Farms Subdivision Near Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
1323	Daylily	1,304	7/15/2016	\$160,000	\$122.70	1996	3	2	1 Story	81129	1304 sf full unfinished basement
1306	Daylily	1,432	9/6/2016	\$166,500	\$116.27	1994	3	2	1 Story	83478	900 sf unfinished basement
4436	Gateway	1,432	10/6/2015	\$163,500	\$114.18	1998	3	2	1 Story	71899	1260 sf finished basement
1333	Daylily	1,583	8/26/2016	\$188,000	\$118.76	1996	3	2	Partial 2nd story	83199	1032 sf unfinished basement
4452	Gateway	1,688	5/29/2015	\$168,000	\$99.53	1998	3	2	2 Story	69194	1032 sf unfinished basement
Away from Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
4413	Hyacinth	1,120	11/14/2014	\$136,300	\$121.70	2001	3	2	1 Story	63254	1120 sf finished basement
4406	Hyacinth	1,120	6/3/2016	\$155,200	\$138.57	2003	3	2	1 Story	80566	1124 sf finished basement
1351	Hosta	1,404	10/21/2015	\$165,000	\$117.52	1999	3	2	1 story	72452	1000 sf finished basement
1339	Yarrow	1,406	8/31/2016	\$179,900	\$127.95	2006	3	3	1 story	83629	988 sf finished basement, with rec room and exercise room
1320	Yarrow	1,422	9/9/2016	\$167,500	\$117.79	2006	3	2.5	2 Story	83749	787 sf unfinished basement
1339	Hosta	1,430	6/9/2015	\$162,500	\$113.64	2002	3	2.5	2 Story	69579	276 sf finished basement
1328	Yarrow	1,443	5/13/2015	\$155,000	\$107.42	2006	3	2.5	2 Story	66320	718 sf unfinished basement
1327	Hosta	1,449	8/31/2016	\$160,000	\$110.42	2003	3	2	2 Story	80508	911 sf unfinished basement
1241	Wildflower	1,511	4/17/2015	\$161,900	\$107.15	2006	3	2.5	2 Story	67638	734 unfinished basement
1347	Yarrow	1,513	3/19/2015	\$157,500	\$104.10	2006	3	2.5	2 Story	66587	Full unfinished basement
1279	Wildflower	1,527	8/12/2015	\$165,000	\$108.06	2007	3	3	2 Story	71989	600 sf finished basement
1380	Yarrow	1,539	7/9/2015	\$176,000	\$114.36	2004	3	2.5	2 Story	70142	600 sf finished basement
4394	Yarrow	1,592	4/17/2015	\$169,900	\$106.72	2004	3	3.5	2 Story	66571	700 sf finished basement
1229	Sumac	1,688	8/26/2016	\$167,500	\$99.23	1998	3	2	2 Story	82607	Full unfinished basement
1258	Sumac	1,688	1/15/2015	\$160,000	\$94.79	1998	3	3	2 Story	65684	Full finished basement
1364	Yarrow	1,742	4/29/2016	\$170,000	\$97.59	2002	4	3.5	2 Story	77576	One bedroom in 800 sf finished basement
1342	Yarrow	1,763	2/27/2015	\$165,000	\$93.59	2006	3	2.5	2 Story	65296	734 sf unfinished basement

All of these sales were constructed between 1994 and 2007; all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$99.53 to \$122.70 per square foot and the average is \$114.29 per square foot. The range of prices of those away from the entrance is \$93.59 to \$138.57 per square foot and the average is \$110.62 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	1994	1,304	\$99.53
Max	1998	1,688	\$122.70
Average	1996	1,488	\$114.29
Away	Year Built	Size	Price
Min	1998	1,120	\$93.59
Max	2007	1,763	\$138.57
Average	2003	1,492	\$110.62



Okemos Preserve Subdivision



Okemos Preserve Subdivision is located across from College Fields Golf Course. The houses in this subdivision were all constructed in the mid to late 2000s and average 2,105 square feet above grade. I researched sales from this subdivision starting October 1, 2014. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS.

Okemos Preserve Subdivision Near Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
2717	Tapestry	1,636	12/12/2014	\$249,900	\$152.75	2007	4	3	1 Story	64347	618 sf basement including a bedroom
2723	Tapestry	1,640	10/7/2015	\$243,000	\$148.17	2006	4	3	1 Story	72164	529 sf basement including a bedroom
2728	Tapestry	1,874	10/8/2015	\$219,000	\$116.86	2006	4	3.5	2 Story	73712	520 sf basement including a bedroom
2724	Elderberry	2,072	6/1/2015	\$251,000	\$121.14	2012	3	2.5	2 Story	66005	1004 sf unfinished basement
2721	Elderberry	2,686	6/7/2016	\$315,000	\$117.27	2008	5	3.5	2 Story	82612	873 sf finished basement including a bedroom
2739	Elderberry	2,854	9/29/2015	\$342,500	\$120.01	2006	5	4.5	2 Story	73034	1500 sf finished basement including a bedroom
Away from Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
2706	Elderberry	1,544	1/28/2016	\$205,000	\$132.77	2010	3	2.5	2 Story	76405	640 sf unfinished basement
2680	Tapestry	1,726	9/2/2016	\$235,000	\$136.15	2006	3	2.5	2 Story	84080	896 sf unfinished basement
2698	Tapestry	1,754	3/27/2015	\$194,000	\$110.60	2009	3	2.5	2 Story	63211	648 sf unfinished basement
2682	Elderberry	1,830	6/19/2015	\$225,000	\$122.95	2006	3	2.5	2 Story	70233	728 sf unfinished basement
2668	Tapestry	1,840	11/7/2014	\$220,500	\$119.84	2006	3	2.5	2 Story	63408	788 sf unfinished basement
2699	Tapestry	2,060	6/25/2015	\$241,000	\$116.99	2012	3	2.5	2 Story	70509	1030 sf unfinished basement
2595	Elderberry	2,080	5/4/2016	\$314,000	\$150.96	2012	4	3.5	2 Story	79320	850 sf finished basement
2697	Elderberry	2,358	7/27/2016	\$338,000	\$143.34	2007	4	3.5	2 Story	83435	1072 sf finished basement including a bedroom
2652	Morning Glory	2,367	8/28/2015	\$265,000	\$111.96	2006	3	2.5	2 Story	73989	992 sf unfinished basement
2640	Morning Glory	2,398	10/13/2014	\$265,000	\$110.51	2007	3	2.5	2 Story	58631	Full unfinished basement
2628	Morning Glory	2,400	12/7/2015	\$276,116	\$115.05	2010	3	2.5	2 Story	76516	Full unfinished basement
2664	Morning Glory	2,436	5/21/2015	\$250,000	\$102.63	2005	4	2.5	2 Story	62676	Full unfinished basement
2667	Morning Glory	2,438	2/18/2015	\$272,500	\$111.77	2007	3	3.5	2 Story	60483	1038 finished basement

