

Responses to Neighborhood Concerns Regarding Railroad Cottages

May 2017

<u>Issue Title</u>	<u>Comments</u>	<u>Response</u>
Traffic	The street is a dead-end, already gets congested with 4 families, what will it be like with 10 more families.	Traffic engineer engaged to perform a trip analysis found that Cottages would generate 57 trips (peak) vs 55 trips for 4 single-family homes. <ul style="list-style-type: none"> • Full report at Attachment A
Parking	Parking proposed is woefully inadequate, 10 units need 20 cars plus 5-8 for guests, proposal is only for 13 instead of the necessary 25 - 28 spots. This is in direct violation of the "cottage ordinance" which says that parking generated by the site must be hosted on the site. People will be forced to park a block away on Fowler.	We do not believe our parking is woefully inadequate. <ul style="list-style-type: none"> • Our proposed parking meets and exceeds the requirements of the adopted cottage ordinance. • 10 units do not need 20 cars since it's likely that half will be singles and half couples with at least some of the latter having only one car. • We are proposing a Transportation Demand Management (TDM) Plan (see Attachment B) that will further reduce the number of cars.
Storm Water Drainage	Proposal is to drain through 2 neighbor yards on Ellison Street - is this legal? Site is essentially a bathtub basin, which means it captures water and the water has no place to go.	<ul style="list-style-type: none"> • All hard surface are permeable pavement material; all roofs go to either infiltration trench or bioretention. • Retention and infiltration of 10-year design storm; retention and infiltration of first inch of runoff for all vehicular and roof areas. • We are working to help solve the existing offsite generated issues. Hard pipe extension is shown as an indication we are willing help if easements are granted. It is legal if easements are granted.
Zoning Change	Why would this be allowed? People bought in a residential R-1 area, now you want to put condos here? Is the only reason that a zoning change is being considered here because the investor/ developer stands to make a large profit (several million)? That is in HIS best interest, not the city's and not the current residents around the site.	The adopted Cottage Ordinance permits the proposed project if a Special Exception is approved. <ul style="list-style-type: none"> • The cottage ordinance was reviewed at three public hearings, two work sessions, all of the boards and commissions, VPIS and the Chamber of Commerce and finally adopted by a 5-1 vote. • The proposed project, we believe, meets and exceeds the requirements of the ordinance.
Density	This site is 3 lots combined, which is zoned for three houses... why would you change the zoning to squeeze in 11 houses and a carport?	Under current zoning and based on its geometry, by-right the site could hold 4 single-family homes. <ul style="list-style-type: none"> • 10 cottages + 1 amenity building = 15,400 SF which is 10,000 SF less than by-right 4 single-family homes. • Total volume with 9' main floor and 8' top half-floor = 147,000 CF which is 100,000 CF less than by-right 4 single-family homes. • No basements (by code) vs. additional 311,000 CF with by-right 4 single-family homes. • 25' to mid point of roof half floor is 10' shorter than by-right 4 single-family homes.
Too close together	Plan calls for the structures to be just 6 feet apart. SIX FEET! Zoning is 30 feet in between structures.	20' at main body , 6'6 between allowed bays

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Wrong location	Site is shaped like a long triangle, which is challenging and dictates poor design. Houses are NOT around a fountain or courtyard, but just in a long row.	Challenging geometry requires good design solutions. Main gathering space in center of community serves as an outdoor living and dining space similar to the sizes inside the Common House. The Falls Church ARB has had an initial review and found the design quite good.
SIDEBAR	If this project is intended for elderly people, isn't it a LOOOOOOOOONG walk to bring groceries in from the carports and also to take their trash out?	The ordinance dictates clustered parking. This design principal creates spaces for people rather than cars. This shared walk space means that neighbors are more likely to have the kind of easy, unstructured encounters with neighbors that promotes safety, health and well being.
School Children	20% of the houses in an age-restricted community must be available to other ages, that means there will be families with kids, possibly up to 6 kids	Referenced law permits 80% but allows for 100% age-restricted, the latter of which we are proposing. <ul style="list-style-type: none"> ● No residents under 18 permitted thus zero school children
Tax Impact	This will be in about \$150k yearly for the city, which will be offset dramatically if there are 6 kids (approx. -\$120k, means a net of only 30k)	<ul style="list-style-type: none"> ● Positive Net Revenue ● Zero school-age children. Statement and data regarding net revenues can be found in Attachment C.
Impact to W&OD trail	People who use the trail will surely notice a concrete jungle of 11 houses mere feet from the trail	<ul style="list-style-type: none"> ● Closest Cottage will be over 50' from the edge of the trail. ● 20' Buffer planting between cottages and trail. ● Working with staff & NVPA to make the area a "Welcome to Falls Church" entrance
Vegetation / Trees	Almost all will be cut down, removed	<ul style="list-style-type: none"> ● Applicant has committed to saving all the trees identified by City Arborist. ● Tree Canopy - 20% of lot area ● Buffer - 10' adjacent to abutting properties; requires tree AND shrub planting
Unrealistic drawings of houses	All the renderings show the site with TEN YEARS projected growth of tress, which is cold comfort to those of [sic] living here in the next 1-3 years. Show us what it will look like NOW. Not so pretty, huh?	To fill the buffer area, we are required to plant evergreen trees along the rear and portions of the side yards that grow 3' per year, conservatively. We are also required to plant canopy trees within the buffer area, which do take longer to grow, but would be the same in a by-right scenario.

