



METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY

**FREDDIE O'CONNELL
MAYOR**

**NASHVILLE DEPARTMENT OF TRANSPORTATION
AND MULTIMODAL INFRASTRUCTURE**

MEMORANDUM

TO: Metropolitan Traffic and Parking Commission

FROM: J. Andrew Smith, Engineer 2
Nashville Department of Transportation

DATE: December 3, 2024

SUBJECT: December 9, 2024, Traffic and Parking Commission Agenda Analysis

PURPOSE:

Provide an overview of all items on the upcoming Metropolitan Traffic and Parking Commission agenda to ensure that commission members have the information necessary for discussion and action prior to the commission meeting.

Commissioners are encouraged to contact Nashville Department of Transportation (NDOT) staff prior to the meeting with any questions.

STAFF ANALYSIS:

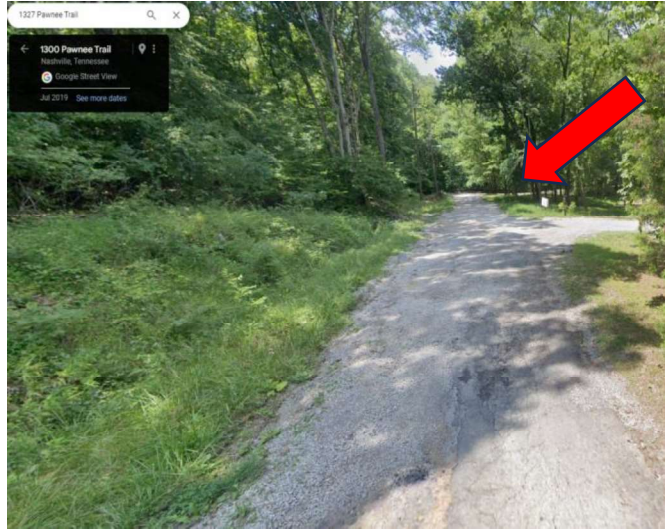
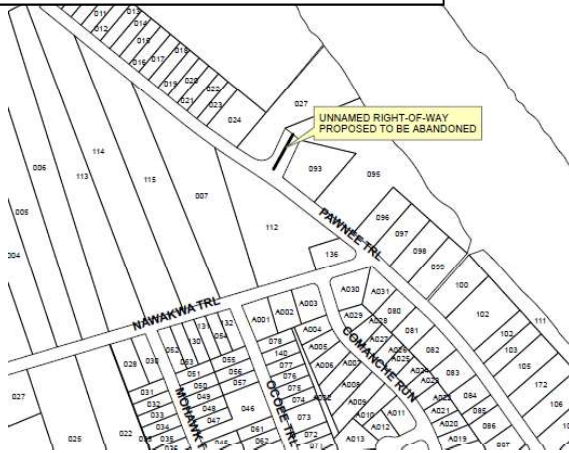
Consent Agenda

5.1 CD 09: Approval of mandatory referral 2024M-008AB-001 for abandonment of a portion of unnamed ROW off Pawnee Trail, requested by CM Hancock

Recommendation: Approval of mandatory referral 2024M-008AB-001, abandoning a portion of unnamed right-of-way from Pawnee Trail, between 1327 and 1321, northeast to a dead end into a portion of 1331 Pawnee Trail.

Analysis: This ROW is unimproved and is currently in use as a personal driveway. NDOT believes that this ROW was likely created by plat not of record, circa 1946. The surrounding land use is single family residential and is rural.

Consent 5.1—Pawnee Trail ROW abandonment



5.2 CD 19: Authorization for new all-way stop at Peabody and 6th Ave S, requested by NDOT

Recommendation: Approval of new all-way stop at Peabody St and 6th Ave S.

Analysis: NDOT staff received a request to evaluate the Peabody St and 6th Ave S intersection for a potential all-way stop. This intersection is currently configured for two-way stop control for Peabody St. NDOT engineers performed a multiway stop control warrant analysis and determined that Criterion B warrant for crash history has been met. The findings included 7 angle crashes in 2024 alone, which exceed the MUTCD Warrant B threshold of 5 or more angle crashes in a 12-month period.

