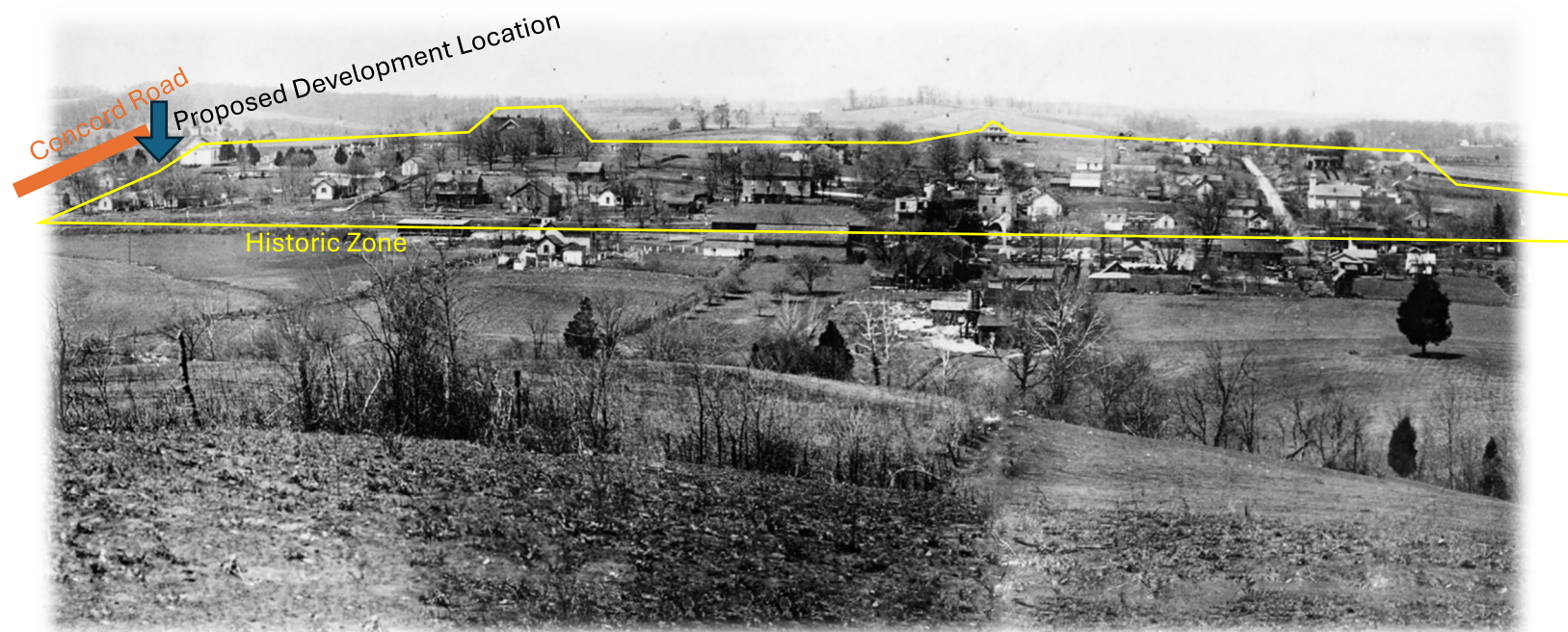


# Development Concerns for 6-B-24-UR, 1025 CONCORD RD



I strongly encourage the planning commission to deny the 'use permitted on review' due to the failure for the proposed use to meet the requirements adopted in the Knox County Code of Ordinances. A denial decision as set forth in Appendix A – Zoning, article 4 and article 6, is allowed and strongly supported because of, but not limited to, the following reasons:

- 1 The use is not in harmony with the general purpose and intent of the zoning regulations; and
- 2 The use is inconsistent with adopted plans and policies, including the general plan and the sector plans; and
- 3 The use is incompatible with the character of the neighborhood where it is proposed, and with the size and locations of buildings in the vicinity; and
- 4 The use will significantly injure the value of adjacent property by noise, lights, fumes, odors, vibration, traffic congestion or other impacts which may detract from the immediate environment; and
- 5 The use is of a nature and so located as to draw substantial additional traffic through residential streets; and
- 6 The nature of development in the surrounding area is such as to pose a potential hazard to the proposed use and create an undesirable environment for the proposed use.