All of these sales were constructed between 2005 and 2012 and all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$102.63 to \$152.75 per square foot and the average is \$129.37 per square foot. The range of prices of those away from the entrance is \$102.63 to \$150.96 per square foot and the average is \$121.96 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	2006	1,636	\$102.63
Max	2012	2,854	\$152.75
Average	2008	2,127	\$129.37
Away	Year Built	Size	Price
Min	2005	1,544	\$102.63
Max	2012	2,438	\$150.96
Average	2008	2,095	\$121.96

Strawberry Farms Estates Subdivision



Strawberry Farms Estates Subdivision is located on the south side of Haslett Road, the major access road for the subdivision. The houses in this subdivision were constructed in the late 1980s to the mid-1990s, with some houses being constructed in the early 2000s. They average 2,123 square feet above grade. I researched sales from this subdivision starting October 1, 2014. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS.

Strawberry Farm Estates Subdivision											
Near Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
648	Earliglow	1,285	6/29/2015	\$176,000	\$136.96	1992	3	2	1 Story	70689	Full unfinished basement
5599	Canoga	2,010	3/13/2015	\$249,900	\$124.33	1988	4	2.5	2 Story	66990	750 sf finished basement
5581	Canoga	2,035	9/18/2015	\$245,000	\$120.39	1988	4	3.5	2 Story	70526	834 sf basement including a bedroom
5596	Earliglow	2,388	9/8/2016	\$262,000	\$109.72	1990	3	3	2 Story	82973	863 finished basement
Away from Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
5548	Earliglow	1,362	11/6/2015	\$187,500	\$137.67	1992	3	1.5	1 Story	75131	847 sf finished basement
5549	Earliglow	2,032	8/13/2015	\$239,900	\$118.06	1993	4	2.5	2 Story	72030	411 sf finished basement
662	Emily	2,064	5/14/2015	\$283,000	\$137.11	2014	4	2.5	2 Story	66872	1000 sf unfinished basement
5496	Earliglow	2,340	11/30/2015	\$339,900	\$145.26	2005	5	3.5	2 Story	75718	1070 sf unfinished basement
5563	Strawberry	2,602	6/28/2016	\$313,000	\$120.29	1988	3	3.5	2 Story	81200	1326 sf finished basement
690	Emily	3,113	2/27/2015	\$377,500	\$121.27	2005	4	3.5	2 Story	66537	1500 sf finished basement

All of these sales were constructed between 2005 and 2012 and all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$109.72 to \$136.96 per square foot and the average is \$122.85 per square foot. The range of prices of those away from the entrance is \$118.06 to \$145.26 per square foot and the average is \$129.94 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	1988	1,285	\$109.72
Max	1992	2,388	\$136.96
Average	1990	1,930	\$122.85
Away	Year Built	Size	Price
Min	1988	1,362	\$118.06
Max	2014	3,113	\$145.26
Average	2000	2,234	\$129.94



Coventry Woods Subdivision



Coventry Woods Subdivision is located west of U.S. 127 with W Columbia Road as the major road at the entrance to the subdivision. The houses in this subdivision were all constructed in the early 2000s and average 1,498 square feet above grade. I researched sales from this subdivision starting October 1, 2014. On the following page is a chart illustrating these sales. This list represents all of the sales listed on the MLS.

Coventry Woods Subdivision											
Near Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
232	Coventry	1,443	9/30/2015	\$159,500	\$110.53	2000	4	2	1 Story	74093	1443 sf finished basement
461	Coventry	1,309	7/16/2015	\$151,575	\$115.79	2005	3	2	Split Level	68730	519 sf finished basement
271	Coventry	1,222	5/16/2016	\$170,000	\$139.12	2001	3	2.5	2 Story	80031	588 sf unfinished basement
472	Coventry	1,746	5/28/2015	\$157,000	\$89.92	2001	4	2.5	2 Story	68843	732 sf finished basement
441	Coventry	1,777	10/16/2015	\$175,100	\$98.54	2002	4	2.5	2 Story	74585	732 sf unfinished basement
Away from Entrance											
Number	Street	Size (sf)	Sale Date	Sale Price	Price/ Sf	Year Built	Beds	Bath	Style	Listing Number	Extra Features
362	Coventry	1,465	12/15/2015	\$169,000	\$115.36	2005	3	2.5	2 Story	75704	Full unfinished basement
392	Coventry	1,476	8/11/2016	\$179,900	\$121.88	2004	3	2.5	2 Story	83032	462 sf finished basement
346	Coventry	1,476	7/2/2015	\$164,740	\$111.61	2005	3	2.5	2 Story	70486	Full unfinished basement
332	Coventry	1,498	11/18/2015	\$167,500	\$111.82	2002	3	2.5	2 Story	75535	369 sf finished basement
432	Coventry	1,504	6/3/2016	\$168,000	\$111.70	2003	3	2.5	2 Story	83198	Full unfinished basement
345	Coventry	1,567	6/10/2015	\$165,000	\$105.30	2005	3	2.5	2 Story	6590	Full unfinished basement, with egress window installed