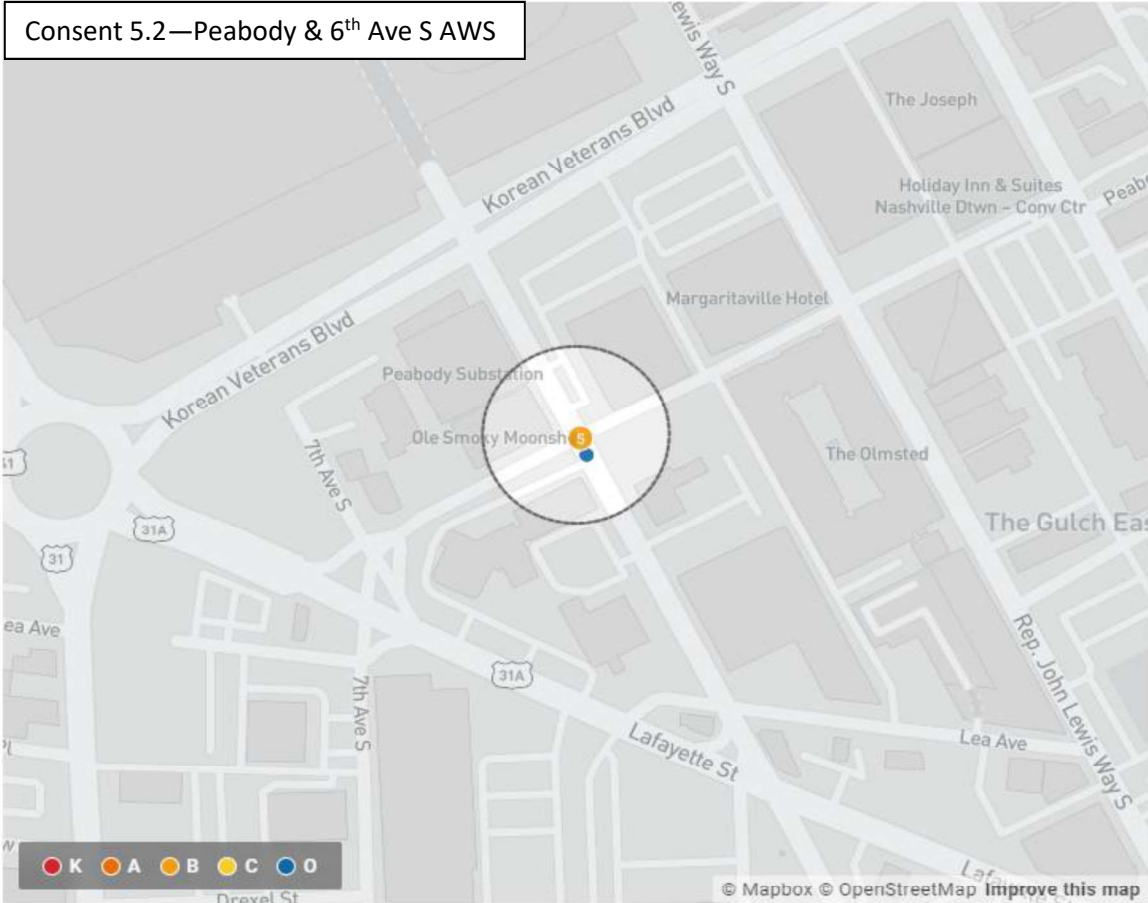
New Crash Query

Created on December 3, 2024
Created by Andrew Smith
Data extents: November 19, 2021 to November 19, 2024



Applied Filters

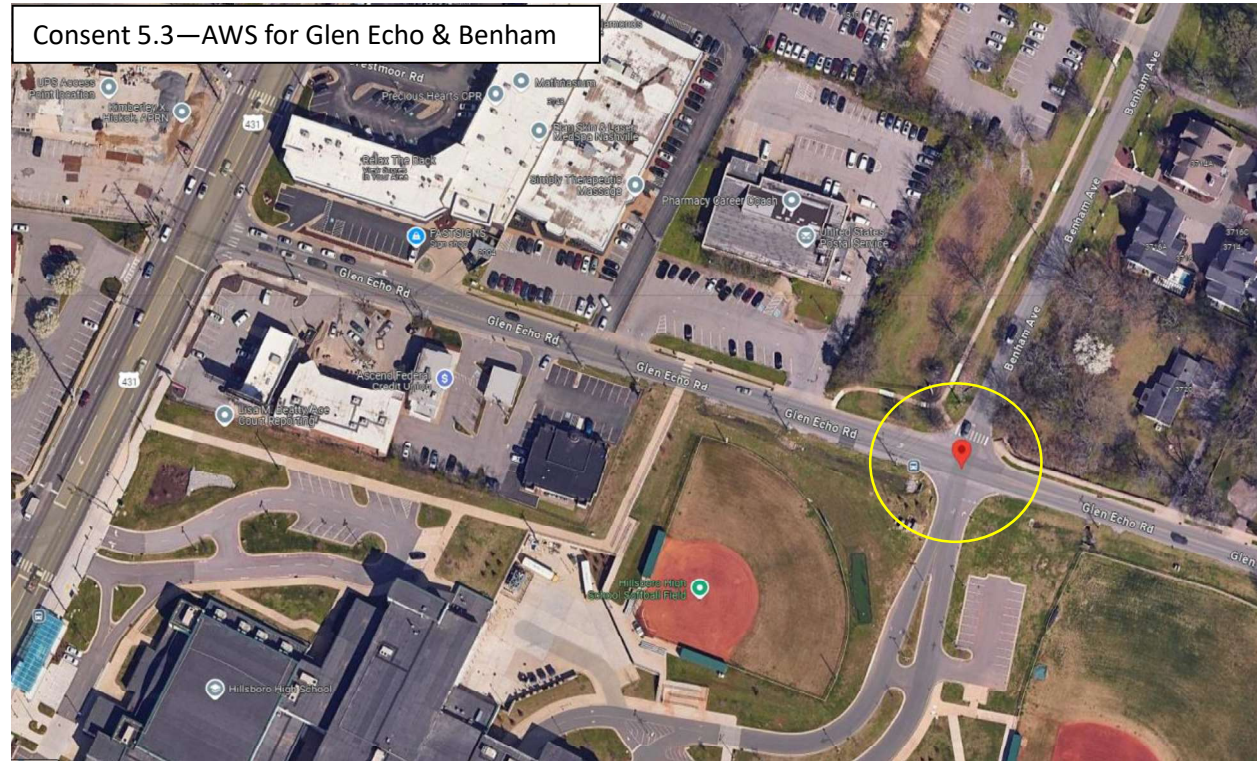
Shape: Circle 150 ft Date of Crash (Year) = 2024 Manner of First Collision = Angle



Total Crashes	7	Fatal Crashes	0
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Recommendation: Approval of new all-way stop at Glen Echo Rd and Benham Ave.

Analysis: NDOT staff received a request to evaluate the Glen Echo Rd and Benham Ave intersection for a potential all-way stop. This intersection is currently configured for two-way stop control for Benham Ave and a newly constructed driveway for Hillsboro High School. NDOT engineers performed a multiway stop control warrant analysis and determined that Criterion B warrant for crash history has been met. The findings included 5 angle crashes in 2024 alone, which met the MUTCD Warrant B threshold of 5 or more angle crashes in a 12-month period.



