

## Post-Hearing Memorandum of Objectors in Opposition to the Application of Quaker Valley School District for a Special Exception

Citizen objectors submit this post-hearing memorandum containing findings of facts and conclusions of law in opposition to Quaker Valley School District's request for a special exception to construct a school in Leet Township on property with an AAA residential zoning designation.

### **I. INTRODUCTION**

Zoning ordinances are a community's protection against ungoverned development, and individuals residing in the community are entitled to rely upon zoning designations when they buy property and/or make a decision to live, or continue to live, in a certain community. AAA Residential Zoning Areas are inhabited by families who value the peace and rural nature of their area within the Township. (Sept. 17, 2021, J. Bunce p. 211; T. Weber p. 76; M. Connelly p. 87; Sept. 13, 2021, Mark Zappala pp. 99, 101-102). In accordance with well-settled Pennsylvania law, a Special Exception Request must be carefully weighed and considered against the reasonable expectations of residents that the community will not abandon the current residents' interests in favor of a new applicant. A request for a Special Exception must also be carefully weighed and considered against the reasonable expectations of residents regarding noise, congestion, and dangers to the safety of the community's homes and residents.

Leet Township is a rural community of roughly 1,600 residents. To grant Quaker Valley School District's ("QVSD") Special Exception Request would mean that five days per week during the school year roughly 1,000 additional persons will become part of the Leet community. This number does not include the students and families who will come from other schools for events such as theatre performances, or other interscholastic events, like basketball games. This number also does not reflect the stated goal of QVSD to make the site a community resource, which

inherently means even more visitors, during both daylight and evening hours. (July 8, 2021, J. Thomas, p. 121). Those persons and people at and/or visiting the school will have service needs, require assistance to deal with inevitable emergencies, and significantly increase road usage in the area. These changes will affect the Township economically and risk upsetting the rural nature of the community itself.

Counsel for QVSD misleadingly argues that the failure of Leet to specifically identify a school among the types of special exceptions to be considered means that the usage must be permitted so long as the proposed school is no more onerous than any other “school.” (See June 28, 2021, Dan Gramc pp. 114 & 119). This argument is as inaccurate as it is glib. It disempowers the Zoning Hearing Board’s important community function. The Ordinance also fails to identify specific requirements for a nuclear waste disposal site on the land. Does Counsel think therefore, that the Township must grant that usage, so long as it is no more onerous than any other nuclear waste disposal site?

The Zoning Hearing Board has the power and authority to examine the substance of QVSD’s application. Part 6 Section 2.A.(1) of Ordinance 2019-02 states that an application for special exception shall include “[a] current property survey indicating all existing and proposed structures and all proposed construction . . . on the site in sufficient detail to determine . . . compliance with all applicable requirements.” Note also that the Planning Commission of Leet Township directed Counsel for QVSD to submit a Geotechnical Report to the Zoning Hearing Board. (June 28, 2021, Dan Gramc, p. 17). The Planning Commission must therefore agree that the ZHB should consider matters beyond strict land usage, including, but not limited to, geotechnical aspects and their impact on the proposed construction. (See testimony of Charles

Wooster in response to this same question by Teri Soster, agreeing that traffic impacts are rightfully considered by the ZHB (July 15, 2021, C. Wooster p. 206)).

More importantly, the Leet Township Ordinance at No. 2019-02 Part 6 Section 2 explicitly enumerates the standards to be applied when considering a request for a special exception. The Ordinance states that the Zoning Hearing Board shall not approve an application for a use by special exception unless:

- (1) The Board is satisfied that the use will be beneficial to the public at the proposed location (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(5));
- (2) It shall be more suitable at the proposed location than on other properties in the same district (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(6));
- (3) It shall not involve any element or condition that may be dangerous, injurious or noxious to any other property or persons (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(7));
- (4) The proposed site shall be sited, oriented, and landscaped to be harmonious with adjacent buildings and property (Leet Ordinance No 2019-02 Part 6 Section 2.A.(8));  
and
- (5) It shall organize vehicular access...to minimize traffic congestion in the neighborhood (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(12)). (emphasis added).

Finally, it is QVSD's burden, as the applicant, to persuade the Zoning Hearing Board that the proposed use will not offend general public interest, such as the health, safety, and welfare of the neighborhood, and that the proposed plan satisfies the remaining tenets of the Ordinance. *See* Leet Ordinance No. 2019-02 Part 6 Section 2.D.

The Objectors assert that QVSD has not met its burden of proof with regard to the requirements set forth in the Ordinance, and submit that QVSD's application should not be granted for, *inter alia*, the following reasons: (1) the character and condition of the land at the site poses a danger to the health, safety, and welfare<sup>1</sup> of the Township, both during and after proposed construction; (2) the character, condition and usage of Camp Meeting Road poses a danger to the health, safety, and welfare of the current residents of the Township as well as persons who would be attending or visiting the proposed high school; (3) the proposed development is not harmonious to adjacent land and buildings due to the makeup of the proposed buildings, noise and light which would be created, and other environmental impacts; (4) QVSD failed to show that a high school is more suitable at the proposed location than on other properties in the same district; and (5) the proposed exception offends the public interest and health, safety and welfare of residents of the Township as a result of, among other things, the lost revenue from property taxes and increased burdens and costs on services, the dangers of a single access road, and the failure of QVSD to follow the recommendations of Pa DOE regarding site choice.

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<sup>1</sup> The Ordinance's use of "health, safety, and welfare" is consistent with well-established Pennsylvania law. *See, e.g., Blancett-Maddock v. City of Pittsburgh Zoning Bd. Of Adjustment*, 6 A.3d 595, 600 (Pa. Cmwlth. 2010); *Elizabethtown/Mt. Joy Tp. Zoning Hearing Bd.*, 934 A.2d 759, 764 (Pa. Cmwlth. 2007); *see also* Section 604 of the Municipalities Planning Code ("MPC"), 53 P.S. § 10604 ("zoning ordinances shall be designed ...[t]o promote, protect and facilitate any or all of the following: the public health, safety, morals, and the general welfare") (emphasis added).

Here, the Ordinance uses the phrase "general public interest" interchangeably with the phrase "health, safety, and welfare." *See* Ordinance § 27-601.2.D ("the proposed use will not offend general public interest, *such as the health, safety and welfare of the neighborhood*) (emphasis added).

Thus, since in accordance with the Ordinance the Zoning Hearing Board necessarily has to consider whether the proposed special exception promotes the public health, safety, and welfare of the community, it does not appear to be necessary to conduct a separate analysis regarding whether a proposed special exception offends the "general public interest."

## II. STANDARD OF REVIEW

An applicant for a special exception has the burden to show that its application complies with the specific criteria delineated in the ordinance. *See Blancett-Maddock v. City of Pittsburgh Zoning Bd. of Adjustment*, 6 A.3d 595, 600 (Pa. Cmwlth. 2010). Indeed, the standard to be observed by a zoning hearing board is “whether the plan as submitted complies with specific ordinance requirements *at the time the plan comes before it.*” *See Edgemont Tp. v. Springton Lake Montessori School, Inc.*, 622 A.2d 418, 420 (Pa. Cmwlth. 1993) (emphasis added) (holding that promise to come into compliance with special exception requirements at some future date is insufficient).

Following this well-settled Pennsylvania standard regarding requests for special exceptions, to be granted the requested special exception, QVSD must meet all of the criteria set forth in the Ordinance, including, but not limited to, the requirements that the proposed exception does not involve any element or condition that may be dangerous, injurious, or noxious to any other persons or property; that the proposed exception produces a harmonious relationship to adjacent buildings and property; and that the requested exception is more suitable at the proposed location than on other properties in the same district. Any promise in the future to come into compliance with the requirements set forth in the Ordinance is insufficient. *See Edgemont Tp.*, 622 A.2d at 420.

A zoning ordinance, like the Ordinance at issue here, may also alter this general presumption by placing the burden of proof on the applicant with regard to issues effecting the health, safety, and welfare of the community. *Elizabethtown/Mt. Joy Assoc., L.P. v. Mt. Joy Tp. Zoning Hearing Bd.*, 934 A.2d 759, 764 n. 6 (Pa. Cmwlth. 2007). In such a case, the applicant

bears the burden of persuasion and, if the applicant is persuasive, the objector(s) must show that the proposed exception is a detriment to the health, safety, and public welfare. *Id.*

### **III. ARGUMENT**

#### **A. The Proposed Use is Dangerous, Injurious, and Noxious to Property and Persons Within the Township (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(7)).**

- (1) The Character and Condition of the Land at the Proposed Site Poses a Danger to the Health, Safety, and Welfare of the Township, both During and After the Proposed Construction.

The Ordinance explicitly states that the proposed development “shall not involve any element or condition that may be dangerous, injurious or noxious to any other property or person.” (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(7)) (emphasis added). The uncontroverted facts elicited during the hearings, both by the witnesses for QVSD, and others, demonstrates that the geotechnical conditions of the proposed site are unsafe and could be dangerous, injurious, or noxious to residents Leet and the surrounding areas. Based on this alone, the proposed exception cannot be granted.

The proposed site is a hilltop ridge with steeply sloped wooded hillsides. (June 30, 2021, J. Thomas, pp. 21, 127; Exhibit 2, SP 3). Indeed, Leet is a known high-risk landslide area (June 30, 2021, J. Thomas, pp 91, 117; Aug 20, 2021, G. Philips p 69). As testified to by QVSD’s own engineers, the site is metastable, with an average safety factor of 1. That is to say, “where forces resisting ground movement are equal to the forces which tend to cause slope movement, ... the slope is right on the verge... It doesn’t take much to cause it to begin to be unstable and potentially begin to move.” (Aug. 20, 2021, G. Philips, pp. 77-79).

Moreover, there are areas on the site with a safety factor of less than 1. “They are in active movement. Every time it rains, they move a little more.” (Aug. 20, 2021, G. Philips, pp. 24, 80,

176). These facts, uncontradicted by any witness, establish how very little it would take to cause a landslide on or below the proposed site.

The testimony also demonstrates that land itself is not conducive to a large construction project, such as the proposed high school. The ridge of the site is capped with hard sandstone. Plans call for the removal of 30 feet of this cap. (Aug. 20, 2021, G. Philips p. 232; June 30, 2021, J. Thomas, p. 21; Exhibit 2, SP 3).