All of these sales were constructed between 2000 and 2005 and all are estimated to be in somewhat similar condition. The range of prices of those near the entrance is \$89.92 to \$139.12 per square foot and the average is \$110.78 per square foot. The range of prices of those away from the entrance is \$105.30 to \$121.88 per square foot and the average is \$112.94 per square foot. The following is a table illustrating the ranges and averages for the year built, sizes, and unit prices for the sales within each subdivision based on location with regards to the entrance of the subdivision.

Near	Year Built	Size	Price
Min	2000	1,222	\$89.92
Max	2005	1,777	\$139.12
Average	2002	1,499	\$110.78
Away	Year Built	Size	Price
Min	2002	1,465	\$105.30
Max	2005	1,567	\$121.88
Average	2004	1,498	\$112.94

## Conclusions ~ Ingham County Subdivisions

Centennial Farms, Okemos Preserve, Strawberry Farm Estates, and Coventry Woods Subdivisions, while in different areas, have similar make ups. They all have homes that have been built around the mid-1990s to the 2000s. The homes in each subdivision all average around 1,500 square feet of above ground floor area. In each subdivision, it can be found that there is a similar price per square foot in the homes near the entrance of the subdivision as well as homes that are deeper into the subdivision. It can be shown by the data that there is no difference in home price depending on the location of the home in relation to the main access point to the subdivision.

## Recapitulation

Below is a chart indicating the percentage difference between the average per square foot sales price of homes near the developments entrance and those away from the entrance. The analysis does not indicate a correlation between a home's proximity to the entrance and a home's value.

Development	Average \$/SF Near	Average \$/SF Away	% difference near vs. away Entrance
Sunset Hills Subdivision	\$102.66	\$106.70	-3.79%
Dawn Haven Subdivision	\$98.27	\$98.91	-0.65%
Centennial Farms Subdivision	\$114.29	\$110.62	3.32%
Okemos Preserve Subdivision	\$129.37	\$121.96	6.08%
Strawberry Farm Estates Subdivision	\$122.85	\$129.94	-5.46%
Coventry Woods Subdivision	\$110.78	\$112.94	-1.91%
		Mean	-0.40%

## Conclusion

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Based on the empirical data collected and analyzed, there is no evidence that location in a subdivision in relation to its entrance has a positive or negative affect on sales price. The secondary data mentioned appears to support this conclusion and goes further to suggest that the location of a home relative to the entrance to the subdivision does not affect the value of the home.

# Qualifications of Appraisers

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James T. Hartman, MAI, SGA, AI-GRS

Senior Managing Director

Valbridge Property Advisors | Southern Michigan

## **Education:**

Bachelor of Arts Degree  
College of Business  
Financial Administration  
Michigan State University, East Lansing, MI

## **License:**

In Michigan, appraisers are required to be licensed/certified and are regulated by the Michigan Department of Licensing and Regulatory Affairs, P.O. Box 30018, Lansing, Michigan 48909. James T. Hartman is currently licensed as a Certified General Real Estate Appraiser with the State of Michigan, License #1205005950, with the State of Indiana, License #CG40600034, with the State of Ohio, License #2007005970, and with the State of Illinois, License #553.002225.

## **Real Estate Appraisal Curriculum, Appraisal Institute:**

**Classes:**

- Basic Valuation
- Real Estate Appraisal Principles
- Residential Valuation
- Standards of Professional Practice, Part A
- Standards of Professional Practice, Part B
- Standards of Professional Practice, Part C
- Income Capitalization, Part A
- Income Capitalization, Part B
- Case Studies in Real Estate Valuation
- Report Writing and Valuation Analysis
- Highest & Best Use and market Analysis
- Business Practices and Ethics
- 7-Hour National USPAP Update Course
- Valuation of Conservation Easements
- Fundamentals of Separating Real Property, Personal Property, and Intangible Business Assets
- Review Theory – General
- Supervisory Appraiser/Trainee Course
- Uniform Appraisal Standards for Federal Land Acquisitions: Practical Applications

**Seminars:** Demonstration Appraisal Report Writing  
Scope of Work: Expanding your Range of Services  
REITS and the Role of the Real Estate Professional  
Partial Interest Valuation – Divided  
Appraisal Symposium – Real Estate Underwriting  
Still Standing – The US Real Estate Market  
Michigan Appraising Licensing Law and Rules  
Appraisal Consulting: A Solutions Approach for Professionals  
Supervising Appraisal Trainees  
Land Valuation Adjustments Workshop  
Analyzing Distressed Real Estate  
Market Analysis and the Site to Do Business  
Valuation & Litigations Services SIG Kick-Off – SIG2006  
Fair Housing  
Introduction to International Valuation Standards  
Environmental Solutions for Commercial RE Transactions  
Spotlight on USPAP: Common Errors and Issues  
Michigan Economy 2009  
Appraising Convenience Stores  
Michigan Economy 2010  
Spotlight on USPAP – Appraisal Review  
Analyzing Distressed Real Estate  
Spotlight on USPAP: Agreement for Services-Instructions  
Loss Prevention program for Real Estate Appraisers  
Liability Issues for Appraisers Performing Litigation & Other Non-Lender Work  
Small Hotel/Motel Valuation  
Government and the Housing Market  
Introduction to Green Buildings: Principles & Concepts  
Appraising Automobile Dealerships