Angle Crash Query for Glen Echo and Benham

Created on December 3, 2024

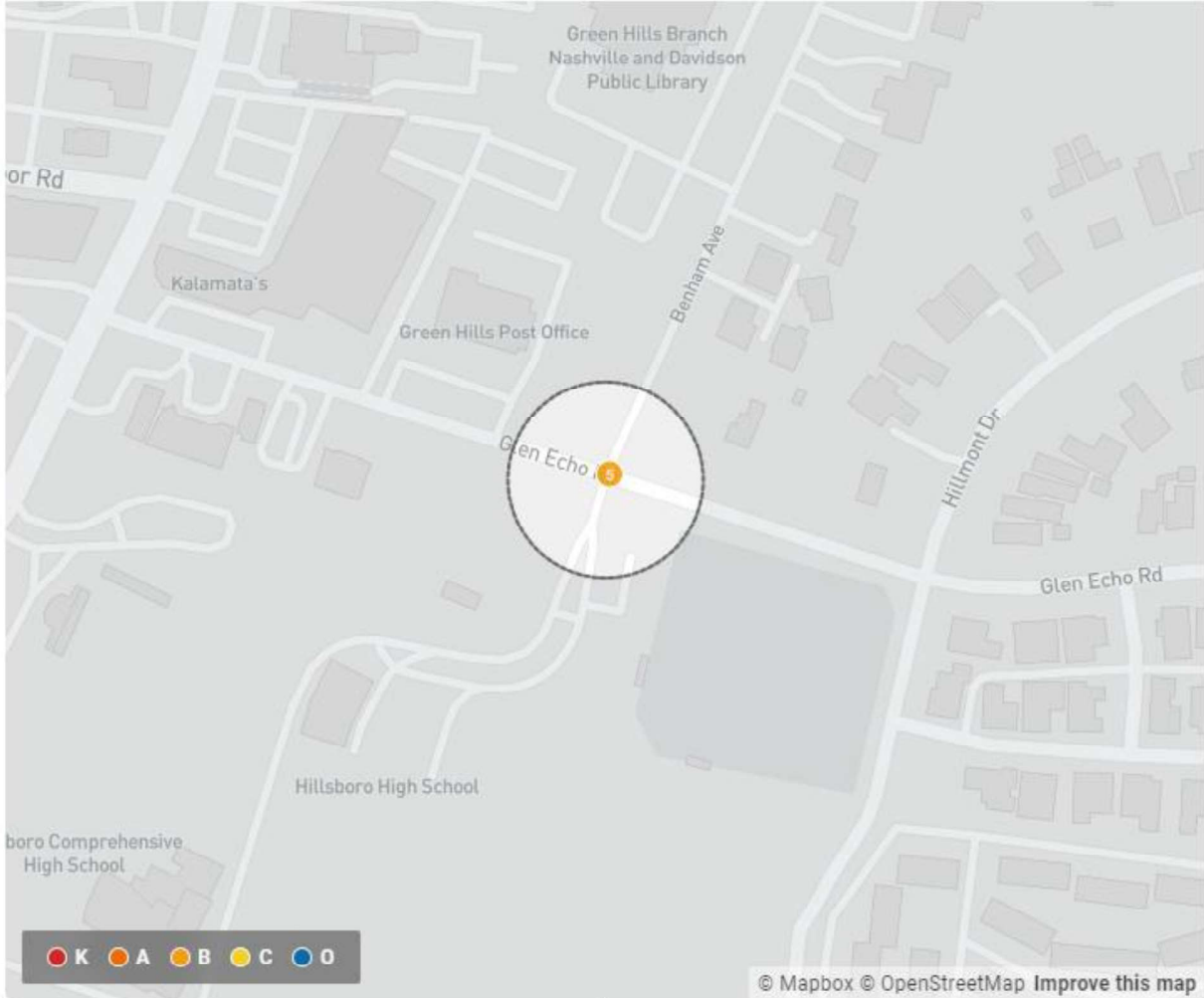
Created by Andrew Smith

Data extents: November 19, 2021 to November 19, 2024



Applied Filters

Shape: Circle 150 ft Manner of First Collision = Angle Date of Crash (Year) = 2024



Total Crashes	5	Fatal Crashes	0
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Recommendation: Removal of existing stop control for Mockingbird Rd and approval for new stop control for Lauderdale Dr.

