



May 14, 2026

Mr. Jay Bernstein
Fitch Irick SC, LLC
1515 Mockingbird Lane, Suite 1010
Charlotte, North Carolina 28209

Additional Intended Users:

South Carolina State Housing Finance
and Development Authority

**Subject: PRELIMINARY NOISE EVALUATION
Proposed Worley Senior Apartments
Worley Road
Greenville, Greenville County, South Carolina
JPEG Project #3629-26**

Dear Mr. Bernstein:

J. N. Pease Environmental Group, LLC (JPEG) appreciates the opportunity to provide the enclosed noise evaluation which was completed in accordance with the South Carolina State Housing Finance and Development Authority Qualified Allocation Plan (QAP) for new construction applications. The current QAP specifies that consideration should be given to noise generated from 1) railroads located within 1,000 feet of the project and 2) civil airports/military airfields located within 2,500 feet and 15,000 feet of the project, respectively. The QAP specifies that the distances should represent the shortest straight line between the boundary or property line and noise source.

PROPERTY DESCRIPTION

The project property includes an approximate 6-acre vacant parcel of land located along Worley Road and adjacent to the intersection with Haughty Street in Greenville, South Carolina. The project property is defined by Greenville County tax parcel number 0174020600500.

SUMMARY OF INPUT PARAMETERS

The HUD Exchange Day/Night Noise Level Calculator Electronic Assessment Tool was used to determine the DNL from qualifying A) railways and B) airports. A summary of the noise model input parameters for railways and airports is provided below:

A. RAILWAYS (within 1,000 feet)

One (1) railway was identified within 1,000 feet of the project property. The railway is operated by CSX and the distance from the railway to the nearest property boundary was measured at 850 feet. An area map is provided in Appendix A which identifies the location of the railway in relation to the project property. The closest crossing is an "at-grade" crossing at the intersection with Tulip Street which is identified by Crossing ID #640645A. Unless otherwise noted as a "Default HUD Value", rail traffic data for this crossing was obtained from the U.S. DOT Crossing Inventory Form available through the Federal Railroad Administration (FRA) Office of Safety Analysis website. A copy of the Crossing Inventory Form is provided in Appendix A. The model parameters for the respective railways are summarized as follows:

Table 1. Railway Data

MODEL PARAMETER	CSX Crossing ID #640645A
Distance	850 feet

MODEL PARAMETER	CSX Crossing ID #640645A
Number of trains per day (ATO)	1
*Fraction of nighttime operations (10pm to 7am)	0
*Diesel locomotives per train (Default HUD Value)	2
*Railcars per train (Default HUD value)	100
Average train speed (mph)	25
Welded? or Bolted? (Default HUD value)	Bolted
Prolong Use of Horns	Yes (per regulations)
Railway DNL	47 dB

*Default value obtained from The HUD Noise Guidebook, September 1991 HUD-953-CDP(1).

A copy of the HUD DNL Calculator output is provided in Appendix A. It is noted a second railway operated by Norfolk Southern was identified approximately 1,922 feet from the closest property boundary. This railway was not included in the noise evaluation since it is located beyond the requisite search distance of 1,000 feet. For reference purposes, this railway is also depicted on one of the railway location figures provided in Appendix A.

B. AIRPORTS (civil with 2,500 feet; military with 15,000 feet)

No qualifying airports were identified within the respective search distances. The closest airport is the Greenville Downtown Airport which is located over 17,700 feet from the subject property. An airport location map is provided in Appendix B.

RESULTS & CONCLUSIONS

The following combined DNLs (noise levels) were calculated using the HUD Exchange DNL Calculator:

Table 2. Noise Levels

NAL	COMBINED DNL (Current)	NOISE CATEGORY*
1 (Property Boundary)	47 dB	Acceptable

*Acceptable = Not exceeding 65 dB

Normally Unacceptable = Above 65 dB but not exceeding 75 dB

Unacceptable = Above 75 dB

The Combined DNL does not exceed 65 dB and falls within the Acceptable range. Based on this evaluation and associated input parameters, noise mitigation measures are not required for the project undertaking. The HUD Exchange DNL Calculator output is provided in Appendix A. Please note additional interpretations of the data input parameters by government officials or other parties may result in an alternate Combined DNL decibel values.

CLOSING

JPEG appreciates the opportunity to serve as your environmental consultant. Please call with any questions. My direct number is (843) 345-4765.