**Other Seminars/Courses:**

Historic Preservation Conference: Incentives for Historic Preservation in Detroit - IPED  
Michigan Tax Tribunal Contemporary Issues – Oakland University  
LEED for New Construction and Major Renovations Technical Review Workshop - USGBC  
Understanding the Impact of the Interagency Appraisal and Evaluation Guidelines for Appraisers and Lenders  
Advanced Computer Applications for Appraisers – Valbridge Property Advisors  
Fractional Interest Valuation – Valbridge Property Advisors

**Appraisal Assignments:**

Performed a variety of appraisal assignments including appraisals of vacant land, subdivisions, industrial buildings, hotels, golf courses, resorts, shopping centers, bowling/family entertainment centers, manufactured home communities, elderly care facilities, condominium construction and conversion, restaurants, and office buildings.



## EXHIBIT D D

### **Counseling Services:**

Economic feasibility and market studies for golf courses, hotels, apartments, multi-tenant office buildings, multi-tenant shopping centers and elderly care facilities.

### **Professional Recognition:**

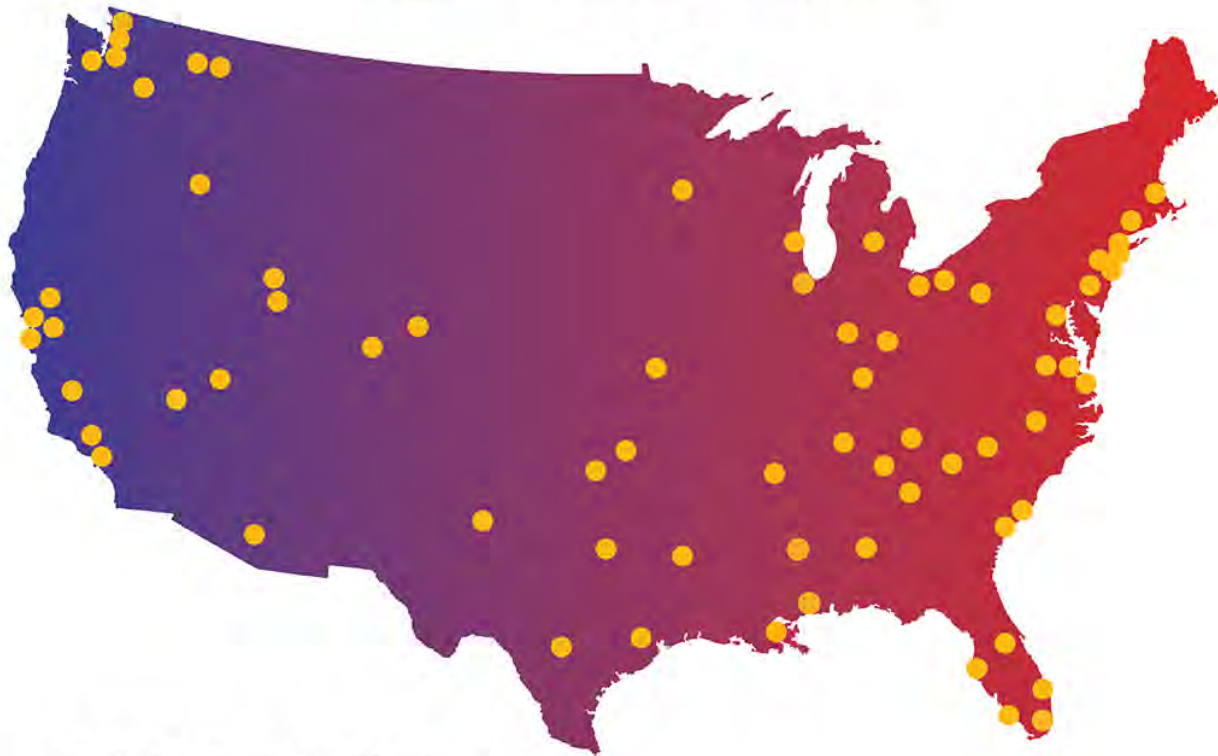
2000-1	Advisory Board, West Michigan Branch, Great Lakes Chapter, Appraisal Institute
2001	Awarded MAI designation by the Appraisal Institute
2002	Vice-Chair, West Michigan Branch, Great Lakes Chapter, Appraisal Institute
2002	Public Relations Committee, Great Lakes Chapter, Appraisal Institute
2002	General Comprehensive Exam Subcommittee, Standard Setting Panel, Appraisal Institute
2003	Chair, West Michigan Branch, Great Lakes Chapter, Appraisal Institute
2003	Region III Representative Alternate, Great Lakes Chapter, Appraisal Institute
2004	Director, Great Lakes Chapter, Appraisal Institute
2004-23	General Comprehensive Exam Subcommittee, Appraisal Institute
2004	Real Estate Appraiser Exam Content Expert, Bureau of Commercial Services Department of Labor & Economic Growth, State of Michigan
2006	Secretary, Great Lakes Chapter, Appraisal Institute
2007	Treasurer, Great Lakes Chapter, Appraisal Institute
2008	Awarded SGA designation from The Society of Golf Appraisers
2008	Vice President, Great Lakes Chapter, Appraisal Institute
2008-9	Region III Representative, Great Lakes Chapter, Appraisal Institute
2009	President, Great Lakes Chapter, Appraisal Institute
2009-10	Vice Chair, General Comprehensive Exam Panel, Appraisal Institute
2009	Awarded MRICS designation from the Royal Institution of Chartered Surveyors
2010	Past President (Board of Directors) Great Lakes Chapter, Appraisal Institute
2010	Region III Representative, Great Lakes Chapter, Appraisal Institute
2011-14	Chair, General Comprehensive Exam Panel, Appraisal Institute
2014-15	Secretary, The Society of Golf Appraisers
2014	Awarded AI-GRS designation from Appraisal Institute
2014-23	Member, State of Michigan Board of Real Estate Appraisers
2016-17	President, Society of Golf Appraisers
2015-19	Vice Chair, General Comprehensive Exam Panel, Appraisal Institute
2016-21	Vice Chair, State of Michigan Board of Real Estate Appraisers
2021-22	Chair, State of Michigan Board of Real Estate Appraisers