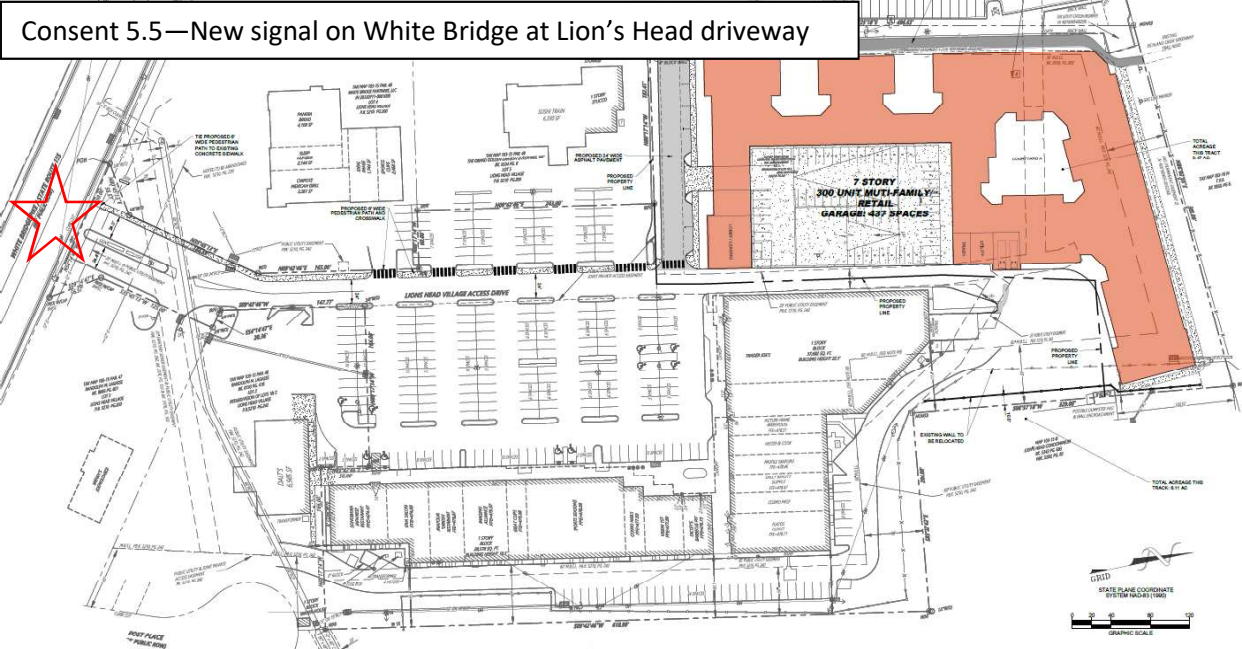
Analysis: Mockingbird Rd is the major street at this intersection. However, there is a stop condition on Mockingbird Rd rather than Lauderdale Rd, the minor street. NDOT collected three days of traffic data on both streets and found that Mockingbird Rd had about 190 vehicles per day (vpd) while Lauderdale Rd had 20 vpd. Due to the low traffic volume at this intersection, it may not make a significant difference if there is a change in stop control. From a traffic engineering standpoint, it makes more sense for the stop to be for the minor street rather than the major street.

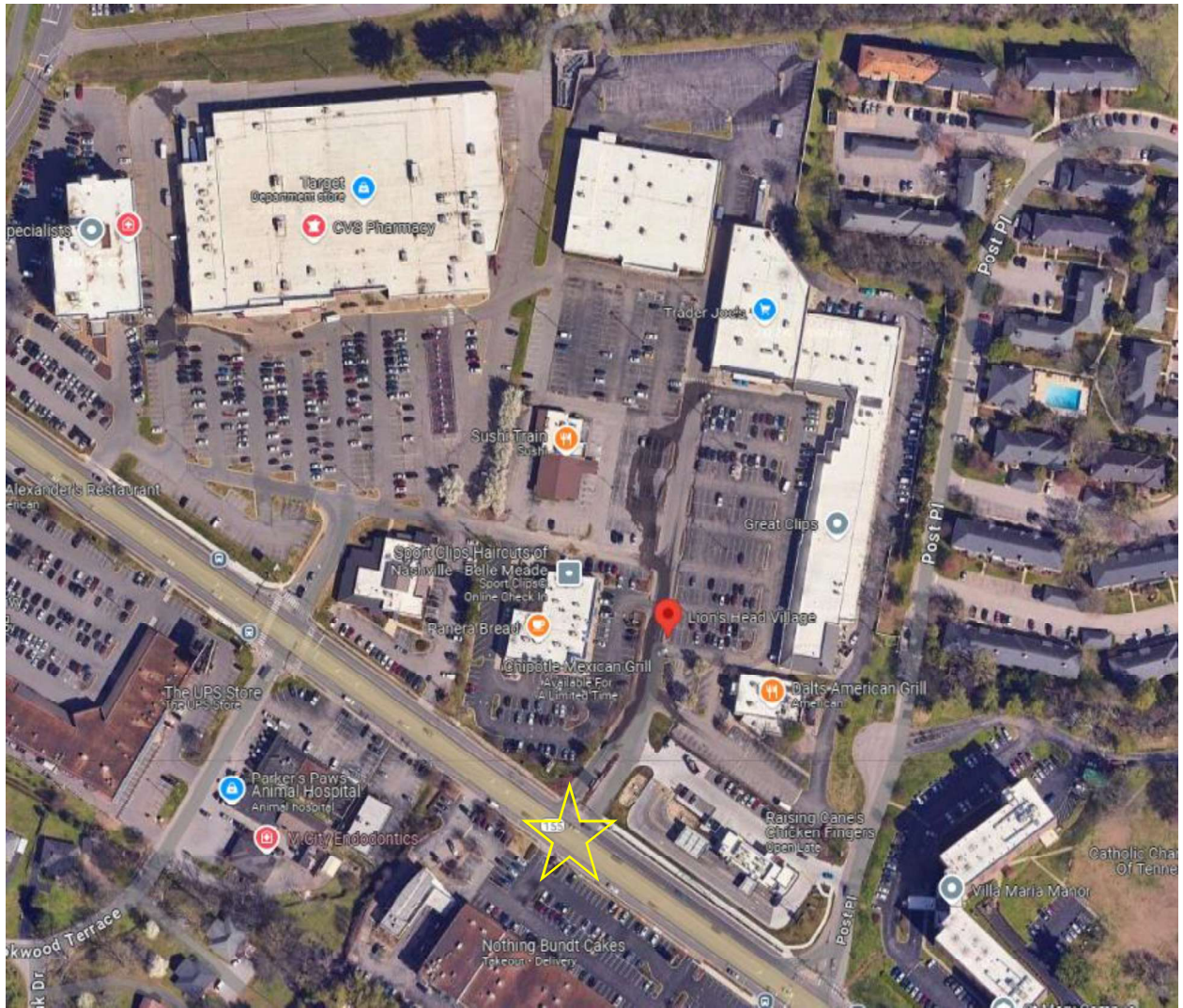


Recommendation: Approval of new traffic signal at White Bridge Rd and Lions Head Village access drive.