Preliminary plans for the site indicated that blasting would be necessary (Aug. 20, 2021, G. Philips, pp. 24-25, 97-98). If no blasting is required, heavy equipment will be used to break up the sandstone. If blasting does occur, its function is to vibrate the land causing fractures to the stone. Either scenario will vibrate the ground. QVSD's engineer, Geoffrey Philips, agreed that blasting can go wrong. (Aug. 2, 2021, G. Philips p. 26). But the blasting does not have to go "wrong" for the vibrations to cause metastable or unstable land (areas with a safety factor of less than 1) to slide.

Borings indicate there is subsurface water. (Aug. 20, 2021 J. Boward p. 64). If breaking up or blasting causes subsurface cracks in the remaining sandstone, subsurface water could make its way "anywhere." This water may cause or contribute to landslides, but in and of itself, may also invade downhill homes. (Aug. 20, 2021, J. Boward, pp. 70, 72-75).

The potential for landslide and the change in the path of subsurface water may adversely affect the 25 downhill neighbors on Winding Road, Wood Spur, Overdrive, and Riverview. Mr. Philips and Mr. Boward admit that cracks in foundations may occur, water may make its way into dwellings and that landslides themselves may cause damage or injury. (Aug 20, 2021, J. Boward, pp. 65-68; Aug. 20, 2021, G. Philips p. 252). The detriment to the health, safety, and welfare of

the community is not obviated by the existence of contractor's insurance. Even if it were, there are still problems of time limitations and burden of proof upon the injured. (Aug. 20, 2021, G. Philips p. 41). The Ordinance states that the proposed development “**shall not** involve any element or condition that **may** be dangerous, injurious or noxious to **any** other property or persons.” (Leet Ordinance No. 2019-02 Part 6 Section 2.A.(7)) (emphasis added).

Another contributor to the potential for landslides is the removal of trees. Many trees will need to be removed on the site, particularly on the southern and western portions, where the district intends to remove colluvial soils and bench, they will of necessity have to clear cut the land. The hilltop ridges that need to be brought down thirty (30) feet will be denuded as well as the building areas and those which will become impervious surface. QVSD's construction manager Jon Thomas testified that approximately 47 acres will have to be clear cut. (June 30, 2021, J. Thomas p. 135; July 8, 2021, J. Thomas pp. 80-82). Everyone agrees that the root system of trees help keep the earth from moving. (June 30, 2021, J. Thomas pp. 114, 125; Aug. 20, 2021, G. Philips p. 265).

To make matters worse, the hillsides are colluvial soils. According to Mr. Philips the colluvial soils “safety factor has been decreased, due to wind, water and erosion, to be less than one.” (Aug. 20, 2021, G. Philips, pp. 14, 70, 79-80). Further, the site is ringed with Pittsburgh Redbed, a “slippery clay layer on top of a shale layer . . . that's prone to movement.” (Aug. 20, 2021, G. Philips p. 73; Nov. 16, 2021; G. Philips pp. 15-16, 21). QVSD made much of its plan to rehabilitate and improve the slope in their application and testimony, but the benching plan involves less than one-third of the dangerous Redbed slopes, and QVSD intends to work only the southern and western side of the ridge. (Aug. 20, 2021, J. Boward p. 82; Aug. 20, 2021, G. Philips pp. 176-177, 234, 259).



The remaining portions of the site, the “undisturbed” slopes, will have trees removed uphill from them, heavy equipment operating uphill from them, pulverizing of stone, and potential blasting, paving and construction. All of this activity will occur uphill from a ring of Redbed, which is covered with colluvial soils where the safety factor of the land is already 1 or less and where VEBH has identified steep slopes and wetlands. (Mar. 12, 2019, QVSD Conceptual Site Planning Study). In addition, downhill of the activity, and the Redbeds, are the Leetsdale neighbors of Winding Road, Wood Spur, Overdrive, and Riverview. There are more streets and homes involved; the named streets are those directly touching land of the site (Garvin Boward Beitko Geologic Map).

The District’s lack of planning regarding these geotechnical matters clearly violates the Ordinance, which requires applicants to provide a degree of specificity sufficient to enable the ZHB to conclude that the work can be done without endangering the health, safety, and welfare of the community. *See* Ordinance 2019-02 Part 6 Section 2.A.(1). The District has not formulated a plan for removing the colluvial soils and Redbed from the southwestern portion of the site. They have not explained how the sandstone will be removed. They have not explained how Camp Meeting Road, which is already sliding, will be supported, or how the benching will be accomplished given the poor state of the site. (Aug. 20, 2021, G. Philips pp. 30, 74, 79, 83-84, 210).

QVSD has been directed to present evidence of the geotechnical aspects of their application. The ZHB is obliged to rule upon it. No specific plan has been submitted. Leet has only the assurances of Mr. Philips and Mr. Boward that they, or whomever is hired, will design and then perform the work safely. (Aug. 20, 2021, G. Philips p. 30).

The combination of trees removed from the site, steep, metastable or unstable slopes, clay, subsurface water, colluvial soils, and Pittsburgh Redbed surrounding the site, combined with the large amount of excavating and earth-moving contemplated, including the very real potential need for blasting, are dangerous and potentially injurious to the Leet community and to its downhill neighbors in Leetsdale. Compounding these risks is the failure of QVSD to present a plan as to how they might safely accomplish their goal. The objectors submit that this combination of factors is sufficient to decline the application of QVSD for a Special Exception.

- (2) The Character, Condition and Usage of Camp Meeting Road Poses a Danger to the Health, Safety, and Welfare of the Current Residents of the Township as well as Persons Who Attend or Visit the Proposed High School.

In addition to the dangers that the land itself poses, the proposed school's location directly adjacent to Camp Meeting Road also creates threats to the health, safety, and welfare of Leet's residents and visitors. *First*, the proposed school would exacerbate the hazardous nature and condition of Camp Meeting Road, causing a dangerous condition to all of those who traverse the road. *Second*, the congestion created by the increased number of vehicles going to and from the school will cause significant delays for commuters.

The Wooster Traffic Impact Study, which was submitted with QVSD's application for special exception, found that 2,800 vehicles use Camp Meeting Road each day. Appendix A, p. 71. Mr. Wooster was satisfied that this count, conducted on September 19, 2019, was reflective of normal road usage. (July 15, 2021, C. Wooster p. 236). However, since the upper end of Camp Meeting Road was closed at that time and Little Sewickley Creek Road was open, the number, in reality, may be even higher.

Wooster's Study found that if the proposed high school is built, the daily volume of vehicle trips on Camp Meeting Road would increase by 1,792. (July 15, 2021, C. Wooster pp. 84, 237).

Note that this count does not reflect any additional traffic for school events, such as theatre or sporting events. (July 15, 2021, C. Wooster pp. 131, 217, 254). It also does not reflect the additional traffic that the school would attract as a result of its use as a community resource. Given that the school's auditorium will seat 800 and its main gymnasium will seat 1,200, it is likely that the traffic increase will be even more pronounced than Wooster's study would suggest. (June 30, 2021, J. Thomas, pp. 60-62).

Of the 1,792 vehicle trips contemplated, Mr. Wooster felt the real difficulty would occur during peak hours in the morning and evening. Even so, his study concluded that there is no need for a traffic signal or even additional stop signs at the intersection of Camp Meeting and Beaver Roads. Instead, Wooster recommends stationing a traffic officer during peak hours, which the school has adopted. (Traffic Impact Study p. 17).

The intersection of Camp Meeting Road and Beaver Road has a present Level of Service rating of "C." (July 15, 2021, C. Wooster p. 239). Level of Service ("LOS") is defined in terms of delay. Delay is a measure of "driver discomfort, frustration, fuel consumption and lost travel time." (Traffic Impact Study p. 176). An LOS rating of C means that there is an average wait time of 15-25 seconds per vehicle. To illustrate: if four vehicles are on Camp Meeting Road waiting to turn onto Beaver, the average wait time of the fourth vehicle is 60 to 100 seconds. (Traffic Impact Study p. 176).

The Traffic Study found that the proposed high school will cause the LOS rating of the Camp Meeting Road/Beaver Road intersection to decrease from "C" to "F." (Traffic Impact Study Table 1E; July 15, 2021, C. Wooster p. 239). An "F" rated LOS means that the volume of traffic exceeds the capacity of the lane and results in extreme delays of more than 50 seconds per vehicle.

(Traffic Impact Study p. 176). Such an LOS is “unacceptable” according to PennDOT and Mr. Wooster. (Traffic Impact Study p. 176).

The contemplated solution of this “unacceptable” traffic congestion is to place a traffic officer at that intersection during peak times. Mr. Wooster testified that this would account for less than one hour in the morning and less than one hour in the afternoon. (July 15, 2021, C. Wooster p. 269). However, his breakdown of when traffic comes and goes shows that 500 vehicles enter the school site and 600 vehicles exit the school site, during non-peak hours. (Traffic Impact Study Table 2; July 15, 2021, C. Wooster pp. 238-239). There will therefore be 1,100 additional vehicle trips on Camp Meeting Road, which will not have the benefit of a traffic officer. (July 15, 2021, C. Wooster p. 239). These additional 1,100 vehicle trips, plus whatever portion of the 2,800 that are not traveling during peak hours, will congest Camp Meeting Road without the benefit of a traffic officer, traffic signal, or stop signs. Again, this number does not account for any additional vehicles traveling to the school site for interscholastic activities or for any contemplated community uses of the proposed school.

QVSD has not submitted a plan to include a stadium at the site, although it is obvious that QVSD intends to put a stadium on the site in the future. Mr. Thomas testified that the planned 550 parking spaces will be sufficient at present, but that “they have room to expand if they need to for stadium parking.” (July 8, 2021, J. Thomas p. 93). He further stated that although the present plan does not have a sports stadium, it is designed so as “not to preclude building one in the future. The basic infrastructure, earthwork, power consumption, sewer loads, and storm water needs are baked in.” (June 30, 2021, J. Thomas, p. 66).

A stadium will host interscholastic football, soccer, lacrosse, track, field hockey, and band events. It will be in use throughout the school year with all attendant traffic, noise, and lights.

Though it is not in their present plan, it is a logical certainty that QVSD intends to construct a stadium at the same site as the school. (June 28, 2021, J. Thomas pp. 57-58: “A stadium is typically close to a high school.”). A decision to grant a special exception to allow the school will lead inevitably to a request to build a stadium.