The recommended approval conditions by the planning staff do not bring this development in compliance with the ordinances and cause further concern with the development being forced into an area not suitable for this type of development.

## 1 Not in harmony with the general purpose and intent of the zoning regulations

### 1.1 CN Neighborhood Commercial Zoning

The proposal does not conform to multiple zoning requirements for CN Neighborhood Commercial as adopted in the Knox County Code of Ordinances. Those nonconformances include, but are not limited to, disruption to residential neighborhoods, compatibility with the character of the adjacent neighborhood, building size, site lighting, and failure to provide maximize compatibility between commercial uses and adjacent residential uses.

### 1.1.1 Ordinance “5.38.04. Building size regulations”

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*“No individual building or commercial establishment shall have a floor area exceeding five thousand (5,000) square feet.”*

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The proposed plans show the commercial establishment sized at more than 7,000 square feet, a +40% exceedance of the ordinance requirement. These plans also provide space for future development within the lot which will further exceed the building size regulations for Neighborhood Commercial zoning. Although the site plans do not show the future buildings, the traffic study indicates the additional future developments to be two (2) 2,800 square-foot retail buildings (assumed to be fast food drive-throughs). This would bring the total planned square footage for the lot to 12,615 square feet, an exceedance to the limits for the zoning ordinance of over 152%. Due to the sensitivities of the adjacent historical concord village, variance to this ordinance seem to be inappropriate for this location. This conflicts with 5.38.01 of the Knox County Code of Ordinances.

The developers answer to building square footage was to add a firewall and expand the building by additional square footage. This is not within the intent of a Neighborhood Commercial Zoning ordinance and should in and of itself be a reason for denial.

### 1.1.2 Ordinance “4.10.10. Outdoor lighting” & “5.38.14. Site lighting”

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*4.10.10. Outdoor lighting “Lighting used for parking lots, outdoor storage, product display or security shall reduce the impacts of glare, light trespass and overlighting, promote safety and security and encourage energy conservation and shall not interfere with the operation of motor vehicles in the public right-of-way or adjacent uses of land.”*

*5.38.14. Site lighting “Lighting of all types shall be directed away from all residential or agricultural zones and any public rights-of-way.”*

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In conflict with the above requirements, the 14 elevated lights above pumps notated as “A” on the Lighting Proposal are configured with a “Forward Throw” which direct light into the historic village and residential zones.

Additionally, the color temperature of the exterior lighting is specified at 5,000 Kelvin. This color emits harsher and excess blue and green emissions from LEDs. This leads to increased light pollution, as these wavelengths scatter more within the eye and have detrimental environmental and glare effects. This conflicts with 4.10.10 and 5.38.14 of the Knox County Code of Ordinances.

At a minimum operational hours for this deployment and lights should be required to be turned off at a reasonable hour to minimize light trespass.

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*4.10.10. Outdoor lighting “The light source shall be shielded and shall be arranged so that lighting is directed away from any boundary of the lot or tract adjacent to any property zoned to permit residential uses.”*

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None of the exterior lighting on the Lighting Proposal are show to be configured with shielding to direct light away from any boundary of the lot or tracts adjacent to any property zoned for residential use. This conflicts with 4.10.10 of the Knox County Code of Ordinances.

### 1.1.3 Ordinance “5.38.01. General description”

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*“locate limited retail and service uses in a manner convenient to and yet not disruptive to established residential neighborhoods.”*

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The details in Paragraph 4 below detail how this development causes significant injury to the value of adjacent property by noise, lights, fumes, odors, traffic congestion or other impacts which may detract from the immediate environment. This conflicts with 5.38.01 of the Knox County Code of Ordinances.

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*“It is intended to provide for the recurring shopping and personal service needs of nearby residential areas. Development should be compatible with the character of the adjacent neighborhood.”*

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The residence of concord hosted a meeting with the developers of this property and their legal representation on 20 June 2024. As communicated to the community in the meeting, the developers’ intent is not on providing recurring shopping and services to the nearby residential area but to draw traffic into their location from the Arterial and Collector roads. In other words, they are oriented to customers traveling though the area not the neighborhood. This conflicts with 5.38.01 of the Knox County Code of Ordinances.

It is also clear by the volume of nearby residence who signed the petition against this property it is not intended to provide for the nearby residential area.