Sincerely,

J. N. PEASE ENVIRONMENTAL GROUP, LLC

James N. Pease, IV

James N. Pease, IV, REM #10923

President/Registered Environmental Manager

Appendix: A – Railway Documentation & HUD DNL Output
 B – Airport Documentation

APPENDIX A

RAILWAY DOCUMENTATION & HUD DNL OUTPUT

Day/Night Noise Level (DNL) Calculator

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the [Day/Night Noise Level Calculator Electronic Assessment Tool Overview \(/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/\)](#).

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

Site ID	Worley Senior Apartments
Record Date	05/14/2026
User's Name	JPEG

Railroad #1 Track Identifier:	CSX Crossing #640645A
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Rail # 1

Train Type	Electric ☐	Diesel ☒
Effective Distance		850
Average Train Speed		25
Engines per Train		2
Railway cars per Train		100
Average Train Operations (ATO)		1
Night Fraction of ATO		0
Railway whistles or horns?	Yes: ☐ No: ☐	Yes: ☒ No: ☐
Bolted Tracks?	Yes: ☐ No: ☐	Yes: ☒ No: ☐
Train DNL	0	47
Calculate Rail #1 DNL	47	Reset

Add Road Source	Add Rail Source
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Airport Noise Level	
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Loud Impulse Sounds?	☐ Yes ☐ No
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Combined DNL for all Road and Rail sources	47
Combined DNL including Airport	N/A
Site DNL with Loud Impulse Sound	

Calculate

Reset

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

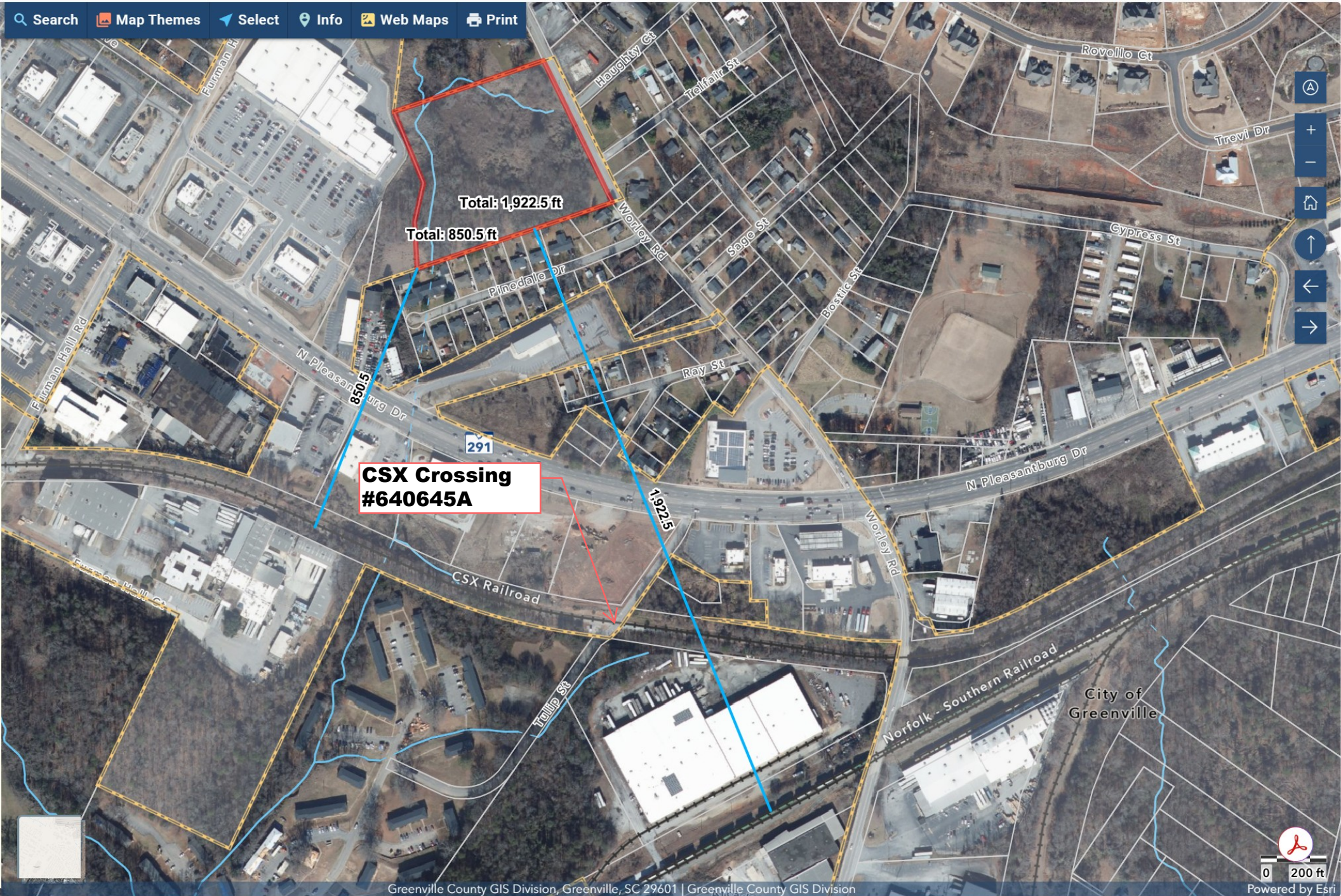
- **No Action Alternative:** Cancel the project at this location
- **Other Reasonable Alternatives:** Choose an alternate site
- **Mitigation**
 - Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)
 - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
 - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
 - Incorporate natural or man-made barriers.
 - Construct noise barrier. See the **Barrier Performance Module** (/programs/environmental-review/bpm-calculator/)