There is also no plan to aid traffic flow with a traffic officer at the primary or the secondary access to the school. (July 15, 2021, C. Wooster p. 242). Although QVSD has presented a plan showing turning lanes at the primary access on Camp Meeting Road, Charles Wooster has stated they are not required, and he is uncertain that they will be part of the ultimate plan. (Wooster Traffic Study P4, pp. 13, 53, 333; July 15, 2021, C. Wooster p. 73). If there are no turning lanes from Camp Meeting Road into the school, then southbound traffic along Camp Meeting Road will be halted regularly at that intersection to allow for left turns.

Altogether, the planned and partially planned proposal of QVSD to locate a school on Camp Meeting Road will cause congestion, creating “driver discomfort, frustration, fuel consumption and lost travel time,” particularly at the intersection of Camp Meeting Road and Beaver Road. For these reasons, it will have a negative impact on the welfare of residents of Leet Township who live on or adjoining Camp Meeting Road and those who, for work or other reasons, need to travel on Camp Meeting Road.

The second set of issues that the proposal presents with regard to Camp Meeting Road pertains to the character of the road itself. The school, as proposed, can only be accessed via Camp Meeting Road. A landslide or an automobile accident requiring a road closure would significantly affect persons coming and going from the school or other Camp Meeting Road locations. (July 15, 2021, C. Wooster pp. 91, 139). It would also create a health and safety hazard if it affects the ability of emergency vehicles to access the school or other nearby locations. (Nov. 2, 2021, H.J.

Garber pp. 118, 120; See Mr. Soman’s statement that it would take eleven minutes to get a fire truck to the site. This amount of time, which he said was “a very long time,” is without the complication of any closed road. Sept. 17, 2021, p. 114).

A school should be built with multiple access points according to safety experts. The possibility of car accidents on the road or a landslide coming from the hillside above the road necessitating the closing of the road are both events which have occurred in the past. (Sept. 17, 2021, M. Connelly p. 85; S. Hyjek p. 111; Nov. 2, 2021, HJ Garber pp. 130-31). These problems are not unlikely. Closure of the road presents not only a logistical problem with no real solution, but also a potential danger to persons with emergency needs. Therefore, proposing to build a school with a single access on this steep, winding, landslide-prone hillside is not beneficial to the welfare of the community.

Camp Meeting Road cannot be designated as a school zone because there are no sidewalks along its length now and no plan to place any there. (June 30, 2021, J. Thomas p. 57; Traffic Study Appendix A: There will be “no crosswalks and no sidewalk because pedestrian and bicycle traffic will be minimum due to location and topography;” C. Wooster pp. 97, 102-103). Both Mr. Thomas and Mr. Wooster agree that it is dangerous to walk or bike on Camp Meeting Road. (July 8, 2021, J. Thomas p. 32; July 15, 2021, C. Wooster pp. 97, 102-103). Therefore, there will be no safe way for students living nearby to walk or bike to the school.

The current site of the high school has sidewalks and crosswalks, and the testimony reveals that somewhere between 80 and 100 students walk to and from school. Moreover, the PDE encourages schools to preserve walkability and existing sites.

The plan of the school district is certainly contrary to this goal. Consider the real-world situation of kids who live in neighborhoods directly across from the entrance to the proposed school or close by. Will they elect to wait for their buses? It seems likely that they will be running, walking, or biking along and across Camp Meeting Road. A proposal that acknowledges the danger of what people will do without planning how to counterbalance that danger, is not a proposal which should be accepted.

Both Mr. French and Mr. Wooster testified as to the nature and condition of Camp Meeting Road. They agree that it is steep and curvilinear. (July 15, 2021, C. Wooster p. 190; Sept. 17, 2021, p. 122; Sept. 17, 2021, J. French pp. 128-129; Safety Review of Camp Meeting Road p. 8: “The grade on Camp Meeting Road between the proposed high school driveway and Beaver Street was estimated at 10% ... a steep roadway by most highway standards. Downgrades increase braking distance, speeding and difficulty stopping and slowing in poor weather conditions.”). Mr. Wooster and Mr. French also agree there is a hairpin turn close to the secondary access and curves where sight distance is currently inadequate. (Nov. 9, 2021, C. Wooster p. 83; Traffic Report of J. French pp. 10, 13 and photographs showing impaired sight distance p. 11). “Embankments and/or vegetation on the inside of horizontal curves obstruct visibility. The consequences of inadequate sight distance are an increased risk of hitting objects in the road, including other vehicles, such as those that might be moving slow or queued due to congestion.” (Traffic Report of J. French p. 9; Sept. 17, 2021, J. French pp. 131-132).

In addition to the difficulties of steepness, curves, and inadequate sight distances, Mr. French was concerned about the hazard of fixed objects occurring by the roadside. (Sept. 17, 2021, J. French pp. 134-39; Traffic Safety Report pp. 14, 15, 18). “They include rock outcroppings, trees, retaining walls and inlet headwalls.” (Traffic Safety Report p. 14; Sept. 17, 2021 pp. 137-139).

Mr. Wooster stated he believed there was “generally” a four-foot shoulder, but there were “some issues of things that need to be maintained.” Mr. Wooster did agree that there was an encroachment. (Nov. 2, 2021, C. Wooster pp. 27-29). Moreover, “[r]oadside hazards cause or worsen a crash by a vehicle leaving the traveling lane.” (Traffic Safety Report pp. 14; Sept. 17, 2021, J. French pp. 134-139).

As further illustration that there many aspects of Camp Meeting Road “that need to be maintained” the testimony of both experts reveals that there are inadequate and damaged guide rails, that there are trees in close proximity behind the guide rails, and that there are guide rails where the earth is falling away behind them. (Traffic Safety Report pp. 17-19; Sept. 17, 2021, J. French pp. 137-39). There is also substandard signing and pavement marking and inadequate lighting for safety along the road. (Traffic Safety Report p. 20).

Another feature of the road is how dangerous it becomes in bad weather. Numerous witnesses testified to the dangers of the road, whether from black ice or snow. (Sept. 17, 2021, M. Vettorazzi p. 72; Sept. 17, 2021, T. Weber p. 80; Sept. 17, 2021, M. Connelly pp. 85-86; Sept. 17, 2021, S. Hyjek pp. 100-101; Nov. 2, 2021, H.J. Garber pp. 130-31).

Mr. French concluded that building a high school on Camp Meeting Road would be detrimental to the health, safety, and welfare of the residents of Leet Township and especially to children. Mr. French stated that the condition of the road combined with increased traffic and teen drivers increases the risk of crashes and may also elevate their severity. (Sept. 17, 2021, J. French pp. 147, 148, 185). For ease of reference, a complete copy of Mr. French’s report is attached to this memorandum as Exhibit A.



The posted speed limit of Camp Meeting Road is 25 mph. (Nov. 2, 2021, C. Wooster pp. 27-28). Mr. Wooster testified that at the posted speed limit, he believed the road was safe. (July 15, 2021, C. Wooster pp. 92, 93, 101; Nov. 2, 2021, C. Wooster pp. 27-28). However, a radar speed study of Camp Meeting Road was performed on January 13, 2021. The study concluded the 85% speed, that is to say, the speed that 85% of the cars were going, was northbound 36 mph and southbound 34 mph. (Wooster Traffic Impact Study, Appendix C 2.2, p. 6). Saying this another way, 36 mph is the speed at which the majority of vehicles traveled, and Fifteen per cent of the vehicles were traveling faster than that. (July 15, 2021, C. Wooster 144-45; Nov. 2, 2021, C. Wooster pp. 66-67).

Mr. Wooster's statement that the road is safe at the posted speed is therefore an empty statement. No one is traveling at the posted speed. In general, people are traveling 9 to 11 mph above the speed limit. Fifteen per cent of the time, they are going even faster than that. If the road is safe at the posted speed and everyone exceeds that, then it cannot be true that the road is safe.

Compounding the problem is the reality that a significant number of drivers on Camp Meeting Road are teenagers. In fact, more than 200 students drive to school each day. (July 15, 2021, J. Thomas p. 32). According to the CDC, motor vehicle crashes are the second leading cause of death for U.S. teens. Persons between the age of 16 and 19 are three times more likely than drivers 20 or older to be in a fatal crash. Preeminent among the reasons given is their inexperience. Other reasons include distracted driving, nighttime and weekend driving, not wearing seat belts, speeding, and alcohol or drug use. (Sept. 17, 2021, J. French p. 152; French Traffic Safety Report pp. 2-3). Mr. Restauri noted that automotive insurance rates are notably higher for teen drivers because they have more accidents.

In sum, Camp Meeting Road is steep and highly curved. It is the single access road for the proposed high school. It has inadequate sight distances, fixed object hazards, poor lighting, poor markings, and damaged and inadequate guide rails. It will likely have students walking or biking along it. It has been the site of accidents and landslide-forced road closures and is susceptible to snow and black ice. While some of these hazards can be repaired or improved, the steepness of the road and its curvilinear nature cannot be changed. Given that drivers regularly exceed the speed limit on the road significantly, the increased traffic which the proposed high school would bring, will almost certainly lead to a rise in the frequency of accidents. Since more than 200 inexperienced and often distracted teenaged drivers will be driving under these deficient conditions, there is little question that granting a Special Exception for the proposed school would be injurious or noxious to other persons or properties and offend general public interest, such as the health, safety and welfare of the neighborhood. Therefore, the objectors submit that the application for a Special Exception should be denied.

**B. The Proposed Location is Not More Suitable than Other Properties in Leet Township.**

To prevail on its application, QVSD must demonstrate that the proposed use shall be more suitable at the proposed location than on other properties in the same district. *See* Leet Ordinance No. 2019-02 Part 6 Section 2.A.(6)). QVSD has failed to meet this burden.

Other than making conclusory statements that the proposed site is more suitable than other locations, QVSD has offered no evidence to support his prong of the Ordinance. Why is that the case? Why did QVSD fail to closely examine the suitability of other properties within the district? The answer to those questions is clear: it is because there are multiple properties within the district that are more suitable and QVSD did not want to weaken its position by examining the suitability

of those other properties. Remember, it is QVSD's burden to prove that the proposed site is more suitable; it is not the burden of objectors to submit evidence to the contrary.<sup>2</sup>

The objectors have produced a substantial amount of compelling evidence that there are other properties within the district that are more suitable.<sup>3</sup> As testified to by industry expert Mark Zappala, the proposed site is one of the worst possible locations for a school. A copy of Mr. Zappala's report is attached as Exhibit B.