March 28, 2017

Attachment A Railroad Cottages Responses to Neighborhood Concerns May 2017

Mr. Joe Wetzel
Railroad, LLC
c/o The Young Group
800 West Broad Street, #333
Falls Church, VA 22046

**Re: Railroad Cottages
Trip Generation Comparison
Tax Map 52-102-030, 031 and 032
City of Falls Church
Pennoni YNGG1701**

Dear Mr. Wetzel:

As requested, please find a trip generation summary for your use with the City and stakeholders for the proposed conceptual development plan for the Railroad Cottages. The proposed conversion to allow 10 single family detached 'senior living' residential units generates similar roadway peak hour and weekday trips in relation to the 'by-right' site development scenario with 4 single family detached residential units. The calculations and comparisons are outlined below. We conclude that the proposed special exception with age-restricted housing (age 55 and over) is consistent with by-right development and that a VDOT Chapter 870 review is not required.

The 1.25 acre site is proposed for a CDP for development totaling 10 DU, with access to the termini of Railroad Avenue, south of the W & OD Trail and west of Route 7.

Trip Generation

The proposed site activities are summarized in **Table E1** below, based on trip equations from the Institute of Transportation Engineers (ITE) **Trip Generation** Manual (9th Edition). The effective trip rates are calculated by residential dwelling unit, to be conservative. Calculations do not include any Transportation Demand Management (TDM) reductions for the age-restricted uses. The Table shows the average rate for comparisons from the national database. The ITE Manual included several types of age-restricted housing. Detached residential units were used to reflect the cottages. Other types of senior housing uses include Senior Adult Housing (attached), Congregate Care Facilities and Continuing Care Retirement Communities. Generally, trip per unit go down as the residents' mobility decreases as the age increases. The ITE Manual notes:

- *Senior adult housing consists of detached independent living developments, including retirement communities, age-restricted housing and active adult communities. These developments may include amenities such as golf courses, swimming pools, 24-hour security,*

transportation and common recreational facilities. However, they generally lack centralized dining and on-site health facilities. Detached senior adult housing communities may or may not be gated. Residents in these communities are typically active (requiring little to no medical supervision). The percentage of retired residents varies by development.

- *Many factors affected the trip rates for detached senior adult housing. Factors such as the average age of residents, development of location and size, affluence of residents, employment status and vehicular access should be taken into consideration when conducting an analysis.*
- *The peak hour of the generator typically did not coincide with the peak hour of the adjacent street traffic. The A.M. peak hour of the generator typically ranged from 7:00 a.m. to 12:00 p.m. and the P.M. peak hour of the generator typically ranged from 1:00 p.m. to 6:00 p.m. The sites surveyed in the 1980s through the 2000s in California, Florida, New Hampshire, New Jersey, Pennsylvania and Canada.*

TABLE E1: PROPOSED TRIP GENERATION SUMMARY

	AM Peak Hour Trips	PM Peak Hour Trips	Weekday Daily Trips
Railroad Cottages ⁽¹⁾	2	3	37
TDM Trips ⁽¹⁾	-0	-0	-0
Pass-by Trips	-0	-0	-0
Internal Trips	-0	-0	-0
External Trips	2	3	37

⁽¹⁾ = ITE Trip Generation Manual (9th Edition) Land Use Code 251 rate for 10 DU. See **Table 1** for details.

The range of rates, in and out trips, and effective trip rates are attached in **Table 1** with the box for the average trips from ITE for Senior Housing and for signal family detached housing. However, since the site trip variable – dwelling unit-- is small for both proposed and by-right conditions, the application of the ITE trip equations is not appropriate. The ITE trip rate equations for land Use Code 251 are linear, so with only 1 DU, the AM trips are at 30 trips, which is not realistic.