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*“The range of permitted uses is limited to those that are generally patronized on a frequent basis by neighborhood residents. Development performance standards are provided to maximize compatibility between commercial uses and adjacent residential uses.”*

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During the 20 June 2024 meeting it was clear there was no support for the development for residents within a ½ mile of the location. It was also clear the developer was unwilling to concede any recommendations from the community to maximize compatibility between commercial uses and adjacent residential uses. This conflicts with 5.38.01 of the Knox County Code of Ordinances.

## 2 The use is inconsistent with adopted plans and policies, including the general plan and the sector plans

### 2.1 Conflict with the Administrative Rules and Procedures of The Knoxville-Knox County Planning Commission

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*Notice shall be given by conspicuously posting a sign on the property that is the subject of the proposal or application, except as noted in Section 4.B, not less than twelve (12) days prior to the scheduled hearing date. Calculation of the notice period shall commence on the first date of posting, but shall not include the hearing date.*

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Although posted for the initial planning meeting planned for June 13<sup>th</sup>, once the applicant requested a postponement the public notice signage was removed and never replaced. There was no public notice signage posted for the 12 days prior to the July 11<sup>th</sup> meeting.

### 2.2 Conflict with the 2024 One Year Plan

This development, even if approved with the conditions, poses significant conflicts with the One Year plan.

#### 2.2.1 The One Year Plan states:

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*Neighborhood Commercial (NC) classification includes retail and service oriented commercial uses intended to provide goods and services for the day-to-day needs of households within a ½ mile radius.*

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Discussion with the developers were clear they plan to orient their commercial use to serve the customer base outside of the ½ mile radius the Neighborhood Commercial zoning is intended to serve. Their presentation to us they indicated they plan to draw business from the 15,000 vehicles that pass through our area. The number of petition signatures against this development are significant within the ½ mile radius.





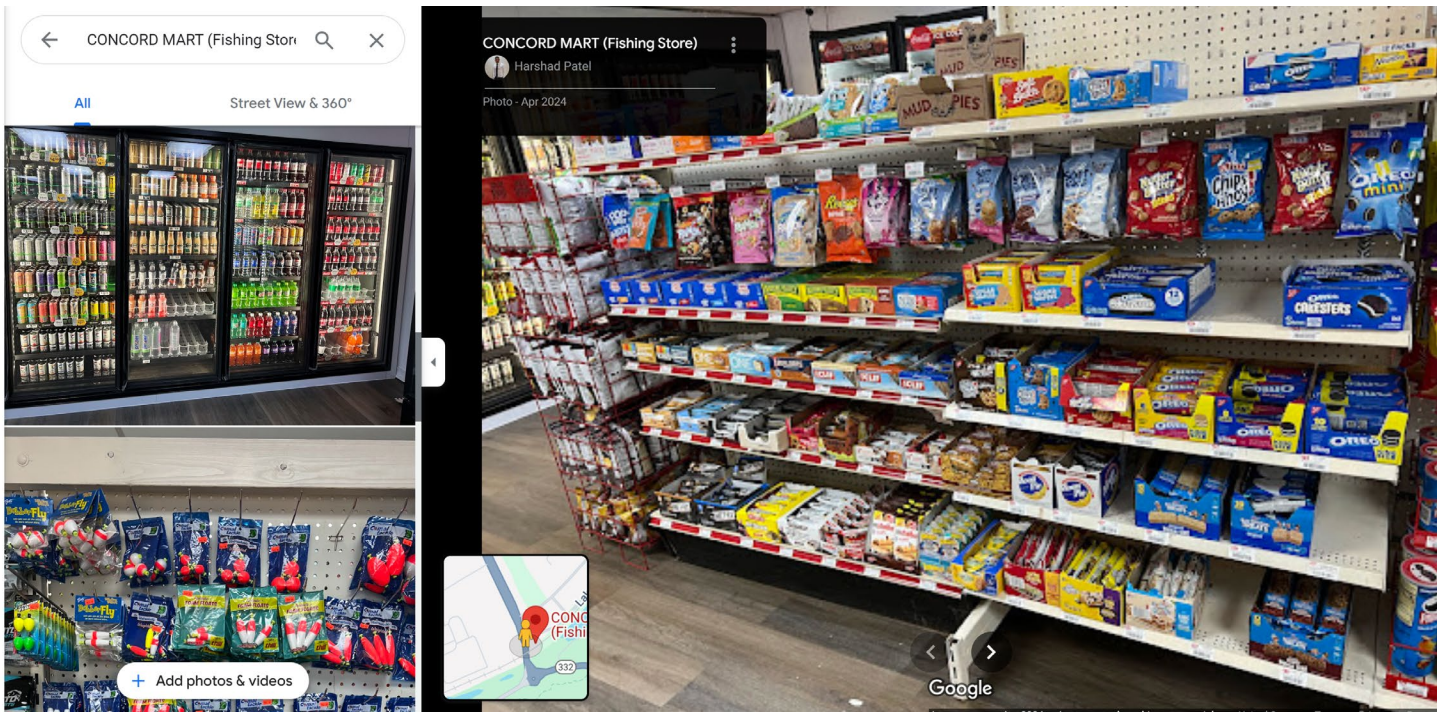
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*New NC should not be zoned for or developed within ½ mile of existing commercial development that features sales of day-to-day goods and services*