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

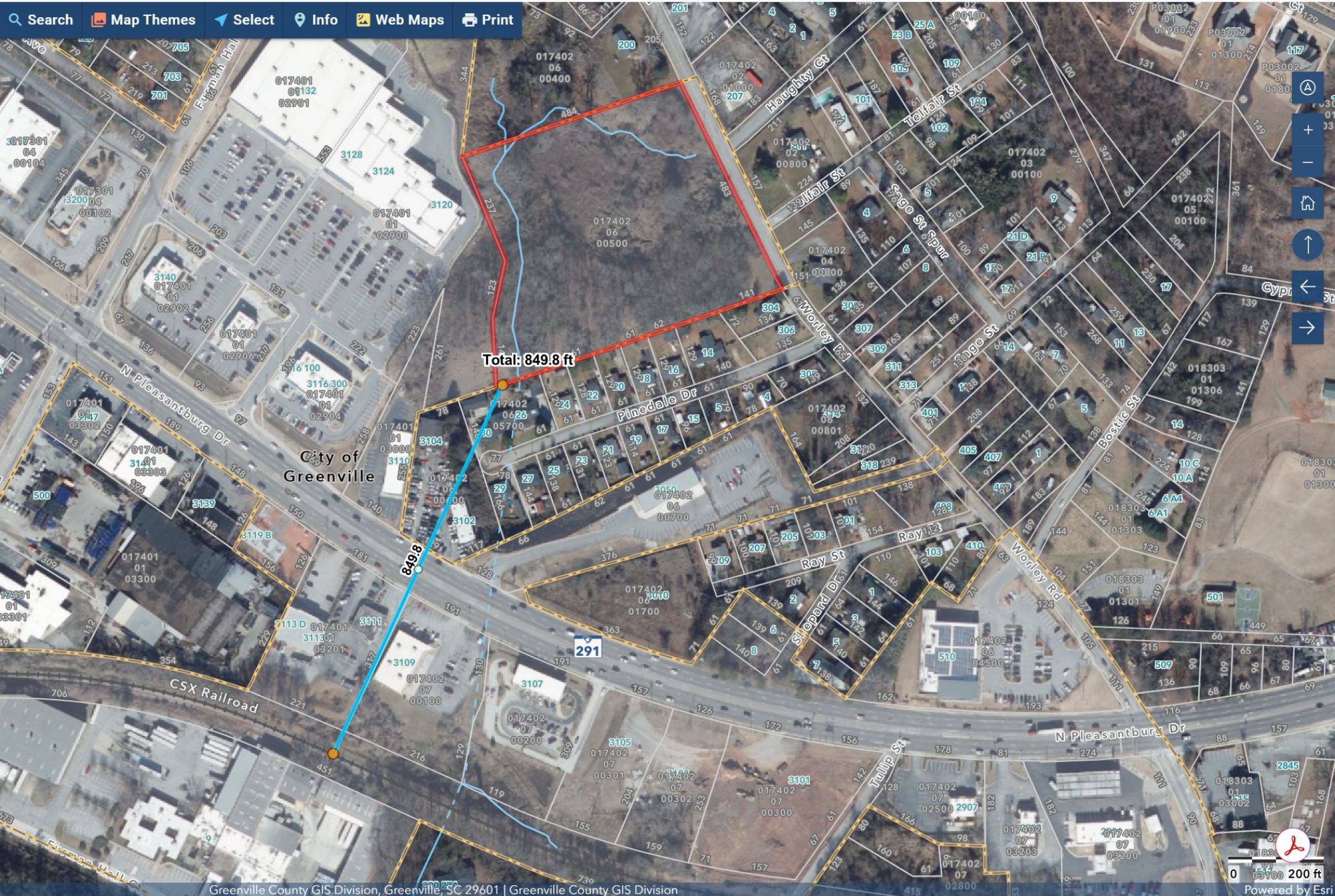
Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Federal Railroad Administration Railroad Operations Data Sources
(<https://www.hudexchange.info/resource/6027/federal-railroad-administration-railroad-operations-data-sources/>)