Analysis: The Novel Lion’s Head development is located along the east side of White Bridge Rd and proposes to build 300 multifamily units and 6,000 sq ft of retail space. The site is accessed from White Bridge Rd at the existing Lion’s Head access drive as well as Brookwood Terrace and Post Place. KCI, the developer’s consultant, performed a traffic study to analyze the access plan and traffic impacts associated with this development.

Among KCI’s recommendations in the traffic impact study is a recommendation for a new traffic signal at the intersection of White Bridge and the Lion’s Head access driveway with protected/permissive signal phasing for eastbound and westbound left turning movements on White Bridge. KCI also recommends permissive signal phasing for both the northbound and southbound approaches of Lion’s Head access and the private drive.



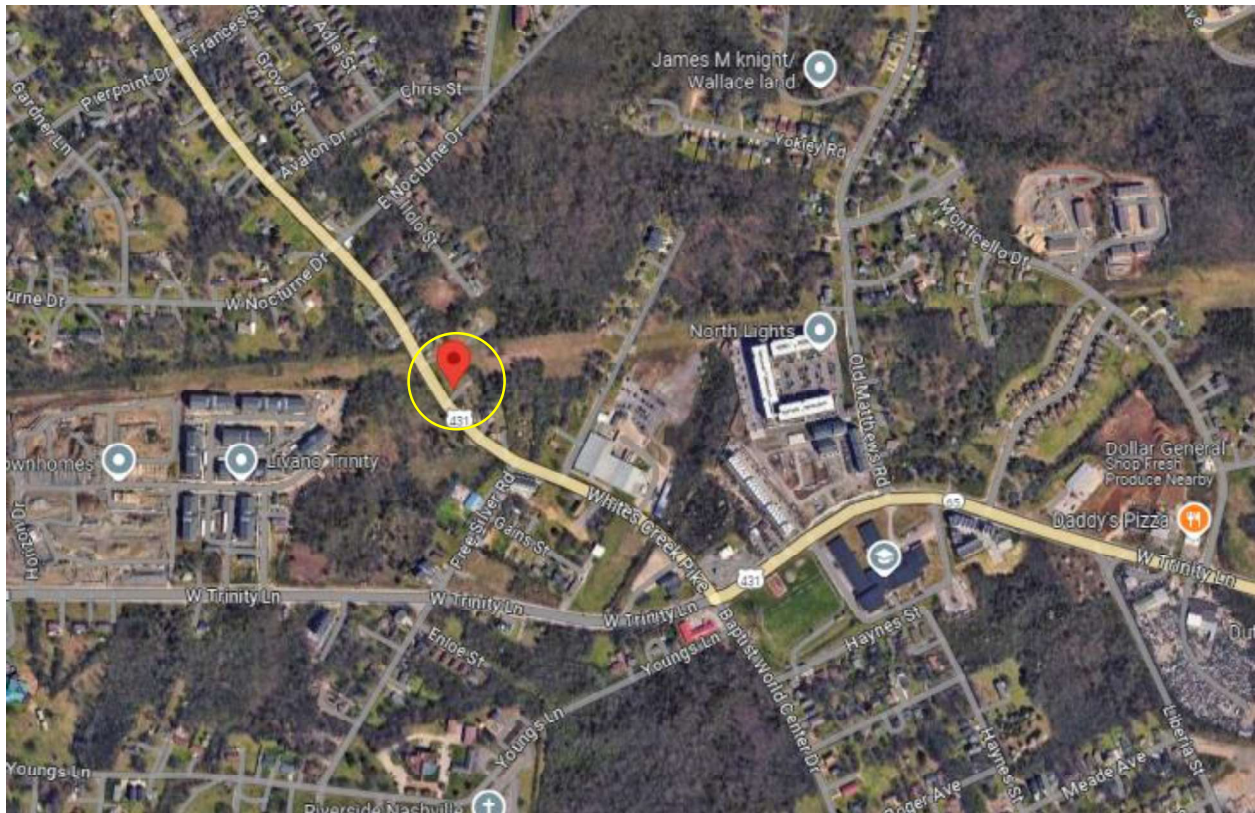


Regular Agenda

6.1 CD 02: Consideration of driveway appeal for 2311 Whites Creek Pike, requested by Catalyst Design Group

Recommendation: Uphold NDOT’s denial of driveway connection for new development proposed for 2311 Whites Creek Pike.

Analysis: This is an appeal for a denial of a driveway connection for a new development proposed for 2311 Whites Creek Pike. The developer wishes to construct 16 new multifamily units with access provided by one driveway on Whites Creek Pike approximately 680 ft north of Toney Rd. Whites Creek Pike is a state route, designated US-431, but TDOT has delegated approval of driveway connections within Davidson County to NDOT.