The topography and geography of the proposed location is "grossly inferior" to land not located in a forested area, on top of a hill, in the middle of a single family neighborhood or on top of Redbed. (June 15, 2021, Zappala Report, p. 3). In addition to deficiencies in the site itself, the selection process for the site was "fundamentally flawed." *Id.*

Development of the proposed location as a school only yields about 25 of its nearly 160 acres, or 15%. If development of the "high school of the future" only required 25 acres, the minimum thresholds incorporated into the selection process improperly eliminated severable viable options from consideration. Namely, QVSD could have acquired adjacent properties

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<sup>2</sup> Whether the proposed development is more or less onerous than residential construction that could be undertaken on the proposed site is irrelevant because proposed residential construction does not need to first apply for a special exception and/or meet the requirements of the Ordinance. *See* Ordinance No. 2019-02 Part 6 Section 2.

<sup>3</sup> What the zoning hearing board must consider as part of a community/neighborhood impact analysis is set forth in the Ordinance. *See Elizabethtown*, 934 A.2d at 764 ("Application for a special exception is to be granted or denied by the ZHB pursuant to the express standards and criteria set forth in the applicable zoning ordinance. Thus, what an applicant must demonstrate to obtain a special exception is determined on a case-by-case basis and will vary among municipalities based upon the use requested and the language in the ordinance.").

Here, the Ordinance specifically requires the Zoning Hearing Board to consider whether the proposed school would be better located elsewhere in the "same district." *See* Ordinance § 27- 601.2(A)(6) (applicant must demonstrate that the "special exception shall be more suitable at the proposed location than on other properties in the same district..."). By using the word "District," rather than "Township," the Ordinance must be read to consider any other properties within the Quaker Valley School District.

similar to the proposed location, at a potentially lower cost with consistent uses and superior ingress and egress, which would have obviated the need for a zoning change altogether. *Id.*

Given QVSD's failure to present testimony on the subject and considering Mr. Zappala's testimony, QVSD has failed to meet its burden that the proposed use shall be more suitable at the proposed location than on other properties in the same district and, accordingly, the objectors submit that the application should be denied.

**C. The Record is Devoid of Evidence Sufficient to Demonstrate that the Proposed Location is a Suitable One.**

To prevail on its application, QVSD must demonstrate to the ZHB that the proposed use will be beneficial to the public at the proposed location. *See* Leet Ordinance No. 2019-02 Part 6 Section 2.A.(5)).

QVSD has failed to demonstrate the suitability of the proposed location. The record demonstrates that deficiencies in the land itself and the condition(s) of Camp Meeting Road make the location dangerous and injurious. The location will also be noxious, as it will adversely affect the quiet enjoyment of adjacent property owners as a result of increased noise, traffic congestion, and disruption to the standard single family occupancy that comes with the influx of hundreds of teenagers each day.

In addition, the proposed location will not produce a harmonious relationship with adjacent buildings and property as the high school is "the equivalent of introducing two Quaker Village Shopping Centers both in land area and square footage on to the Subject." (June 15, 2021, Zappala Report, p. 3). As Mr. Zappala explained, "[i]t is impossible to insert the proposed building mass along with ancillary parking and expect it to be considered 'harmonious' with the surrounding single family homes." *Id.*

Based on the facts set forth in this section and throughout this memorandum, the objectors submit that QVSD has failed to demonstrate that the proposed use will be beneficial to the public at the proposed location, requiring that the application be denied.

**D. The Requested Special Exception is Not Beneficial to the Public at the Proposed Location.**

For the reasons set forth at length in this memorandum, it is evident the proposed exception is not beneficial to the public at the proposed location.<sup>4</sup>

Given the geotechnical issues regarding the proposed site and development, and the dangerousness of Camp Meeting Road, the evidence demonstrates that the proposed use is dangerous, injurious, and noxious to persons and property within Leet and the surrounding community. The proposed exception also offends the public interest and health, safety and welfare

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<sup>4</sup> While Pennsylvania courts have identified some factors that are not *per se* detrimental to the general welfare, few, if any, factors are expressly excluded from the Zoning Hearing Board's analysis. For example, complaints of noise and possible diminished property values can be evaluated when considering the adverse impact on the public interest, beyond that normally expected for the proposed special exception use. *See Mehring v. Zoning Hearing Bd. of Manchester Tp.*, 762 A.2d 1137, 1142 (Pa. Cmwlth. 2000). Pennsylvania courts have similarly held that a loss in tax revenue and an increase in the cost of municipal services can be considered. *See Jacobi v. Zoning Bd. of Adjustment of Lower Moreland Tp.*, 196 A.2d 742, 745 (Pa. 1964).

Similarly, there does not appear to be any Pennsylvania authority requiring any specific factors to be considered by the Zoning Hearing Board in making such a determination. While the Zoning Hearing Board may consider various factors, it is only *required* to consider the factors that are referenced in the Ordinance.

Here, those factors are set forth in the Performance Standards of Section 27-701 of the Ordinance, and include, *inter alia*, fire hazards, radioactivity or electrical disturbance, noise, vibration, odors, glare, and water pollution. The Ordinance also specifically requires the Zoning Hearing Board to consider whether the special exception is harmonious with adjacent buildings and properties, and whether the special exception will minimize traffic congestion. *See* Ordinance § 27-601.2.A(8) and (12).

The Ordinance also grants the Zoning Hearing Board with discretion to make such other and additional conditions and safeguards as they deem necessary to protect the best interests of the surrounding property and neighborhood. *Id.* at § 27-601.2.A(13). The standard of proof for any of these factors is the same – the applicant bears the initial burden of persuasion and, if met, an objector has the burden of production to demonstrate that the impact from the proposed use will substantially affect the health, safety and welfare of the community. *See Blancett-Maddock*, 6 A.3d at 600.

of residents of Leet as a result of, *inter alia*, the lost revenue from property taxes and increased burdens and costs on services, the dangers of a single access road, and the failure of QVSD to follow the recommendations of Pa DOE regarding site choice.

In the face of these demonstrated dangers to persons and to the welfare of the community, the objectors submit that the Zoning Hearing Board must conclude that the Applicant has failed to show that granting a special exception will be beneficial to the public. (See Leet Twp. Ordinance Part 6 Section 1, 2.A.(5)).

**E. The Objectors Have Standing.**

Any person that is “aggrieved” regarding the development proposed by QVSD through its application has standing to object. See *Provco Partners v. Limerick Tp. Zoning Hearing Bd.*, 866 A.2d 502, 507 (Pa. Cmwlth. 2005). Aggrieved persons with standing to participate in special exception proceedings include groups of concerned citizens who own and/or reside on land near the subject property. See *Union Tp. v. Ethan Michael, Inc.*, 979 A.2d 431, 433 n. 1 (Pa. Cmwlth. 2009). Pennsylvania case law is clear that such aggrieved persons are not necessarily limited to those residing in the Township in which the proposed exception is sought. See *id.* at 505 (citing *Miller v. Upper Allen Tp. Hearing Bd.*, 535 A.2d 1195, 1199 (Pa. Cmwlth. 1987) (holding that a municipal line has no impact on the ability of a person to be aggrieved by the treatment of property in another municipality). Moreover, an objector is not required to establish pecuniary or financial loss as a result of the proposed use in order to have standing. See *Appeal of Hoover*, 608 A.2d 607, 611 (Pa. Cmwlth. 1992).

Following this standard, all of the Objectors represented by the undersigned counsel are aggrieved persons who live in close proximity to the proposed site, are aggrieved by the request use, and have standing to oppose the request for special exception.

**IV. CONCLUSION**

For all the reasons delineated in this memorandum, but especially for the conditions, circumstances and reasons more fully described herein, and for the concomitant failure of the Applicant to carry its burden of proof, the objector submit that the application should be denied.

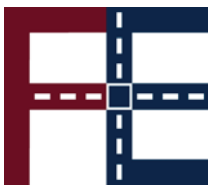
January 10, 2022

Respectfully Submitted,

/s/ Louis A. DePaul

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June 15, 2021

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Lloyd J French III  
Date: 2021.06.11  
08:13:49 -04'00'

RE: Safety Review of Camp Meeting Road  
Quaker Valley High School Relocation  
Leet Township, Allegheny County, Pennsylvania

French Engineering has performed a review of the impacts of the proposed relocation of Quaker Valley High School to Camp Meeting Road in Leet Township, Allegheny County, Pennsylvania. At this time, the first draft of the traffic study prepared by the school district is complete. The focus of the traffic study prepared by the school district is primarily related to capacity, level of service, and queuing. French Engineering reviewed the study developed by the school district and identified numerous concerns. To address safety more fully, an independent review of potential safety concerns was conducted by French Engineering and documented in this technical memo. The limits of the safety review were Camp Meeting Road between the proposed high school and Beaver Street. These concerns may have some bearing on special exception criteria, particularly:

*The special exception shall not involve any element or cause any element or condition that may be dangerous, injurious or noxious to any other property or persons, and shall comply with the performance standard of § 27-701.*

The project area was field viewed on Thursday, January 14, 2021 during daylight hours; Sunday, January 17, 2021 during nighttime / snow conditions; and Thursday May 6, 2021 during daylight hours. In general, the roadway was found to have one lane in each direction with no turn lanes at any driveway or intersection. It had a steep upgrade in the northbound direction (away from Beaver Street), numerous horizontal curves, and a posted speed limit of 25 mph. According to PennDOT functional class maps, it is classified as an urban major collector. It is owned by Allegheny County and is a non-state federal aid roadway. It was last counted on September 19, 2019 (Thursday), at which time 2,800 vehicles were counted in a 24-hour period.