APPENDIX A

Worley Senior Apartments Greenville, SC



APPENDIX A: Worley Senior Apartments Greenville, SC

U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 02 / 10 / 2026	B. Reporting Agency ☒ Railroad ☐ Transit ☐ State ☐ Other	C. Reason for Update (Select only one) ☒ Change in Data ☐ New Crossing ☐ Closed ☐ Re-Open ☐ Date Change Only ☐ Change in Primary Operating RR ☐ No Train Traffic ☐ Quiet Zone Update ☐ Admin. Correction	D. DOT Crossing Inventory Number 640645A
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Part I: Location and Classification Information

1. Primary Operating Railroad CSX Transportation [CSX]		2. State SOUTH CAROLINA		3. County GREENVILLE	
4. City / Municipality ☐ In ☒ Near GREENVILLE		5. Street/Road Name & Block Number TULIP STREET (Street/Road Name) * (Block Number)		6. Highway Type & No. I-4082	
7. Do Other Railroads Operate a Separate Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? ☐ Yes ☒ No If Yes, Specify RR		
9. Railroad Division or Region ☐ None CAROLINAS		10. Railroad Subdivision or District ☐ None BELTON		11. Branch or Line Name ☒ None	
12. RR Milepost AKL 0059.690 (prefix) (nnnn.nnn) (suffix)		13. Line Segment * 940020			
14. Nearest RR Timetable Station * NEWS		15. Parent RR (if applicable) ☒ N/A		16. Crossing Owner (if applicable) ☒ N/A	
17. Crossing Type ☒ Public ☐ Private	18. Crossing Purpose ☒ Highway ☐ Pathway, Ped. ☐ Station, Ped.	19. Crossing Position ☒ At Grade ☐ RR Under ☐ RR Over	20. Public Access (if Private Crossing) ☐ Yes ☒ No	21. Type of Train ☒ Freight ☐ Intercity Passenger ☐ Commuter ☐ Transit ☐ Shared Use Transit ☐ Tourist/Other	22. Average Passenger Train Count Per Day ☐ Less Than One Per Day ☐ Number Per Day 0
23. Type of Land Use ☐ Open Space ☐ Farm ☒ Residential ☐ Commercial ☐ Industrial ☐ Institutional ☐ Recreational ☐ RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? ☐ Yes ☒ No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) ☒ No ☐ 24 Hr ☐ Partial ☐ Chicago Excused Date Established		
26. HSR Corridor ID ☒ N/A	27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 34.8857210		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -82.3938980		29. Lat/Long Source ☒ Actual ☐ Estimated
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-232-0144		34. Railroad Contact (Telephone No.) 904-366-3051		35. State Contact (Telephone No.) 803-737-1200	