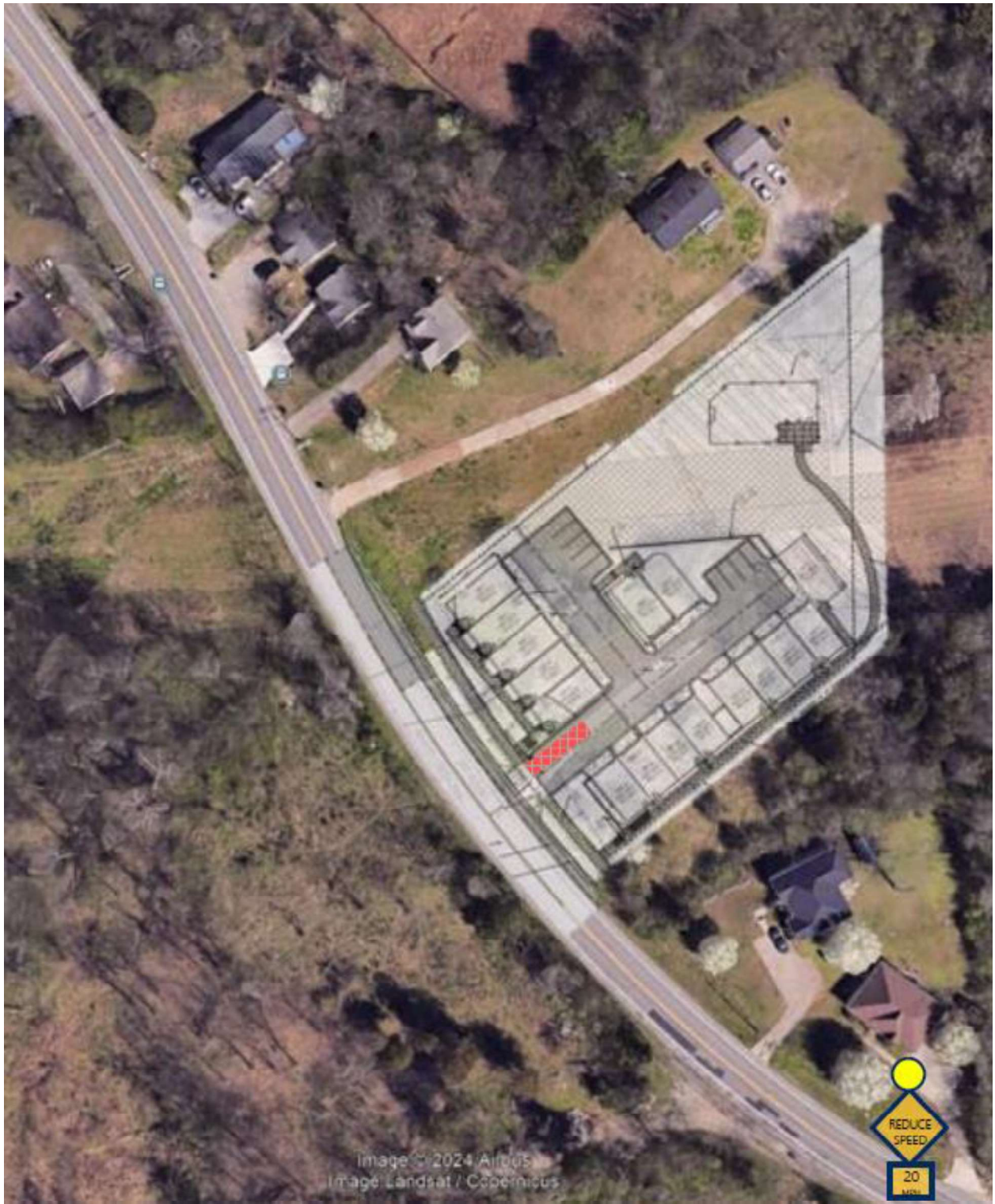
Whites Creek Pike is a two-lane arterial street with a posted speed limit of 40 mph. For a 40 mph speed, the guidelines from A Policy on Geometric Design of Highways and Streets, by the American Association of State Highway and Transportation Officials (AASHTO) specify a minimum stopping sight distance of 305 ft. Stopping sight distance is the length required for a motorist to detect an object in the roadway that requires a stop and still have enough room to be able to safely come to a stop.

The AASHTO manual also contains guidelines for minimum intersection sight distance, which allows enough of a time gap for a motorist to turn from the site driveway on to Whites Creek Pike without requiring oncoming traffic to significantly reduce speed. For the posted speed limit of 40 mph, the design values for intersection sight distance for a motorist turning from a stop is 445 feet for left turns and 385 feet for right turns. The proposed driveway connection meets the 445 ft left turning intersection sight distance with over 600 ft available. However, it fails to meet the 385 ft right turning intersection sight distance with only 195 ft available. For this reason, NDOT Development staff denied the driveway connection for this proposed 16-unit development.

The problem with inadequate intersection sight distance can be seen in this Google street view photo of Whites Creek Pike near the project site:



The developer's consultant proposes to mitigate the deficiency in intersection sight distance with a proposed combination of vegetative pruning, a warning sign and a flashing beacon. NDOT development staff rejected this proposed mitigation as insufficient, and the consultant has appealed the decision to the Traffic & Parking Commission. NDOT traffic engineering staff recommends that the Commission uphold the driveway denial. A 3-year crash analysis shows a downward trend in crashes on Whites Creek Pk between W Trinity and W Nocturne.



Regular Agenda 6.1—3-year crash query of Whites Creek Pk from W Nocturne to W Trinity