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There are currently two main businesses that provide day-to-day goods and services in this location well within the 0.50 mile specified in the One Year Plan. Nearest is Tacos El Primo, a food service less than 0.05 mile away from the proposed location, and the other is Concord Mart, a convenience store 0.08 mile away from the proposed location. Both of these businesses serve the same products (with the exception of gas, which is available on all roads leading to this location a short distance away), the market base the planned development wishes to sell to. If approved the new development would be in conflict with the most recently adopted 2024 One Year Plan.






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*“Automobile-oriented uses (e.g. gas stations or convenience stores) should be located on arterial streets at the edge of neighborhoods”*

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Although the location of the proposed development is located on an arterial street, the primary entrance is not. This poses significant impact to residents who travel 2<sup>nd</sup> Drive. This conflicts with the 2024 One Year Plan.

### 3 The use is incompatible with the character of the neighborhood where it is proposed, and with the size and locations of buildings in the vicinity

The proposed development is not in alignment with the size of the surrounding commercial and residential buildings. The average building size within a ½ mile radius of the proposed development is 2320 sq ft. The proposed development is over 7,000 sq ft which is three times larger than the average building size in the area. The commercial facilities in the area have an even smaller average size of 2240 sq ft reinforcing this proposed development is incompatible with the neighborhood. Additionally, a 7 bay 14 pump gas station does not align with the character of the neighborhood. The Village of Concord, originally founded in 1854 is one of the few historic areas in West Knoxville – this modern-day oversized gas station with a drive thru does not align with the character of the village.

### 4 The use will significantly injure the value of adjacent property by noise, lights, fumes, odors, vibration, traffic congestion or other impacts which may detract from the immediate environment

#### 4.1 Noise

The proposed development will create additional noise due to Delivery Trucks, Dumpster emptying, Drive thru Speaker, and additional engine noise due to traffic acceleration.

## 4.2 Lights

In addition to the concerns with the lighting plan discussed above, there is concern with the brightness that will be emitted from the development. Although both luminance and brightness are measures of light, they are not the same thing. Luminance refers to the amount of light that is emitted or reflected from a surface per unit area. In other words, it is the brightness of a surface in a specific direction. Brightness, on the other hand, is the subjective perception of how intense the light appears to the human eye. It is a psychological sensation that is influenced by factors such as the amount of light, the contrast between light and dark areas, and the color of the light.

The measure “Illuminance” selected as the calculation type on the lighting plan does not give a true prospective of how the “Brightness” will impact the surrounding area. Using the lighting plan for the development a total average of over 1 million lumens can be accounted for that will be imitated from the development. To give perspective, here is a comparison to those bright LED headlights we all encounter while driving on the road. The average LED vehicle headlight produces around 3,000-6,000 lumens per light (6,000-12,000 per vehicle). The 1,061,635 average lumens planned for this development equates to the brightness of 88 - 177 vehicle LED headlights focused on a single location.