Part II: Railroad Information

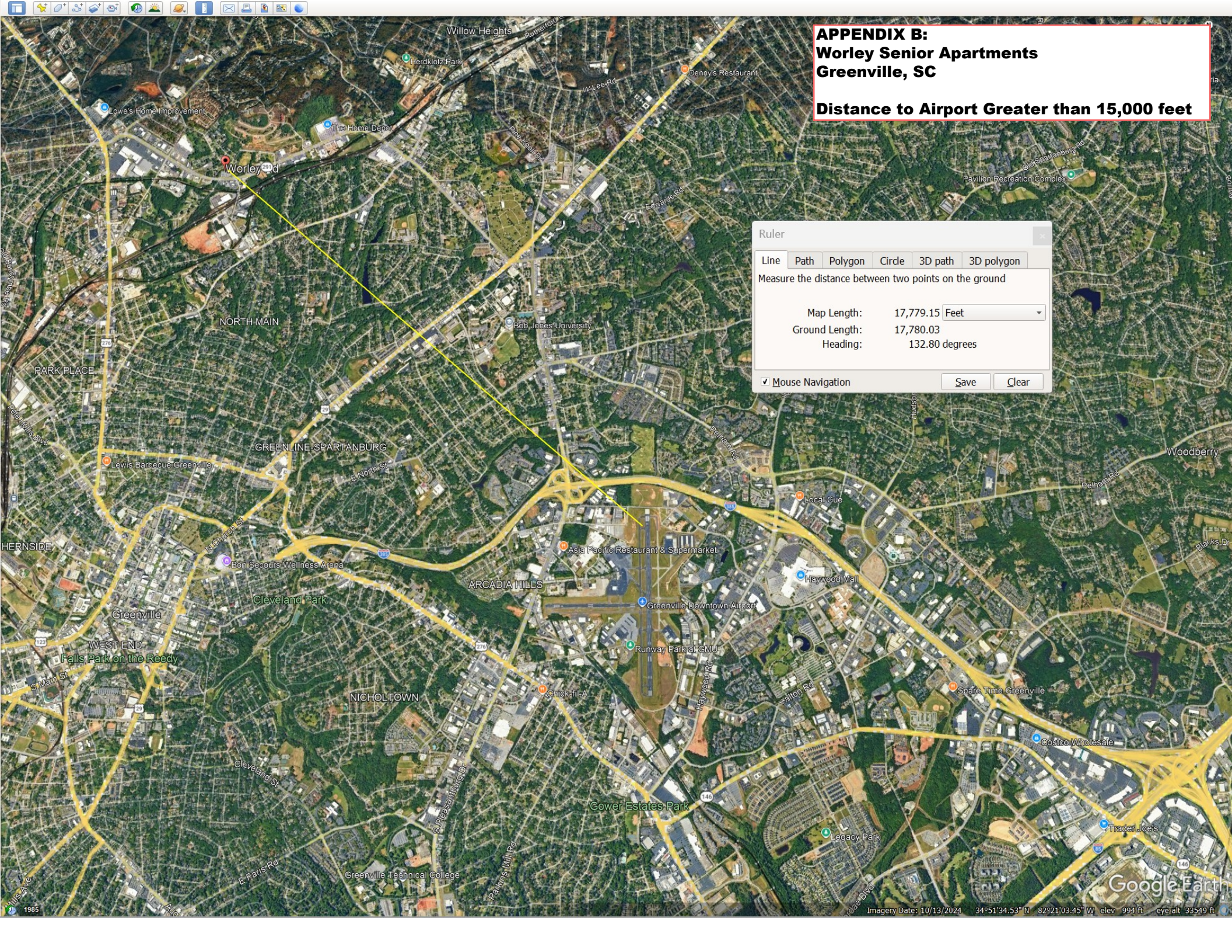
1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 0	1.B. Total Night Thru Trains (6 PM to 6 AM) 0	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day ☒ How many trains per week? 1
2. Year of Train Count Data (YYYY) 2026		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 25 3.B. Typical Speed Range Over Crossing (mph) From 25 to 25		
4. Type and Count of Tracks Main 1 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) ☐ Constant Warning Time ☒ Motion Detection ☐ AFO ☐ PTC ☐ DC ☐ Other ☐ None				
6. Is Track Signaled? ☐ Yes ☒ No		7.A. Event Recorder ☒ Yes ☐ No		7.B. Remote Health Monitoring ☐ Yes ☒ No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 02/10/2026		PAGE 2		D. Crossing Inventory Number (7 char.) 640645A	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? ☒ Yes ☐ No		2. Types of Passive Traffic Control Devices associated with the Crossing			
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0	2.C. YIELD Signs (R1-2) (count) 0	2.D. Advance Warning Signs (Check all that apply; include count) ☐ None ☒ W10-1 2 ☐ W10-3 _____ ☐ W10-11 _____ ☐ W10-2 _____ ☐ W10-4 _____ ☐ W10-12 _____	
2.E. Low Ground Clearance Sign (W10-5) ☒ Yes (count 2) ☐ No		2.F. Pavement Markings ☒ Stop Lines ☐ Dynamic Envelope ☐ RR Xing Symbols ☐ None		2.G. Channelization Devices/Medians ☐ All Approaches ☐ Median ☐ One Approach ☒ None	
2.H. EXEMPT Sign (R15-3) ☐ Yes ☒ No		2.I. ENS Sign (I-13) Displayed ☒ Yes ☐ No			
2.J. Other MUTCD Signs Specify Type _____ Count _____ Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) ☐ Yes ☐ No		2.L. LED Enhanced Signs (List types)	
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway 2 Pedestrian 0		3.B. Gate Configuration ☒ 2 Quad ☐ Full (Barrier) Resistance ☐ 3 Quad ☐ Median Gates ☐ 4 Quad		3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane 0 ☐ Incandescent Not Over Traffic Lane 0 ☐ LED	
3.D. Mast Mounted Flashing Lights (count of masts) 2 ☐ Incandescent ☒ LED ☒ Back Lights Included ☐ Side Lights Included		3.E. Total Count of Flashing Light Pairs 4			
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) ____/____/____ ☒ Not Required		3.G. Wayside Horn ☐ Yes Installed on (MM/YYYY) ____/____/____ ☒ No		3.H. Highway Traffic Signals Controlling Crossing ☐ Yes ☒ No	
3.I. Bells (count) 2		3.J. Non-Train Active Warning ☐ Flagging/Flagman ☐ Manually Operated Signals ☐ Watchman ☐ Floodlighting ☐ None			