CRASH SUMMARY REPORT

Crash Query - Whites Creek Pk from Nocturne to W Trinity

Created on December 3, 2024

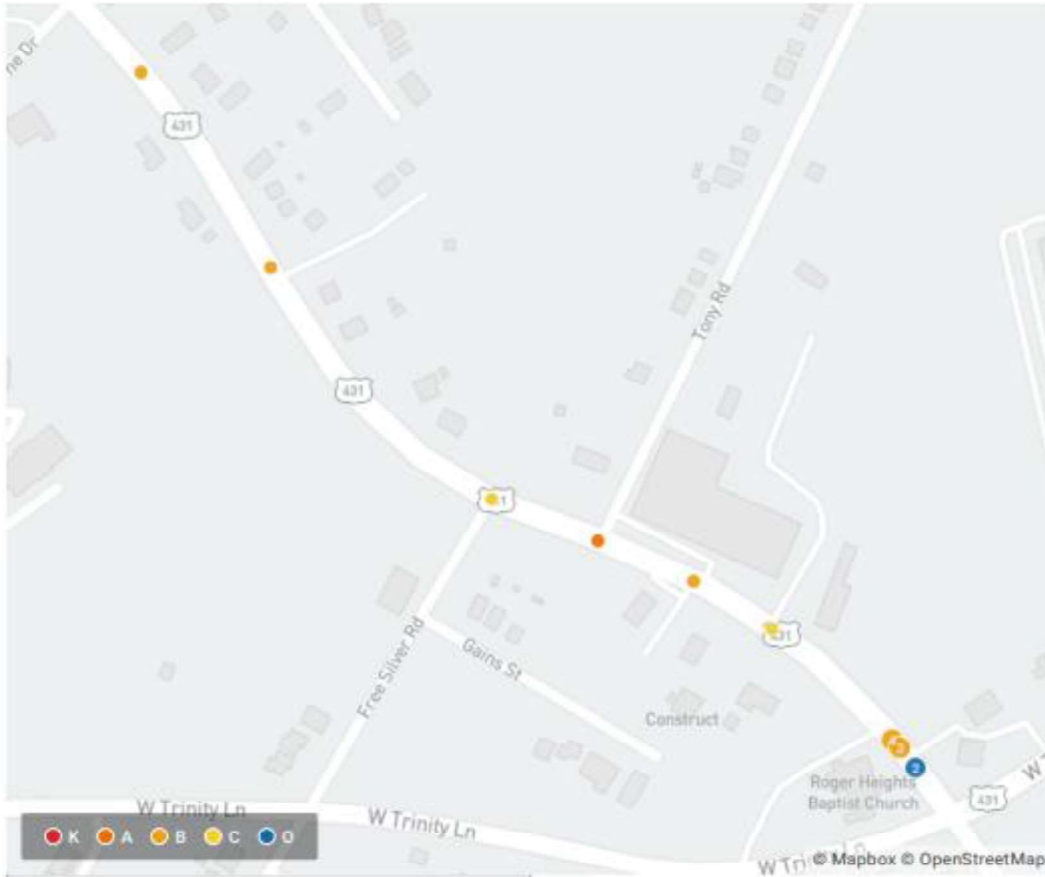
Created by Andrew Smith

Data extents: November 19, 2021 to November 19, 2024



Applied Filters

ID Number = 19SR065001 MP: 1.35 - 1.78



Total Crashes	15	Fatal Crashes	0
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Summary	Crash	
Total Crashes	15	100.00%
Alcohol Involved	2	13.33%

+ 4 more	0	0%
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Type of Crash	Crash	Crash
(B) Suspected Minor Injury	7	46.67%
(O) Property-Damage Only	4	26.67%
(C) Possible Injury	3	20.00%
(A) Suspected Serious Injury	1	6.67%
(K) Fatal Injury	0	0.00%

Date of Crash (Year)	Crash	Crash
2024	4	26.67%
2023	5	33.33%
2022	6	40.00%
+ 8 more	0	0%

Manner of First Collision	Crash	Crash
Angle	6	40.00%
Head-On	4	26.67%
No Collision W/ Vehicle	3	20.00%
Rear-End	1	6.67%
Sideswipe, Same Dir	1	6.67%
+ 5 more	0	0%

First Harmful Event	Crash	Crash
Vehicle in Transport	12	80.00%
Curb	1	6.67%
Ditch	1	6.67%
Overturn	1	6.67%
+ 61 more	0	0%

Crash Location	Crash	Crash
Along Roadway	15	100.00%
+ 6 more	0	0%

Light Conditions	Crash	Crash
Daylight	10	66.67%
Dark-Lighted	3	20.00%
Dark-Not Lighted	1	6.67%
Dusk	1	6.67%

+ 4 more

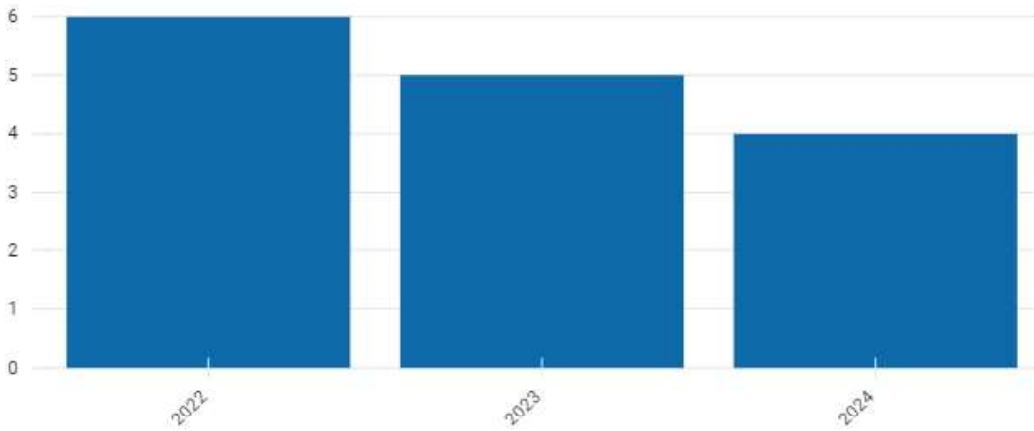
0 0%

Weather Conditions

Crash

Clear	12	80.00%
Cloudy	2	13.33%
Rain	1	6.67%
+ 9 more	0	0%

Whites Creek Pike (Nocturne to Trinity)



3-Year Crash History of Whites Creek Pk

6.2 TPAC Rideshare Pilot presentation

This item is presented for information only this month, with a vote planned for January.