Quantity	Label	Height	Average Lumens	Total Average Lumens
14	A	15 Feet	23,101	<b>323,414</b>
14	B	15 Feet	23,284	<b>325,976</b>
10	C	24 Feet	37,946	<b>379,460</b>
5	D	10 Feet	6,557	<b>32,785</b>
			<b>Total:</b>	<b>1,061,635</b>

## 4.3 Fumes

A recent study conducted by the Columbia Mailman School of Public Health, with results published in the journal Science of the Total Environment, found emissions were 10 times higher than estimates used in setback regulations. The report states, “We found evidence that much more benzene is released by gas stations than previously thought. In addition, even during a relatively short study period, we saw a number of instances in which people could be exposed to the chemical at locations beyond the setback distance of 300 feet.”. The results also recommend “Officials should reconsider their regulations based on these data with particular attention to the possibility of short spikes in emissions resulting from regular operations or improper procedures related to fuel deliveries and the use of pollution prevention technology.”.

The nearest home to this planned development is less than 300 feet from this location and could be a signification risk of being exposed to hazardous fumes released from the filling station. The full report is available at <https://www.publichealth.columbia.edu/news/gas-stations-vent-far-more-toxic-fumes-previously-thought>

Another concern is around the potential for a fire and fumes released from such an event. This neighborhood was recently exposed to hazardous fumes due to a fire that occurred during a boat refueling at the nearby Concord Marine. This hazard should be given significant weight in consideration for this use on review.

## 4.4 Odors

The Odors from the restaurant exhaust and dumpster on the property line backing up to the adjacent property will be an impact the historic zoning and neighborhood in a negative way. The prevailing winds will direct these odors into the historic village and neighborhoods.

## 4.5 Vibration

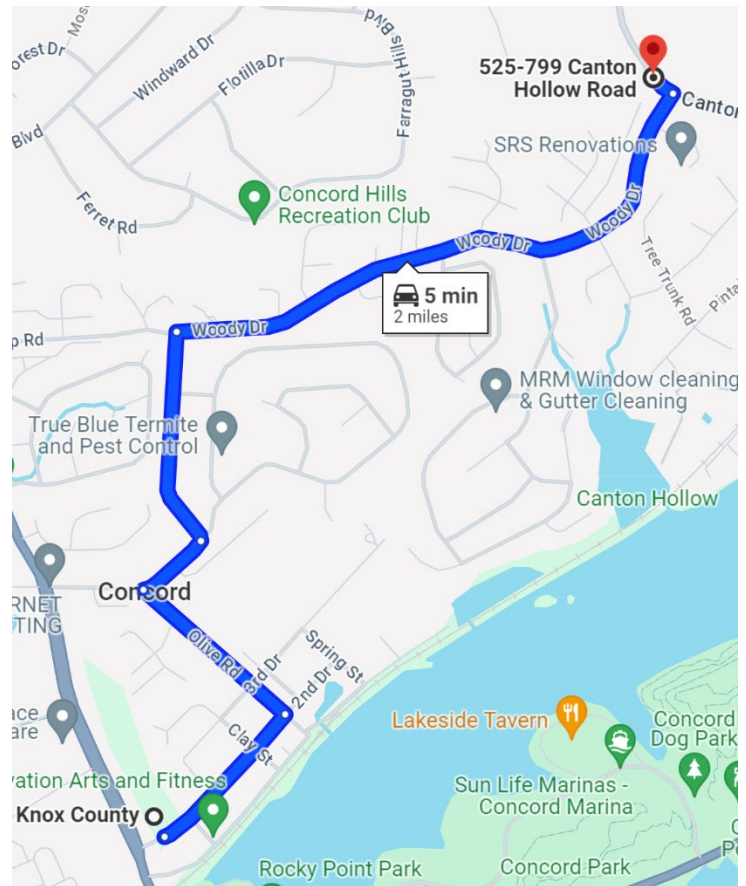
Although the majority of vibrations are expected to be limited to the construction phase of this development, those vibrations pose a risk to the historic structures in the vicinity. Equipment such as vibratory rollers and excavator mounted hydraulic breakers could pose significant risk to the historic buildings, such as the nearest brick building built in 1800's that is 300 feet from the site.

## 4.6 Traffic Congestion

The proposed location creates additional traffic concerns and hazards for the community which are not addressed in the development plans. The traffic study completed by the developer identifies several recommendations needed to make the traffic around the development safe. Unfortunately, only one of the recommendations is included in the site plan. The traffic study also appears incomplete as it does not evaluate traffic that would be drawn through the neighborhood or safe line of sight evaluation for the intersection of 2nd Drive from Concord Road. With the increased high-density housing and considerable increase of traffic on Loop Road and Canton Hollow Road (soon to be widened) this development which survives by drawing vehicular traffic to it, would cause a significant increase in traffic flowing through historic village neighborhood to get the location

Due to the increased traffic hazards created by this development, the developers own traffic control study recommends the below actions be taken to mitigate hazards and meet the requirements of Tennessee

Department of Transportation (TDOT) and AASHTO's A Policy on Geometric Design of Highways and Streets.