3.K. Other Flashing Lights or Warning Devices Count 0 Specify type _____		4.A. Does nearby Hwy Intersection have Traffic Signals? ☐ Yes ☒ No			
4.B. Hwy Traffic Signal Interconnection ☒ Not Interconnected ☐ For Traffic Signals ☐ For Warning Signs		4.C. Hwy Traffic Signal Preemption ☐ Simultaneous ☐ Advance		5. Highway Traffic Pre-Signals ☐ Yes ☐ No Storage Distance * _____ Stop Line Distance * _____	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes 2 ☐ One-way Traffic ☒ Two-way Traffic ☐ Divided Traffic		2. Is Roadway/Pathway Paved? ☒ Yes ☐ No		3. Does Track Run Down a Street? ☐ Yes ☒ No	
4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) ☐ Yes ☒ No					
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/____ Width * 7 Length * 25 ☐ 1 Timber ☒ 2 Asphalt ☐ 3 Asphalt and Timber ☐ 4 Concrete ☐ 5 Concrete and Rubber ☐ 6 Rubber ☐ 7 Metal ☐ 8 Unconsolidated ☐ 9 Composite ☐ 10 Other (specify) _____					
6. Intersecting Roadway within 500 feet? ☒ Yes ☐ No If Yes, Approximate Distance (feet) _____		7. Smallest Crossing Angle ☐ 0° – 29° ☐ 30° – 59° ☒ 60° - 90°		8. Is Commercial Power Available? * ☒ Yes ☐ No	
Part V: Public Highway Information					
1. Highway System ☐ (01) Interstate Highway System ☐ (02) Other Nat Hwy System (NHS) ☐ (03) Federal AID, Not NHS ☒ (08) Non-Federal Aid		2. Functional Classification of Road at Crossing ☐ (0) Rural ☒ (1) Urban ☐ (1) Interstate ☐ (5) Major Collector ☐ (2) Other Freeways and Expressways ☐ (3) Other Principal Arterial ☐ (6) Minor Collector ☐ (4) Minor Arterial ☒ (7) Local		3. Is Crossing on State Highway System? ☐ Yes ☒ No	
4. Highway Speed Limit 35 _____ MPH ☒ Posted ☐ Statutory		5. Linear Referencing System (LRS Route ID) *			
6. LRS Milepost *		7. Annual Average Daily Traffic (AADT) Year 2013 AADT 000694			
8. Estimated Percent Trucks 05 _____ %		9. Regularly Used by School Buses? ☒ Yes ☐ No Average Number per Day 9 _____		10. Emergency Services Route ☐ Yes ☐ No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					

APPENDIX B

AIRPORT DOCUMENTATION



APPENDIX B:
Worley Senior Apartments
Greenville, SC

Distance to Airport Greater than 15,000 feet

Ruler

Line Path Polygon Circle 3D path 3D polygon

Measure the distance between two points on the ground

Map Length: 17,779.15 Feet

Ground Length: 17,780.03

Heading: 132.80 degrees

☒ Mouse Navigation

Save Clear