EXHIBIT D





**Valbridge**  
PROPERTY ADVISORS



## FAST FACTS

### COMPANY INFORMATION

- Valbridge is the largest independent national commercial real estate valuation and advisory services firm in North America.
  - Total number of MAI-designated appraisers (200+ on staff)
  - Total number of office locations (70+ across U.S.)
  - Total number of staff (675+ strong)
- Valbridge covers the entire U.S. from coast to coast.
- Valbridge services all property types, including special-purpose properties.
- Valbridge provides independent valuation services. We are not owned by a brokerage firm or investment company.
- Every Valbridge office is led by a senior managing director who holds the MAI designation of the Appraisal Institute.
- Valbridge is owned by our local office leaders.
- Valbridge welcomes single-property assignments as well as portfolio, multi-market and other bulk-property engagements.





# Valbridge

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Fircrest, WA 98466  
253.274.0099

8378 W. Grandridge Boulevard  
Suite 110-D  
Kennewick, WA 99336  
509.221.1540

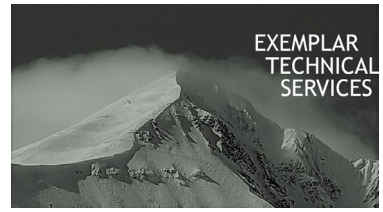
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## EXHIBIT D



February 10, 2023

VIA EMAIL: [msm@kuhnrogers.com](mailto:msm@kuhnrogers.com)

Marc McKellar II, Esq.

Kuhn Rogers PLC

4033 Eastern Sky Drive

Traverse City, Michigan 49684

Re: Project Impact Statement Supplement  
Groundwater Resources Water Supply and Sanitary Wastewater  
Proposed Wellevity Special Use Permit Application  
Section 13, T28N, R12W Elmwood Township, Michigan

Dear Mr. McKellar:

This letter communicates my initial evaluation of the referenced Special Use Permit (SUP) proposed. The evaluation includes review of the plans provided and the SUP application in the context of site conditions. Site conditions are understood from physical observations of the property and environs following comprehensive review of public records available for the region. In addition, I conversed with Mr. Jamie Wade, PE via telephone and email. Mr. Wade is a Professional Engineer (PE) employed by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and who is assigned to the Community Water Supply Program for Grand Traverse and Leelanau Counties. Mr. Wade is intimately familiar with groundwater source Community Water Supplies in this area and has direct knowledge of the operation and performance of the Type I Community Supply wells located immediately east of the subject property in Section 13.

### **BACKGROUND**

The SLU application identifies the proposed development would rely upon an existing water supply well located at the property to supply water for potable use and irrigation. The well is proposed to supply water for fire suppression needs, consistent with applicable fires code(s) as a source for water stored in tanks (120,000 gallons) located at the development which will deliver fire suppression water via a “booster” pump while the well feeds the tanks as water is utilized. A minor volume of water produced from this supply would be used to supplement natural precipitation for irrigation purposes via “drip” techniques.

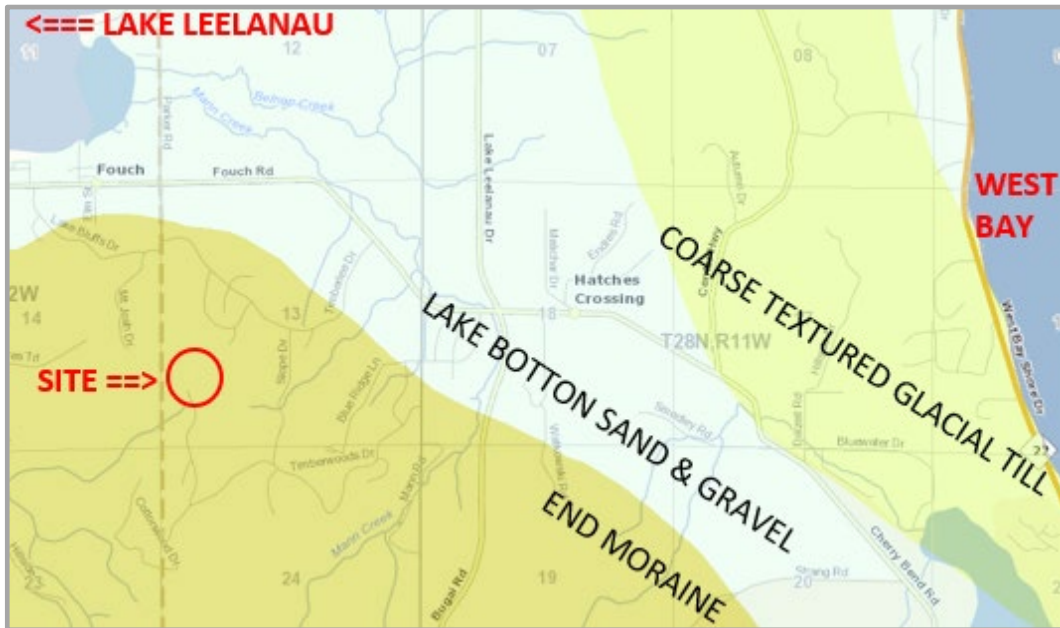
The probable daily water demand from this supply is given by the sanitary wastewater land application rate proposed to manage the fixtures and personal demands evident from the proposed land use. The development would, when appropriate, apply for a permit from EGLE for a Part 22 authorization to discharge. It is understood from the SUP application that this daily application volume will exceed 10,000 gallons. The design daily water use would be calculated at that time based upon the nominal and maximum guest capacity combined with operations staff. Based upon current understanding of the project and land uses, daily water production is estimated at less than 20,000 gallons. Operationally this yields a conservative estimated for nominal water production rate at 150 gallons per minute (GPM) with a peak production demand designed at 250 gallons per minute. The peak demand assumes that fire protection tank filling is occurring, thus a “once in a lifetime” probability of occurrence drives system design, not ground water consumption.