Numerous concerns were identified during the field view, which are categorized into the following general areas:

- (1) Inadequacies at the Beaver Street / Camp Meeting Road intersection
- (2) Poor geometry for Camp Meeting Road between the proposed High School and Beaver Street
- (3) Roadside hazards along Camp Meeting Road
- (4) Substandard signing and pavement markings on Camp Meeting Road



(5) Dark areas along Camp Meeting Road due to gaps in the street lighting

## Organization of this Document

This document has three main parts:

1. Discussion of the specific challenges presented by teenaged drivers, which will be a major component of the traffic generated by the high school.
2. Discussion of the specific safety concerns observed on Camp Meeting Road and the Camp Meeting Road / Beaver Street intersection.
3. Approximate costs of improvements that would be considered to address some of the safety concerns.

## Teenaged Drivers

As the safety concerns are presented in this document, special consideration should be given to the high school aged drivers that will be attracted to this area with the proposed high school. Their inexperience will compound the identified issues. According to the Center for Disease Control (CDC), motor vehicle crashes are the second leading cause of death for U.S. teens. The CDC noted:

*The risk of motor vehicle crashes is higher among teens aged 16–19 than among any other age group. In fact, per mile driven, teen drivers in this age group are nearly three times as likely as drivers aged 20 or older to be in a fatal crash.*

The following materials from the CDC outline the specific risk factors associated with teenaged drivers:

- Inexperience - Teens are more likely than older drivers to underestimate or not be able to recognize dangerous situations. Teens are also more likely than adults to make critical decision errors that can lead to serious crashes.
- Nighttime and Weekend Driving - In 2018, 37% of motor vehicle crash deaths among teen drivers and passengers aged 13–19 occurred between 9 pm and 6 am, and 52% occurred on Friday, Saturday, or Sunday.
- Not Using Seat Belts - Compared with other age groups, teens and young adults often have the lowest seat belt use rates. Among teen drivers and passengers 16–19 years of age who died in car crashes in 2018, almost half were unrestrained at the time of the crash (when restraint use was known).
- Speeding - Teens are more likely than older drivers to speed and allow shorter headways. In 2018, 30% of male drivers aged 15–20 years and 18% of female drivers aged 15–20 years who were involved in fatal crashes were speeding. These were the highest percentages by sex as compared with all other age groups
- Alcohol Use - Drinking any amount of alcohol before driving increases crash risk among teen drivers as compared with older drivers. Teen drivers have a much higher risk for

*being involved in a crash than older drivers at the same blood alcohol concentration (BAC), even at BAC levels below the legal limit for adults.*

Source: [https://www.cdc.gov/transportationsafety/teen\\_drivers/teendrivers\\_factsheet.html](https://www.cdc.gov/transportationsafety/teen_drivers/teendrivers_factsheet.html)

## Safety Concerns

### (1) Inadequacies at the Beaver Street / Camp Meeting Road intersection

The following are specific concerns related to the Beaver Street / Camp Meeting Road intersection.

- A. Restricted sight distance looking right from Camp Meeting Road at Beaver Street due to a wall and utility pole in the northwestern corner. This leads to an increased risk that a motorist on Camp Meeting Road will pull out in front of a motorist heading eastbound on Beaver Street, resulting in an angle collision.



View of Camp Meeting Road from eastbound Beaver Street. As can be seen, all but the last few feet are hidden by the wall and utility pole. This photo also shows the lack of pavement markings on Beaver Street in the Camp Meeting Road intersection.



View looking right from Camp Meeting Road from the perspective of a vehicle stopped at the stop sign. The stop sign is well behind the wall lining Beaver Street.

- B. General difficulty pulling out of Camp Meeting Road at Beaver Street due to cross traffic, the three-way stop to west, and the VFW parking lot. This could lead to vehicles pulling out in front of traffic on Beaver Street, either due to confusion or risk-taking behavior caused the lack of acceptable gaps in Beaver Street traffic. The consequences of such actions are typically angle collisions in the intersection.



The stop sign has a supplemental sign indicating “OPPOSING TRAFFIC DOES NOT STOP USE CAUTION AT INTERSECTION”.

During the field view, the driver also experienced difficulty in finding a gap in Beaver Street traffic due to overall congestion conditions. It is anticipated that this will be identified and addressed in the traffic study being conducted by the school district. It is expected that alternative traffic control (i.e., signalization, all-way stop, etc) will be evaluated and proposed by the traffic study.

#### C. Skew in Camp Meeting Road / Beaver Street intersection

There is a slight skew (<10 degrees) in Beaver Street near the Camp Meeting Road intersection. Westbound traffic must turn to the left to continue following the Beaver Street alignment. Eastbound traffic must turn to the right. If a westbound driver fails to make the turn, they will hit the wall and utility pole in the northwest quadrant. (see photo below). Skewed intersections are generally undesirable because they complicate driver tasks such as navigating the intersection and identifying gaps in traffic into which to turn.



Photo shows skew in Beaver Street at its intersection with Camp Meeting Road. It also shows the lack of pavement markings.

#### D. Lack of pavement markings on Beaver Street

As can be seen in the photos above, Beaver Street lacks double yellow center lines. White edge lines are generally not required next to curb but could be beneficial in this case given the width of the road and low curb reveal. Pavement markings may help to delineate the skew of the intersection. Also to be noted, the "Pedestrian" sign with supplemental "Yield to Peds in Crosswalk" sign is shown in the photo above with no visible crosswalk on the pavement. The purpose of pavement markings are to provide guidance to the driver and can be used to convey regulations, guidance, and warnings in ways that are not obtainable by the use of other devices. The consequences of missing pavement markings are typically related to drivers leaving their assigned path, such as run-off-the road crashes, opposite direction sideswipe crashes, and head-on crashes.

#### E. Inadequate turning radii in the intersection to turn larger sized vehicles, including school buses.

The two figures below show school buses turning in and out of Camp Meeting Road from each direction of Beaver Street with a vehicle waiting on Camp Meeting Road attempting to turn out. This illustrates the tight radii on each corner, as well as how the sight obstructions caused by the wall and utility pole in the northwestern quadrant greatly reduce what limited room is available in the intersection for turning. The consequences of the poor turning radii include the potential for buses to hit the obstructions in the corner while turning, or to hit other vehicles in

the intersection because the buses are forced into opposing traffic lanes while turning around the obstructions in the corner.



Turning simulation showing the school bus turning right into Camp Meeting Road



Turning simulation showing the school bus turning left into Camp Meeting Road

## (2) The curvature and steepness of Camp Meeting Road.

### A. Steep grade on Camp Meeting Road

The grade on Camp Meeting Road between the proposed high school driveway and Beaver Street was estimated at 10% using measurements and tools in Google Earth. This would be considered a steep roadway by most highway standards. Downgrades increase braking distance, speeding, and difficulty stopping and slowing in poor weather conditions. The consequences include an increased risk of hitting fixed objects in the roadside or hitting other vehicles on Camp Meeting Road. Downgrades can also increase the likelihood of sliding off of sharp horizontal curves, which the corridor has many. The following photo shows the W7-1 “hill” sign installed on Camp Meeting Road, which is warranted in the Manual on Uniform Traffic Control Devices (MUTCD) based on the steepness and length of the grade. According the MUTCD, this sign *should be used in advance of a downgrade where the length, percent of grade, horizontal curvature, and/or other physical features require special precautions on the part of road users.*



Hill (W7-1) and Winding Road (W-15) signs on southbound Camp Meeting Road approaching the school area

Note the W-15 “winding road” sign that has also been installed. This sign is correctly applied and is warranted when there are three or more changes in roadway alignment each separated by a tangent distance of less than 600 feet.

## B. Speeding and aggressive driving on Camp Meeting Road

During the field view, the engineer drove downgrade at the posted speed limit of 25 mph and had a queue of vehicles form behind it, including those honking horns and aggressively driving. It is anticipated that a spot speed study on the roadway would reveal that operating speeds are in excess of the 25-mph speed limit. Speeding increases the likelihood and consequences of crashes and can reduce the effectiveness of certain roadway design elements, such as guide rail, guide rail end treatments, and superelevation on horizontal curves. It also requires increased sight distance to safety stop in response to hazards, which may not be available.

## C. Inadequate sight distance on select horizontal curves on Camp Meeting Road

According to the Policy on Geometric Design of Highways and Streets, Table 3-2 Stopping Sight Distance on Grades, the stopping sight distance for 25 mph speeds on 9% grades are as follows:

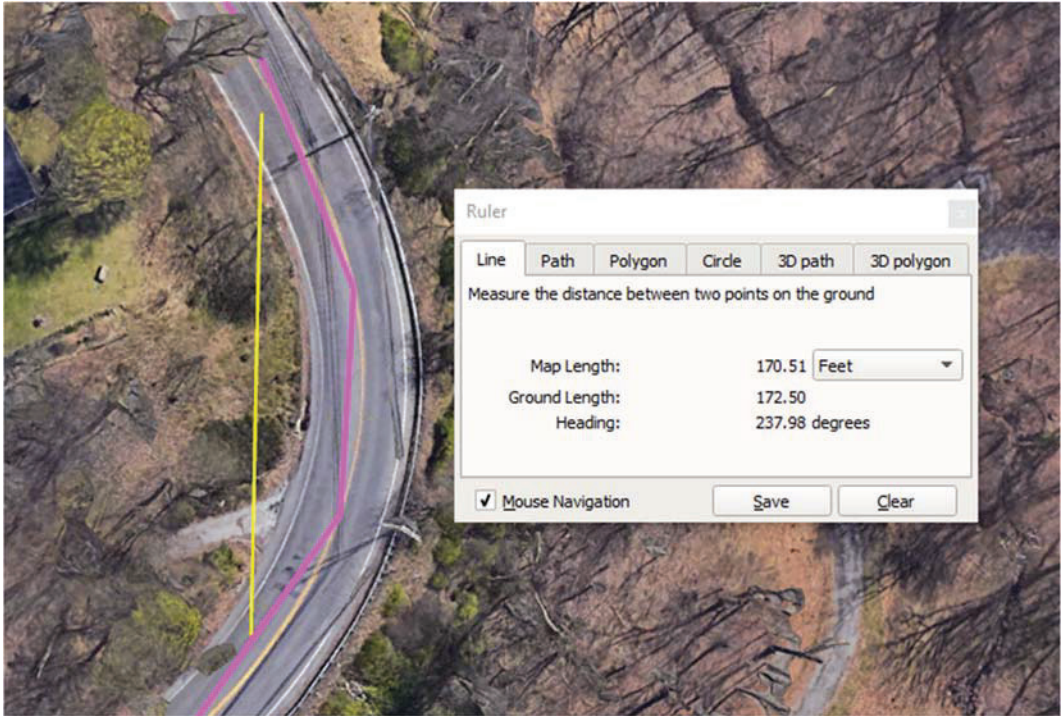
Upgrade = 140-ft

Downgrade = 173-ft

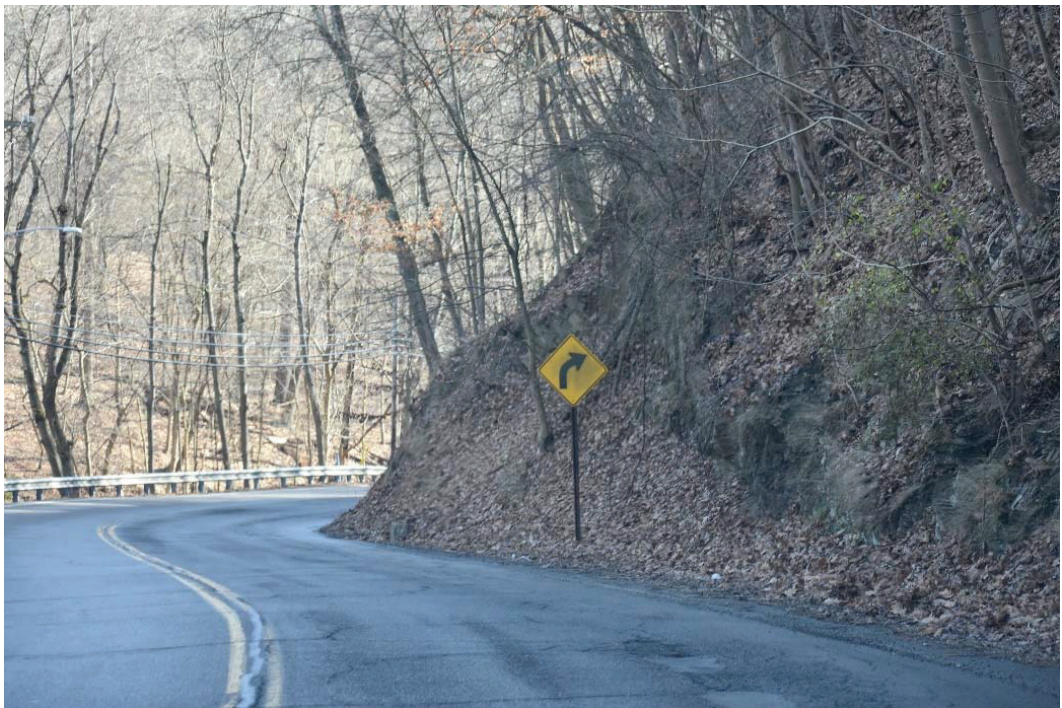
There are multiple examples along Camp Meeting Road where these minimums are not met because of embankments and / or vegetation on the inside of horizontal curves obstructing visibility. The consequences of inadequate sight distance are an increased risk of hitting objects in the road, including other vehicles, such as those that might be moving slow or queued due to congestion.

The following three figures illustrate this point. The first is an aerial photo that shows a measured distance of 173-ft being blocked by a wall / embankment. The final two are photos taken from ground view upstream of horizontal curves with sight distance limited by obstructions on the inside of the curve.





Measured length of 170-ft blocked by embankment that is located at the edge of road on the inside of the curve.



Sight distance in horizontal curve approximately 1200-ft from Beaver Street



Sight distance in horizontal curve approaching stop sign at Beaver Street

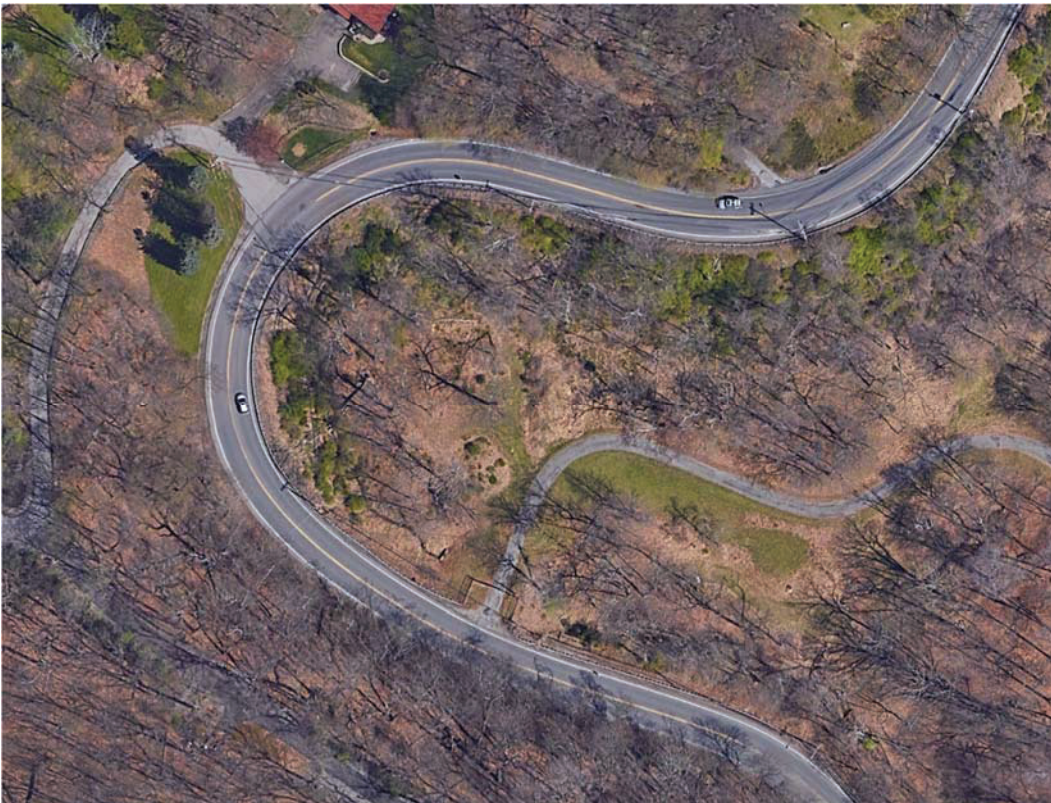
In addition, a driveway on a horizontal curve was observed with a mirror across the road to assist with sight distance. The following photo shows this mirror. PennDOT policy generally discourages the use of mirrors and will only allow them if there are no other practical alternatives for improving the sight distance or providing an alternate method of traffic control. They are a last resort for sight distance problems and should be considered atypical.



Mirror at a driveway along Camp Meeting Road due to poor sight distance

D. The series of horizontal curves on Camp Meeting Road (winding road conditions)

Camp Meeting Road has a series of reverse and broken back horizontal curves between the proposed school site and Beaver Street. The curves are of such frequency and spacing that the winding road sign is warranted and installed in both directions, as noted previously. In addition, one curve of particular concern is the curve with the intersection of Myrtle Hill Road. This curve has the “hairpin curve” (W1-11) sign installed because the MUTCD indicates it can be applied when *the curve has a change in horizontal alignment of 135 degrees or more*. In this case, the change in horizontal alignment is approaching 180 degrees, as shown in the following aerial photograph. Horizontal curves carry increased risk of sliding off the road or rolling over. A series of horizontal curves increase demands on the driver. Reverse curves complicate efforts to provide proper superelevation around curves, especially at the entrances to the curves. Substandard superelevation makes the curves even more susceptible to run off the road crashes.



Curve with “Hairpin Curve” (W1-11) sign installed



"Hairpin Curve" sign (W1-11) in the northbound direction. A second sign is installed southbound.

**(3) Camp Meeting Road has numerous roadside hazards that can cause or worsen crashes for vehicles leaving the traveling lane. The roadside hazards include the following:**

**A. Narrow shoulders on Camp Meeting Road**

While the lane widths on Camp Meeting Road appear to be approximately 12-ft, shoulder widths are narrow and on the order of a couple of feet. This leaves very little buffer / recovery area between the travel lane and hazards present in the roadside, which increases the likelihood of the hazards being struck. Most of the previous photos presented along Camp Meeting Road illustrate the narrow shoulders.

It was also noted that there are drop offs of a few inches at the edge of pavement. These can grab a wheel and yank the vehicle towards the edge of road if the driver drifts their outside wheel over them. According to PennDOT Publication 242, Pavement Policy Manual, drop-offs of greater than 2" are problematic and require correction, typically by the installation of a "Safety Edge." The following photo shows an example on the outside of the curve near Myrtle Hill Road.



Exposed pavement edge on the outside of curve near Myrtle Hill Road

- B. Unprotected fixed object hazards including rock outcroppings, trees, rollover embankments, retaining walls, and inlet headwalls. Trees and utility poles do not generally need to be protected unless they are likely to be hit due to geometric roadway conditions (outside of a curve, steep grade at beginning of a curve, etc.).

The following photos show a few examples of items in the immediate roadside that would cause or worsen a crash by a vehicle leaving the traveling lane.



Blunt end of a retaining wall sitting at the back of the shoulder, only a couple of feet from the travel lane. In addition, in the background, pieces from the wall can be seen laying on the shoulder. Blunt fixed objects can lead to high deceleration in the crash and / or spearing of the vehicle, the consequences of which are more severe crashes.



Headwall of an inlet that presents a blunt end fixed object hazard. In addition, some of the inlets have broken or depressed grates / sidewalls that could grab a tire, thus increasing the potential severity of the crash.



One example of a rock outcropping that presents a fixed object hazard. PennDOT Design Manual 2, Chapter 12, indicates *a steep, rough-sided rock cut should normally begin outside the clear zone or be shielded. A rock cut is normally considered to be rough-sided when the face can cause excessive vehicle snagging rather than provide relatively smooth redirection.*



Trees greater than 4" in diameter are considered fixed object hazards. Steep embankments can cause rollover crashes or fixed object crashes. The photo also shows another inlet headwall protruding prominently from the earth around it.

- C. Inadequate guide rail including outdated equipment, lack of guide rail backup, fixed object hazards right behind guide rail, and guide rail damage

The following photos show guide rail that has been hit and not repaired, as well as guide rail that is sliding due to sliding of the earth into which it is imbedded. The purpose of guide rail is to protect drivers from the hazards that are behind it by redirecting motorists back into the roadway. If it is not functioning properly or designed and installed in accordance with the latest standards, it can fail in this regard and / or simply be another roadside hazard.