- 1) A southbound left turn lane into the site from Concord Road should be constructed with a storage length of 50 feet and a taper length of 160 feet. – **Not Implemented, but if implemented, would drive additional traffic into the neighborhood. Hazard remains.**
- 2) A northbound right turn lane onto 2nd Drive from Concord Road should be constructed with a storage length of 50 feet and a taper length of 120 feet. – **Not Implemented, due to the property being outside the lot boundary, however this should be part of the turn in front of the property being developed. Hazard remains.**
- 3) Ensure that grading, landscaping, signing, and other site features do not restrict lines of sight exiting the development. The sight distance looking left when exiting the site onto 2nd Drive should be improved to at least 250 feet. – **Not Implemented, because if it was it would not be within the requirements of the Knox County Code of Ordinances. Hazard remains.**
- 4) The lanes on 2nd Drive should be widened to at least 10 feet per Knox County requirements. – **Implemented but causes additional negative consequences to residence of the area including lost land for street widening, lost vegetation barrier to increase line of sight, and lost of history character due to changes to roadways.**

The traffic study also identifies that a signal is warranted at 2<sup>nd</sup> Drive and Concord Rd but due to cost recommends not addressing the issue.



It also appears the traffic study is incomplete and fails to evaluate two major concerns, both related to line of sight at the Concord Road and 2<sup>nd</sup> Drive intersection.



Figure 2 View of Concord Rd Southbound Traffic from 2nd Drive

The first hazard (shown in Figure 2), due to the topography of Concord Road, the line of sight for south bound traffic is limited to around 400-500 feet, depending on vehicle ride height. AASHTO's A Policy on Geometric Design of Highways and Streets sight distance requirements for 40 mph roadways, 445 feet of sight distance is necessary when looking right. Due to the necessary sign distance being less than the required value would increase hazards to drivers at the intersection of Concord Road and 2<sup>nd</sup> Drive.

The second hazard is sun glare in early morning and late afternoon (shown in Figure 3). The early morning sun glare blocks the view of traffic traveling on concord Road. This could impede the ability to see traffic entering the road from 2<sup>nd</sup> Drive. The reverse is true in the evening for vehicle on 2<sup>nd</sup> Dr, where their view is obstructed by sun glare which compounds the issues of the first, sight distance hazard.



Figure 3 Morning Sun Glare blocking view of 2nd Dr

#### 4.7 Other impacts

The below picture is an example of a filling station owned by this developer, which backs up to a residential area in Knox County. There is minimal effort to shield the property with any natural barrier. Although it may not be required for the zoning of this location, it shows the operation is completed to the minimal requirements with little consideration to the surrounding neighborhood. It would not be appropriate for the beauty and heritage of the historic village, with building that predate the United States capital to be detracted from for a development that does not meet the minimum requirements of the adopted Zoning Ordinance of Knox County.



Of further concern is the traffic plan produced for this development conflicts with the landscaping plan. If the traffic plan is followed it destroys the heritage of the historic zone. If the landscaping plan is followed, it creates hazards to vehicles in the area. This shows this is a loose-loose location for this development and should not be approved for this property.



## 5 The use is of a nature and so located as to draw substantial additional traffic through residential streets

Volume of traffic through residential streets was not analyzed in the traffic study. Second Drive is the only option for a left turn out of the proposed development – with an increase in volume there is a potential for a line to form to encourage a driver to cut through the historic neighborhood to avoid Concord Road. Additional concerns are outlined throughout this document.

## 6 The nature of development in the surrounding area is such as to pose a potential hazard to the proposed use and create an undesirable environment for the proposed use.

First Utility Sewage Treatment Plant is located directly across the street, from the planned development location. The Sewage Treatment Plant is also upwind of the prevailing wind direction and sewage fumes often float into the location of the planned development. The nature of the existing development in the surrounding area which emits sewage fumes would create an undesirable environment for the proposed use of a restaurant.