## PUBLIC RECORDS REVIEW

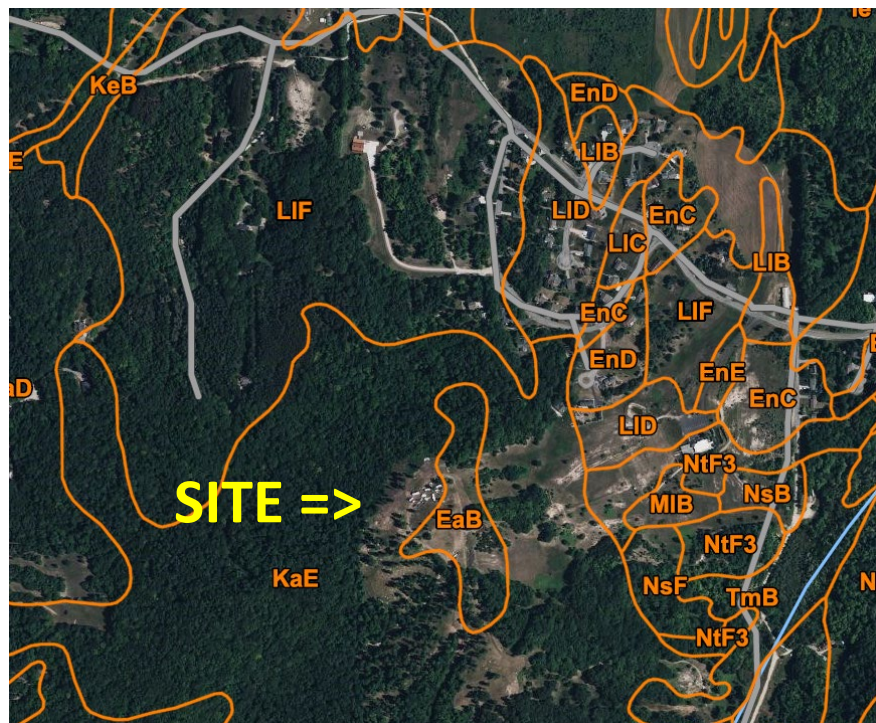
Glacial alluvium maps published for the State of Michigan were reviewed to gain understanding of the hydrogeological conditions of the area. Figure 1 is excerpted from the State GeoWebFace website.

**FIGURE 1**  
**AREA GLACIAL GEOLOGY MAP**



Soils evolve on glacial alluvium under various influencing conditions. Areas of similar soil taxonomy are directly related to the parent glacial alluvial texture and slopes. Figure 2 is a map of soil taxa taken from the 1973 Soil Survey for Leelanau County.

**FIGURE 2**  
**SOIL SURVEY MAP**



These two maps indicate that the glacial alluvium is substantially uniform in texture in the area of the development. The KaE and EaB soil taxa that mapped are acronyms for the Kalkaska and East Lake Series of soils which are predominant sand. Thus, the underlying glacial alluvium textures are coarse alluvium. Review of the 1973 Soil Survey's Table 5 and Table 6 Engineering Properties for these Series indicate a textural classification for these as "SAND" and "LOAMY SAND", respectively. These are well-draining soils of high permeability with minimum permeability reported at 20-inches per hour.