With respect to sliding guide rail, it should be noted that there should be 2-ft of somewhat level earth behind the guide rail posts to secure them in the ground. This is not likely to be present throughout, especially if the posts are sliding.

In addition, there should be a clear area behind the guide rail posts that is at least equal to the deflection distance of the guide rail. Without a detailed examination, of the guide rail, it will not be possible to know the deflection distance. According to the PennDOT Roadside Safety Pocket Guide, deflection distances range from 1.5-ft to 9-ft. It is likely that there are obstructions, namely utility poles and trees, within the deflection distance of the guide rail that has been installed.

**Deflection Table  
(Minimum Unobstructed Distance)\***

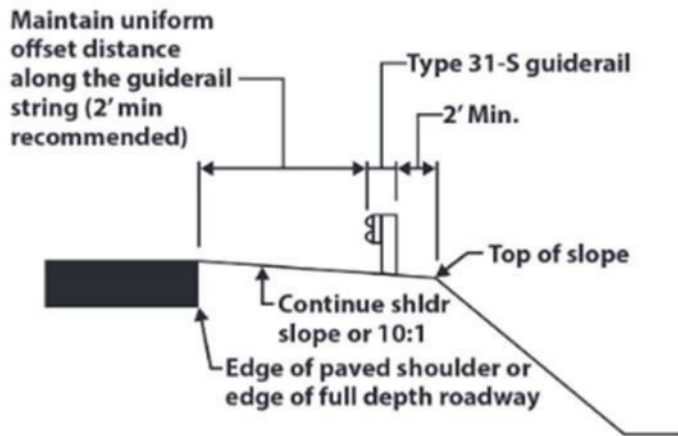
	Type	Deflection (ft)	Post Spacing (ft-in)	Mounting Height
<b>Flexible</b>	2-W	9	12' - 6"	32"
	2-WC	6.5	6' - 3"	
	2-WCC	5.5	3' - 1 ½"	
<b>Semi-Rigid</b>	31-S	4	6' - 3"	31"
	31-SC	3	3' - 1 ½"	
	31-SCC	1.5	1' - 6 ¾"	
<b>Rigid</b>	Concrete Barrier	0	-	32" or 50"

\*Measured from the rear face of the guide rail post to the front face of the obstruction.

Excerpt from PennDOT Roadside Safety Pocket Guide showing deflection distances of guide rail.



## For Optimum Performance



Excerpt from PennDOT Roadside Safety Pocket Guide showing 2-ft minimum distance between the back of the guide rail post and the top of slope on embankments.

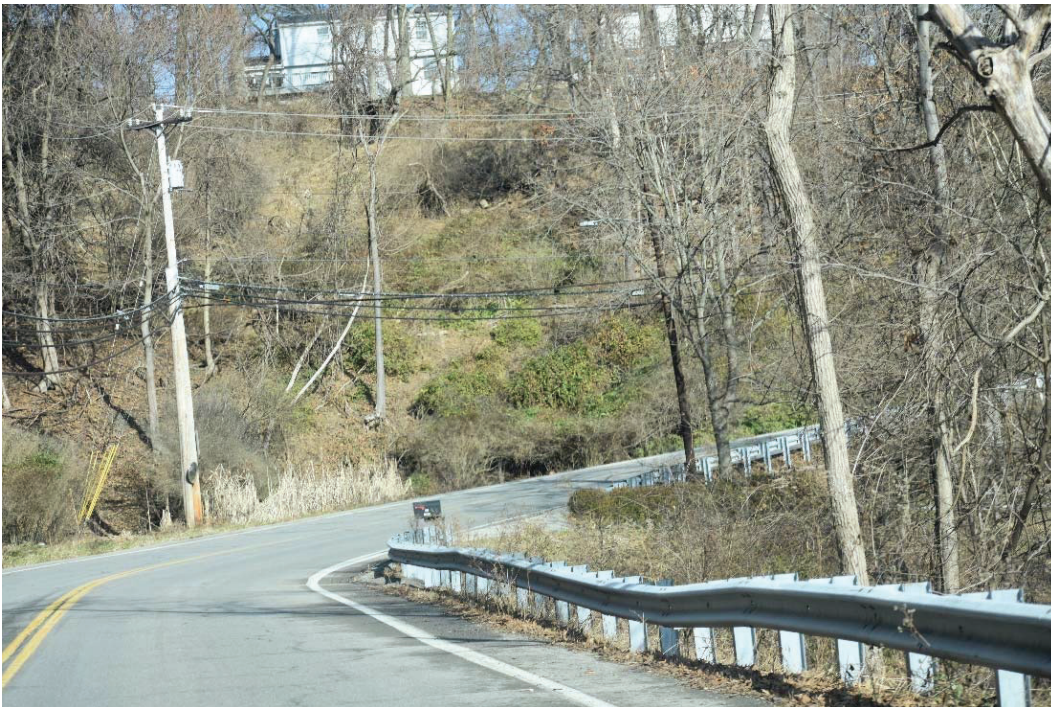
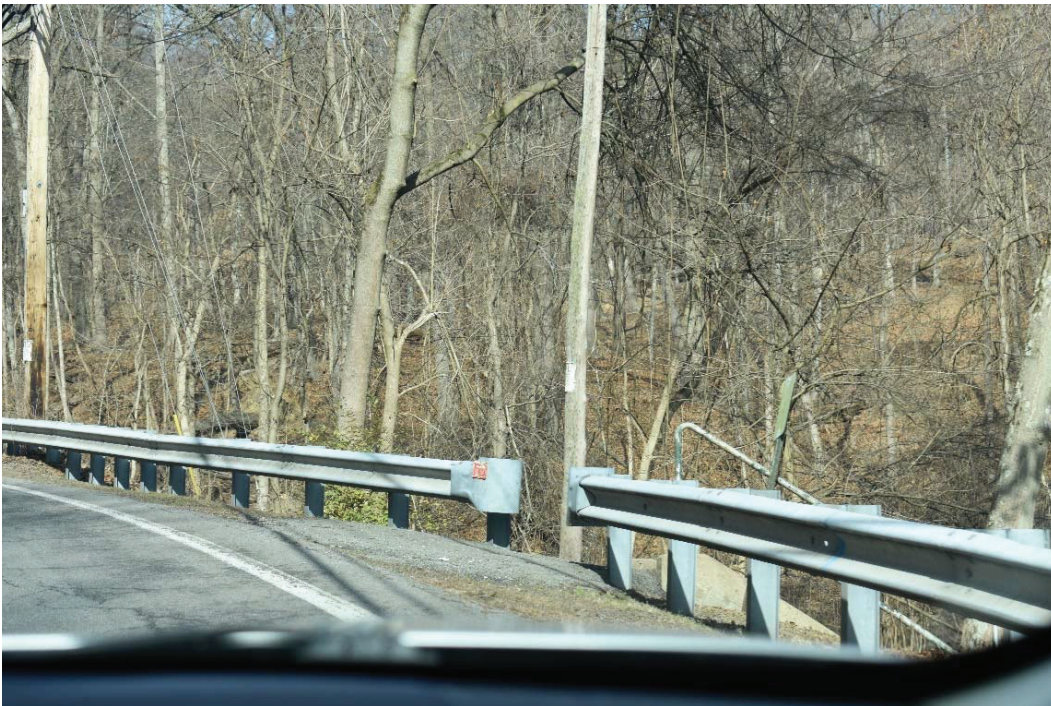


Photo shows sliding guide rail, likely due to earth sliding behind it.



Damaged guide rail. Also, potential fixed object hazards behind the guide rail within the deflection distance.



Earth around guide rail posts is eroding away from the posts in the background of the photo.

D. Old pavement, including cracking and rutting

The pavement appears old and worn, including cracking and rutting. Old pavement can have reduced friction and increase driving difficulty. The following photo illustrates the cracking in the pavement.



Cracked, distressed pavement on Camp Meeting Road

E. Shadows on the road due to the wooded nature of the area

The adjacent trees in this heavily wooded area cast shadows on various portions of pavement. Pavements in the shadow tend to stay colder, which could lead to frozen / icy pavement in the winter when other parts of the roadway are just wet, lack of foliage in the winter notwithstanding. The following photo shows an area that is almost entirely covered in shadow. Areas that are in near-perpetual shade during the winter because the roadway is oriented east-west with the trees on the southern side are particularly prone to this phenomenon.



Section of Camp Meeting Road in shadow

#### **(4) Substandard signing and pavement markings on Camp Meeting Road**

##### **A. Non-compliant horizontal curve signing**

Design criteria for horizontal curve signing needed to be brought into compliance with new requirements in the MUTCD by the end of 2019. It does not appear that the signing on Camp Meeting Road has been updated to these new standards. However, further detailed study would be required to make a final determination. Consistent signing on horizontal curves is essential to helping drivers successfully navigate the roadway alignment. Failure to do so increases the risks of run off the road crashes.

##### **B. Lack of delineation**

As a roadway through a wooded area with only sporadic lighting, the roadway would benefit from delineation in accordance with PennDOT standards (TC-8604). If uniform lighting were provided, delineation would not be beneficial. Like pavement markings, delineation guides drivers along the alignment of the roadway. If drivers fail to follow the alignment, they leave the roadway and are subject to hitting objects in the roadside.

#### **(5) Dark areas along Camp Meeting Road due to gaps in the street lighting**

Generally speaking, Camp Meeting Road has a series of light and dark areas because lighting is only provided in the horizontal curves. Additional lighting could be installed to uniformly light the entire roadway. Roadway lighting can reduce nighttime crashes that result from poor visibility.

## Cost of Safety Improvements

While it is beyond the scope of this review to conduct a detailed estimate of the cost to improve Camp Meeting Road, the following “order of magnitude” construction cost estimations are provided in this regard. Note that other costs including but not limited to design, utilities, right-of-way, maintenance and operation are not included.