Unfinished Business

7.1 CD 11, 14, &15: Authorization to reduce the posted speed limit of Lebanon Pike from 40/45 mph to 35 mph between Donelson Pike to Wilson County line, requested by NDOT
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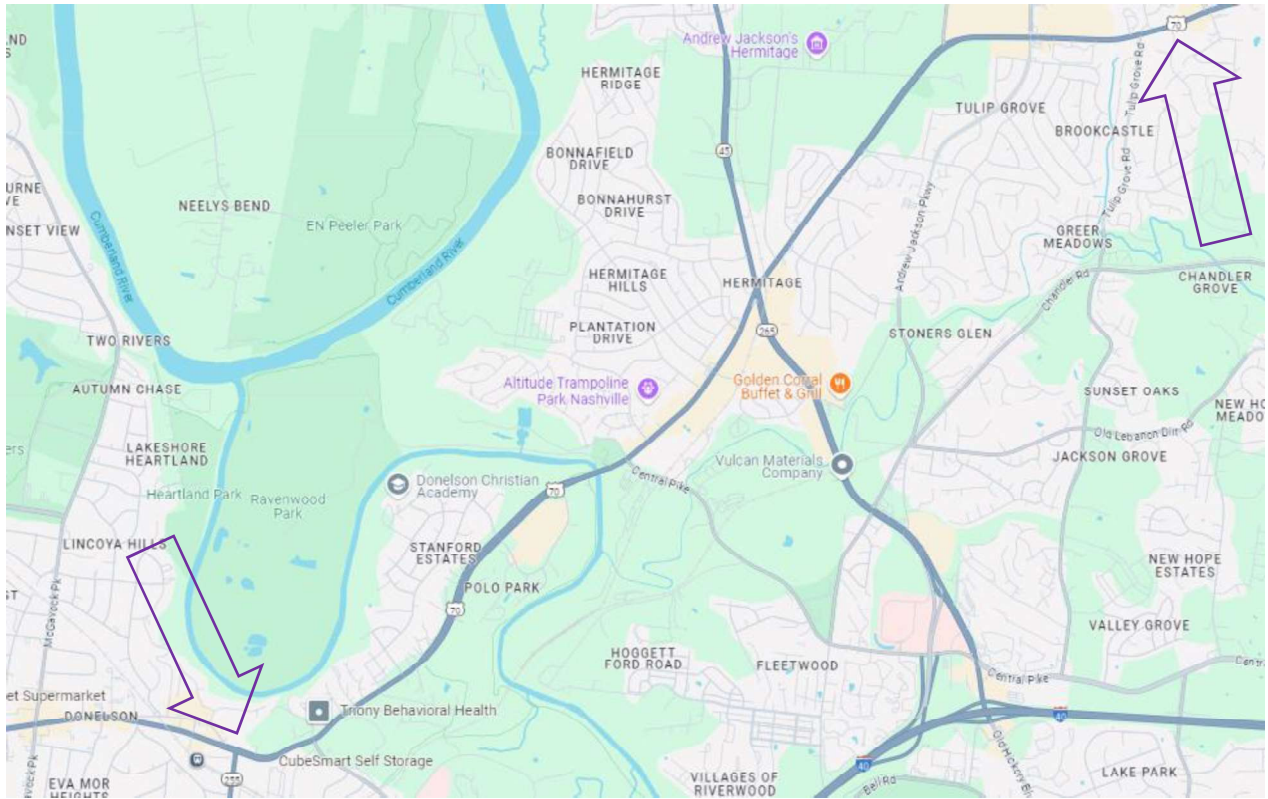
Recommendation: Approval of new posted speed limit on Lebanon Pike of 35 mph, a reduction from 40/45 mph, between Donelson Pike and the Wilson County line.

Analysis: As a part of NDOT's Vision Zero program, the department commissioned assessments of operating conditions along several of Nashville's arterial corridors to reduce crashes and crash severity on these roads. Dickerson Pike is not just one of the most dangerous roads in Nashville, it's one of the most dangerous roads in the state for pedestrians. TDOT has identified Lebanon Pike as an area for pedestrian safety improvements through multiple complete streets initiatives. NDOT has been working with TDOT, WeGo, MNP, and other stakeholders throughout this process.

Consistent with the FHWA Proven Safety Countermeasures and the Nashville Vision Zero Action Plan, NDOT seeks to move from determining speed limits on the 85th percentile standard, and instead base recommended speed limits based on a combination of operating speeds at the 50th percentile while also considering land use, road conditions, traffic volumes, crash histories, and the presence of vulnerable road users to reduce traffic fatalities and other serious injuries.

The Commission recently approved similar requests for new lower posted speed limits on Dickerson Pike, Hermitage Ave, and Lebanon Pike west of Donelson Pike. Details of those actions can be found starting with the July 2024 Commission meeting.

When the approval of new posted speed limits, NDOT will follow a similar rollout of changes starting in January with placement of dynamic message boards advising motorists of upcoming new speed limits.



New Business

Other Items

9.1 Community poll results on proposed 2:30 meeting time change

The November Traffic & Parking Commission meeting was held on Tuesday, November 12 with an earlier starting time. A commissioner requested that NDOT open a community poll about a permanent change to an earlier starting time of 2:30 pm. There have been nine responses with two comments as of December 2, 2024, but the poll will remain open until December 6.

Traffic and Parking Commission: New Meeting Time Proposed

9
Responses

00:50
Average time to complete

Active
Status

1. Do you support permanently moving the start time of the Traffic and Parking Commission meeting to 2:30 p.m.?

- Yes 7
- No 2



2. Comments

5
Responses

Latest Responses
"Great idea!"

"That would make it even more difficult for nashvillians who work regular hour..."