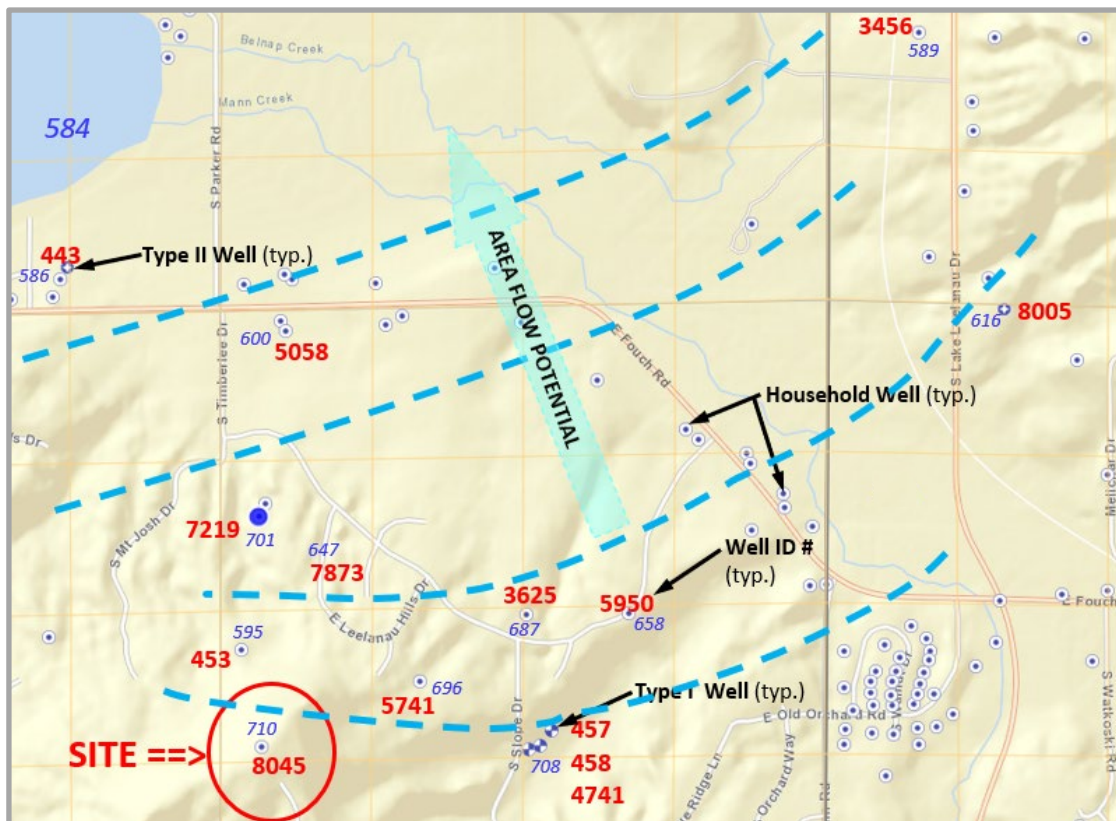
Existing Water Supply Wells

Water well records for wells located in Section 13 and 14 as well were examined to identify the properties of glacial alluvium in the development area and several records from sections 17, 18 and 12 of T28N, R11W were also reviewed. Unsaturated and saturated zone thicknesses were examined, along with well depth and well screen size and open area were reviewed to determine the likely yield. The statistics below represent the nature of well development in the area.

PROPERTY	VADOSE ZONE	SATURATED ZONE	BOTTOM ELEVATION	SCREEN LENGTH
MIN	1	20	458	5
MAX	340	151	618	35
mean	36	82	555	12

The variability in properties is related to the variability in topography which in this area dictates the thickness of unsaturated alluvium which must be penetrated to reach the water table. The records indicate that groundwater is present in the region in an unconfined, water table aquifer. The elevation of the water table at each location was determined and mapped to produce the Figure 3, below.