It may be possible to address some of the concerns with low-cost safety improvements, such as signing, pavement markings, and delineation:

- The estimated cost for a typical post-mounted sign (e.g., 36” x 36”) is approximately \$600. It is reasonable to expect that the signing could be upgraded for \$5,000 to \$10,000.
- The estimated cost for durable thermoplastic pavement markings is approximately \$5.00 per linear foot. This is a high-quality pavement marking that is superior and more expensive than paint. Installing it along the 0.67-mile length of Camp Meeting Road between Beaver Street and the proposed school driveway would cost approximately \$70,000. Installing similar markings along Beaver Street through the Camp Meeting Road intersection area would cost approximately \$2,500.
- Post mounted delineators cost approximately \$50 each and delineators on guide rail cost approximately \$20 each. Installing delineation along the corridor would cost approximately \$5,000.

Some medium cost items include upgrading the guide rail / end treatments, replacing the inlets, installing additional lighting, and installing high friction surfacing on the curves.

- Guide rail – Typical guide rail costs approximately \$25 per linear foot, with end treatments estimated at \$3,500 each. Guide rail currently runs along the eastern side of Camp Meeting for nearly all of the length between Beaver Street and proposed school. Replacing this guide rail would cost approximately \$50,000 (includes end treatments). This also gives an idea of what it might cost to add guide rail at select locations on the other side of the roadway, acknowledging that hazards on the other side of the roadway would likely most be dealt with by removing them.
- Inlets – We estimate that replacing one of the older style inlets will cost approximately \$7,500 each. A quick investigation revealed at least six of these inlets, which amounts to a total of \$45,000.
- Lighting – Between Beaver Street and the vicinity of the proposed high school driveway, there are seven existing street lights, and up to 6 more could be added to provide more uniform lighting. It is anticipated that most of these could be added by mounting them

on an existing utility pole. It may be necessary to install one or two on new poles depending on the outcome of the lighting design. It is roughly estimated at \$1,500 to mount a new light on an existing utility pole and \$7,000 if a new pole is required. Using these assumptions, the cost to improve the lighting is estimated at \$15,000 to \$20,000 plus the ongoing costs of electrifying them.

- High Friction Surface – Given the steep grades, series of closely-spaced horizontal curves, and intersection at the bottom of the grade, it is assumed that high friction surface would be applied along most of the length of roadway. At an estimated cost of \$50 per square yard, applying the treatment in both lanes along the entire length would cost \$236,000, which serves as the upper limit on the cost of the improvement.

If a traffic signal becomes necessary at the intersection of Beaver Street and Camp Meeting Road, this will cost upwards of \$250,000 plus the cost of any roadway improvements required to accommodate the signalization, which could include turning lanes, improved turning radii in the corners, and other modifications required to place the signal equipment. A project such as this could cost upwards of \$500,000 depending on the magnitude of the roadway improvements.

Finally, some concerns will not be feasible to address, including some of the major concerns related to the steep grades and sharp horizontal curves. It is also questionable as to whether all of the roadside hazards can be satisfactorily addressed without impacting adjacent properties and / or acquiring right-of-way. It is also uncertain what can be done about the speeding and aggressive driving in the corridor without additional law enforcement. Ultimately, even if unlimited funds were available, there is only so much that can be done with the roadway given its existing alignment and the topography through which it runs.

My name is Mark Zappala and I submit this report in advance of the hearing before the Leet Township Zoning Hearing Board scheduled to begin on June 28, 2020.

I. Background, Education and Experience.

My wife of thirty seven years and I currently reside at 360 Backbone Road. We have been residents of the greater Sewickley area, more specifically the Quaker Valley School District (“QVSD”), for more than thirty years. Two of our children graduated from Sewickley Academy and the third from Quaker Valley High School.

I hold a Masters of Business Administration degree in Real Estate and Regional Studies from Southern Methodist University, the curriculum of which focused on developing competencies in real estate law, structural real estate transactions and real estate valuations techniques. I spent seven years in the commercial banking industry analyzing, underwriting, originating and servicing over \$1 Billion in commercial real estate construction loans throughout the South. I have spent the last thirty years in the planning, development, renovation and management of over one million (1,000,000) square feet of commercial and residential property including a multi-family townhouse development in the Borough of Sewickley.

I have served on the Sewickley Planning Commission, the Sewickley Academy Board of Trustees, the asset committee for an international real estate investment entity and on the Board for condominium associations in Florida and Mexico.

Given my above experience, I intend to provide testimony in opposition to Quaker Valley School District’s request for a Special Exception.

Through the careful and thorough application of the fundamental analysis of determining a site’s “Highest and Best Use”, it is in my professional opinion that a continued “Residential” designation for the property that is the subject of the request for a special exception is most appropriate and beneficial to the citizens of Leet Township.

II. Materials Reviewed.

In conjunction with this writing, I have reviewed the following: Leet, Leetsdale, Edgeworth and Sewickley Zoning Ordinances; Gavin, Boward, Beitko Report of a Preliminary Geotechnical Exploration (GBB); Phillips Proposal for Preliminary Engineering Studies (Phillips); Due Diligence Executive Summary; Site Selection presentation; Brainspace Study; and the various development scenarios put forth by QVSD.

III. Opinion

When analyzing the adequacy of a site for development, it is typical to first determine its “Highest and Best Use” defined as the reasonable, probable and legal use of vacant land which use is physically possible, appropriately supported and financially feasible resulting in the highest value. These criteria must be satisfied in sequential order before the ultimate determination of value is made. And while the ultimate determination of “value” is not germane to the question in front of the Leet Zoning Hearing Board, the methodology of pursuing same is sound and established real estate practice.

**A. The Requested Special Exception is Not Beneficial to the Public at the Proposed Location.**

- The Proposed Location is described as being “situated along a wooded hilltop flanked by forested side slopes...Mature forest...dominates the habitat...(which) drains to Little Sewickley Creek.”
- Based upon engineering estimates, over 50 acres of the mature forest would have to be cut down to accommodate the grading plan. The resulting “denuding” of the hilltop will significantly increase the possibility of soil erosion, adversely affecting the Little Sewickley Creek watershed while forever changing the fundamental character of the immediate area.
- “The Gateway test borings and research indicated that the east-west aligned ridge is composed of a sandstone cap underlain by the notoriously landslide-prone Pittsburgh Redbed formation, The Gateway test borings also revealed the presence of prehistoric, as well as relatively recent landslide deposits.”
- Little Sewickley Creek Road is currently closed due to unusually high landslide activity which have threatened the integrity of the road and resulted in significant undermining of the road bed in numerous locations.
- Grading estimates require the cutting and filling of approximately 3 million cubic yards and will involve significant blasting of the bedrock, an event that purportedly immediately preceded the WalMart slide.
- By their engineer’s own admission, “Regardless of the thoroughness of a geotechnical exploration, there is always the possibility that conditions between borings will be different from those at specific boring locations, and conditions will not be as anticipated by the designers and contractors”.
- Neither the designers, engineers nor the contractor will specifically guarantee grading performance or site stability now or in the future. It is an uninsurable risk whose consequences no reasonable developer would assume, especially with the foreknowledge of the WalMart fiasco. The personal liability would be far too great with damages potentially reaching into the tens of millions of dollars. Whether assumed by an individual or an entity, the downside risk of loss would far outweigh any economic incentive to warrant further consideration.

The Proposed Location is currently zoned “AAA Residence”, the most restrictive classification in the Leet ordinance. It is surrounded on three sides by properties bearing a similar designation and on the fourth by properties carrying the “AA Residence” classification. In actuality, Leet is, for all intents and purposes, a bedroom community with less than an estimated 1% of land area dedicated to non-residential uses. I am not aware of any argument that can be put forth that would conclude that the health, safety, welfare or property values would be enhanced by the development of a high school in this location.



**B. The Proposed Location is not more suitable than other properties in Leet Township.**

- The Subject, until recently, was not a singular site but, rather, represents an assemblage of several parcels the majority of which were acquired for the sole purpose of developing a family compound for an individual that prizes privacy;
- While the Proposed Location comprises nearly 160 acres, its development is yielding a paltry 25 acres or 15% of the total. If 25 acres is all that is necessary to accommodate the development of the “high school of the future”, the site selection process was fundamentally flawed. By stipulating a minimum threshold more than double what the Proposed Location will purportedly yield, it eliminated from consideration several viable options from consideration including, but not limited to, the acquisition of adjacent properties which would have created a usable area similar to the subject at a potentially lower cost with consistent uses and superior ingress/egress, obviating the need for a zoning change.
- As outlined above, the topography and geography of the Proposed Location is grossly inferior to those that are not located in a forested area, or on top of a hill, or in the middle of a single family neighborhood or on top of Redbed.

**C. Portions of the Proposed Location will be dangerous, injurious and/or noxious.**

Noxious uses are those that adversely effect the quiet enjoyment of the adjacent property owners including, but not limited to: noise, traffic safety, vibration, congestion and light wash. Using the standard single family occupancy of a four person household, the introduction of 650 young adults, hundreds of support staff, teenage drivers, school busses, sports fields, parking lot lights and a stadium, is, by definition, noxious to adjacent property owners.

**D. The Proposed Location will not produce a Harmonious Relationship with the Adjacent Buildings and Property.**

The development of the Proposed Location as a high school as previously described is the equivalent of introducing two Quaker Village Shopping Centers both in land area and square footage on to the Subject. It is impossible to insert the proposed building mass along with ancillary parking and expect it to be considered “harmonious” with the surrounding single family homes.

**E. The Proposed Location is Likely not Financially Feasible for Leet Township.**

While acknowledging that, in this instance, the determination of the Proposed Location’s value is not, per se, at issue, the process of determining same provides a widely acceptable methodology to determine the appropriateness of a proposed use. Since I am restricted from pursuing that line of testimony, I offer a direct quote from the proposal to provide engineering services wherein the principal of the firm opined “However, based on observations during the request for proposal (RFP) site meeting, which revealed such elements as significant landslide activity, springs and massive/very hard bedrock outcroppings,...we contacted QVSD and indicated that this particular site may not be workable from a typical budget perspective even if the site was effectively “gifted” or donated to QVSD”.

**F. Constructing a High School in the Proposed Location is Not in the Best Interests of the Surrounding Property or Neighborhood.**

The development of the Proposed Location for the proposed use is fraught with such significant risk no reasonable person (individual or entity) would assume. Given the failure to meet the criteria detailed above, the determination for the Subject zoning use to remain Residential is the only reasonable conclusion to be drawn.

Respectfully submitted this 15<sup>th</sup> day of June, 2021.



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Mark Zappala