The peak hour of the roadway during the ‘rush hour’ is typically the highest street volume counts, so the roadway peak hours were shown in the Tables. Off peak hours trips for senior housing – after 9 AM and before 4 PM -- are higher by 25 to 35 percent – in relation to the roadway peaks.

Trip Generation Change Summary

The proposed site activities are compared with the site “by-right” tabulations in **Table E2** below, based on single family detached average rates from the Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition). The change in trips are shown to compare with the by-right uses, which show no increase in trips. Daily trips for single-family housing default to the VDOT ‘default rate of 10 trips per DU.

TABLE E2: PROPOSED TRIP GENERATION COMPARISON

<u>Scenario</u>	<u>Railroad Cottages</u>	<u>Weekday AM Peak (two-way Trips)</u>	<u>Weekday PM Peak (two-way Trips)</u>	<u>Weekday Daily (two-way Trips)</u>
Proposed	10 SF DU Senior Housing	2	3	37
By-right	4 SF DU (ITE Code 210)	3	4	40
	Change from By-Right	-1	-1	-3
	Percentage Change	-33.3%	-25.0%	-7.5%

Trip Generation Sensitivity

The senior housing rates in ITE are based on 23 AM and 24 PM peak period studies. In past land use cases in Northern Virginia for senior housing, Pennoni has reviewed increased daily trips to account for flex-time traveling (i.e. households with workers who may commute part time or full time on the roads). To evaluate the sensitivity of the ITE data base, the average rates from ITE have been increased by 1 standard deviation (to reflect app. 88%) of the likelihood of higher trips. As shown in the bottom of Table 1, the effective trip rates with 1 standard deviation added are shown for the proposed 10 senior housing, as well as for the by-right detached housing, which recognizes multiple bedrooms and car ownership for facilities.

With the added trip sensitivity for senior housing, the proposed site activities are compared with the by-right tabulations, also with an increase in trips for multiple bed rooms and car ownership, in **Table E3** below, based on average rates and one standard deviation added from the Institute of Transportation Engineers (ITE) **Trip Generation** Manual (9th Edition).

TABLE E3: PROPOSED TRIP GENERATION SENSITIVITY WITH MAX TRIPS

<u>Scenario</u>	<u>Railroad Cottages</u>	<u>Weekday AM Peak (two-way Trips)</u>	<u>Weekday PM Peak (two-way Trips)</u>	<u>Weekday Daily (two-way Trips)</u>
Proposed CDP	10 DU Senior Housing (Ave + I.S.D.)	7	8	57
By-right	4 SF DU (ITE Code 210 + I.S.D.)	7	8	53
	Change from Approved	0	0	+4
	Percentage Change	0.0%	0.0%	+7.5%

Senior housing, with over 55 year age restriction for one member of the household and no year round school age children results no increase in peak hour trips than the single family detached homes. Daily trips for the senior housing with the increase in rates are 4 vehicles higher than the single-family detached trips with 4 DU assumed.

Other Data Sources

As part of land use entitlement applications in Northern Virginia, Pennoni had reviewed trip rates for active adult uses. In reviewing field traffic counts at Ashburn and Dumfries for the Dell Webb Four Seasons senior living communities, effective trip rates for the roadway peak hours for these sites compare to the ITE averages in the ITE Trip Generation Manual (2012). For a recent Fairfax County approval in the Fort Belvoir area, Pennoni used the trip rates as the average plus one standard deviation for the Daily trips to recognize a conservative approach for age-restricted housing for Daily activities. That rate at 5.7 trips per DU for Daily trips is shown in the sensitivity analysis in **Table E3**, and is 55 percent higher than the ITE data base rates.

In reviewing the on-line resources from ITE, the trip sources for senior housing in the ITE Journal have be incorporated into the rates used in the 9th Edition (from 2012). Note that one of the recent studies sources in 2011 includes a review of four senior housing sites in suburban Maryland, where the effective trip rates per dwelling units were 0.02 higher in the AM peak for dwelling units and equal in the PM peak at 0.27 trips per DU. Note that the PM average trip rate per DU for single family detached homes is 1.0 trips per DU, or 3.7 times higher than the Senior housing rate. The 2011 data is consistent with the data from Table E1. Therefore, the methodology per dwelling unit rate for this comparison is consistent with local and national trends.

Conclusions

The proposed use as senior housing single-family detached (SFD) residential uses at 10 lots generates peak period and Daily trips that are consistent with the by-right development of 4 single-family detached dwelling units, without age restrictions. The comparisons are based on the average data associated with the ITE Trip Generation Manual, review of trip generation sensitivity, local experience in Northern Virginia for other age-restricted land use entitlement applications, and a literature review.

If you should have any questions, please contact me directly at (703) 840-4830.