**FIGURE 3  
WATER TABLE FLOW POTENTIAL MAP**

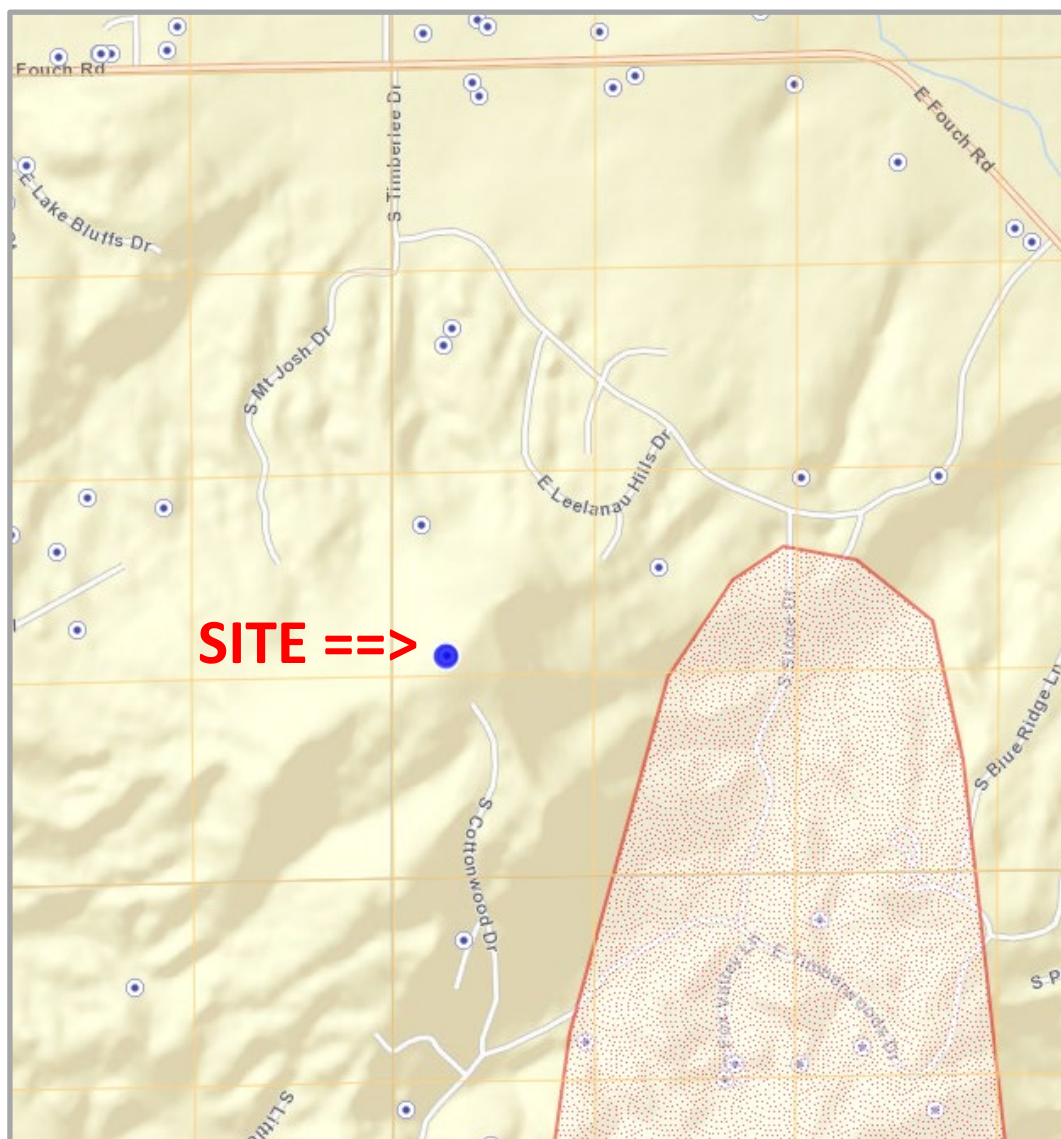




EGLE Well Head Protection Website Data

This interpretation is supported independently by review of the Well Head Protection Zone Map available from the EGLE Water Well Viewer website tool. Figure 4 shows the capture zone (provisional wellhead protection area) for the Timberlee Type I Community Supply operated by Elmwood Township (see wells 457, 458 and 4741 on Figure 3).

**FIGURE 4**  
**PROVISIONAL WELL HEAD PROTECTION AREA**



The provisional Well Head Protection Area (WHPA) is approximately 33% as wide as its length, which is an indication of the highly transmissive nature of the aquifer. A low-wielding aquifer would have much wider transverse aspect as groundwater from a great distance from the well would be drawn to it.

United States Geological Survey Open File Report Review

The unconfined aquifer characteristics are also evident from review of the Open-File Report 2007-1236, "Summary of Hydrogeologic Conditions by County for the State of Michigan". The report notes that the glacial alluvium in Leelanau County ranges in thickness from 200 to 800 feet with wells capable of sustained yields of 500 GMP in aquifers of mostly unconfined conditions. The transmissivity is given as 17,856 ft<sup>2</sup>/day.

## EVALUATION

From review of the local hydrogeological conditions in the context of the proposed development, several findings of fact may be established:

- The aquifer is of sufficient saturated thickness and transmissivity that high yielding wells are easily developed.
- The yield and transmissivity are sufficiently great that well head capture zones are narrow in width
- Narrow capture zones indicate reduced potential for groundwater production to affect other users.
- Developing a 150 to 250 GPM water supply for the development is feasible.
- The 150 to 250 GPM yield will generate a capture zone smaller than that for the Timberlee Type 1 Supply
- The unsaturated (vadose) zone below the development site is extremely thick.
- The vadose zone has very high permeability
- The application rate for treated sanitary wastewater at 20,000 gallons per day is approximately 1-inch/hour.
- Typical permit application rates for treated wastewater are over 1.5-inches/hour.
- The permeability cited in the Leelanau County Soil Survey ranges from 20-40 inches/hour capacity.

Thus, the production of groundwater will not affect off-site users of groundwater. The portion of produced groundwater that is discharged as treated sanitary wastewater will be resident in the unsaturated zone approximately 2 to 10 years as it percolates downward to the water table. The vadose zone is over 300 feet in thickness below the proposed land application area. The land application area is proposed over soil types well suited for land application of wastewater.

## DISCUSSION

Conversation with Mr. Jamie Wade, PE identifies that the Timberlee Community Water Supply is robust and yields approximately 250-350 GPM. Review of the WHPA and the proposed development well location does not instill concern for EGLE regarding any potential for impact to the existing community supply. Operational concerns for the existing supply are related solely to the existing system's pressure tank, its age and the expressed desire for some community members to expand distribution piping for that system. Absent expansion, the Timberlee Community Supply (TCS) will continue to utilize the existing pressure tank.

Review of the annual reports of water quality from sampling the TCS have never detected PFAS or any other chemical that has established water quality standards for municipal water supply. The capture zone for water delivered by the TCS lies below hundreds of laundry and kitchen facilities in residential subdivisions south of the well heads. The washing and cooking activities are no different at these many locations than the washing and cooking that is proposed at the development.

The only meaningful difference between these two sources of wastewater discharged to the water table aquifer is that there is no advanced treatment for the residential wastewater and no operational regulation of these many waste streams. That situation contrasts starkly with the proposed development, where design will be reviewed by Professional Engineers and operations will occur under the oversight of a State-certified wastewater treatment plant operator. That system operation will include sampling of the applied wastewater and regular reporting to the State.

It is my professional opinion based upon evaluation of data and facts that the proposed land use will not adversely impact existing or future neighboring uses and will not be detrimental to any persons, property, or the general welfare nor have adverse environmental impacts and detrimental effects due to use of groundwater supply, nor due to land application of treated wastewater.

It merits noting that both Type II water supply development and wastewater discharges are activities highly regulated by the State of Michigan. This is true from concept to permitting to construction to operation and includes monitoring and reporting designed to insure that there are no detrimental impacts to the environment, natural resources and human health, both on-site and off-site.

Respectfully submitted,



Andrew Smits, PE  
Geological Engineer  
Certified Wastewater Treatment Plant Operator