Sincerely,

PENNONI



Mr. Douglas R. Kennedy, P.E.
Associate Vice President

Enclosure: Table 1 Trip generation computations

**Table 1
Trip Generation**

ITE Land Use ^(1,2) CODE	DENSITY	Var.	USE			AM PEAK HOUR			PM PEAK HOUR			DAILY (2-way)
			IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	

Railroad Cottages Trip Generation

251	251.100	10	DU	Senior Adult Housing Det.	1	1	2	2	1	3	37	
251	251.180	10	DU	Senior Hous. Det @ 10 DU	11	21	32	5	3	8	61	
251	251.200	10	DU	Senior Housing Det. (D+1 SD)	1	2	3	2	1	3	57	
251	251.220	10	DU	Senior Housing Det. (+1 SD)	2	5	7	5	3	8	57	
10			DU	Use ave + 1 S.D.	2	5	7	5	3	8	57	
By Right												
210	210.171	4	DU	SF Res. @ 4 DU	3	10	13	3	1	4	54	
210	210.190	4	DU	Single-Fam. Det. (VDOT)	1	2	3	3	1	4	40	
210	210.200	4	DU	Single-Fam. Det. (+1 S.D.)	2	5	7	5	3	8	53	
210	210.100	4	DU	Single-Fam. Det.	1	2	3	3	1	4	38	
4			DU	Use ave + 1 S.D.	2	5	7	5	3	8	53	

Comparisons Proposed Vs. By-Right

Average Rate	Change	0	-1	-1	-1	0	-1	0	-1	-3
	Percentage Change	0.0%	-50.0%	-33.3%	-33.3%	0.0%	-33.3%	0.0%	-25.0%	-7.5%

Average Rate + 1 S.D.	Change	0	0	0	0	0	0	0	0	4
	Percentage Change	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%

	AM Peak Hour			PM Peak Hour			Daily Weekday (2-way)
	(2-way)	% Inbound		(2-way)	% Inbound		
<i>Effective Trip Rates⁽³⁾</i>							
251	Senior Adult Housing Det.	DU	0.20	50%	0.30	67%	3.70
251	Senior Hous. Det @ 10 DU	DU	3.20	34%	0.80	63%	6.10
251	Senior Housing Det. (D+1 SD)	DU	0.30	33%	0.30	67%	5.70
251	Senior Housing Det. (+1 SD)	DU	0.70	29%	0.80	63%	5.70
210	SF Res. @ 4 DU	DU	3.25	23%	1.00	75%	13.50
210	Single-Fam. Det. (VDOT)	DU	0.75	33%	1.00	75%	10.00
210	Single-Fam. Det. (+1 S.D.)	DU	1.75	29%	2.00	63%	13.25
210	Single-Fam. Det.	DU	0.75	33%	1.00	75%	9.50

(1) Trip Generation Manual (9th Edition), Institute of Transportation Engineers (ITE); 2012. Average trip rates used, unless noted with "e", then equations
 (2) ITE Land Code shown as the first 3 digits. Decimal shown for internal use by Pennoni for lookup table for trip rate variable.

(3) Effective trip rates calculated by land use:
 For average rates =
 For ITE equations, "e" noted =
 (Density) x (ave. trip rate) = 2-way Trips ; x (inbound percentage) for Trips In
 (Density) x (trip equation) = 2-way Trips ; x (inbound percentage) for Trips In

Attachment B
Railroad Cottages Responses to Neighborhood Concerns
May 2017

Railroad Avenue Cottage Housing
Transportation Demand Management and
Parking Management Plan

Purpose

The City's Comprehensive Plan establishes a vision of providing a transportation network that offers choices in travel modes. The Plan also includes a strategy of meeting increased travel demand within, from, and through the City via non-automobile modes. To that end, the City expects redevelopment activity to use Transportation Demand Management (TDM) and Parking Management Techniques that provide a range of transportation options and reduce the reliance on automobiles.

Goals

This combined TDM and Parking Management Plan is designed to achieve the following goals:

1. Provide travel options that allow residents to “age in place”, which means “the ability to live in one’s own home and community safely, independently, and comfortable, regardless of age, income, or ability level”
2. Demonstrate that the number of parking spaces provide is consistent with City code and accommodates travel demand

Plan Flexibility

This combined TDM and Parking Management Plan recognizes that travel behavior may change over time. For that reason, this combined plan uses a strategy of adaptive management – monitoring performance and updating the strategies applied as necessary to achieve the stated goals. The success of this TDM and Parking Management Plan will be reviewed periodically and updated as needed to deliver on the goals listed above.

Plan

The table below summarizes the plan elements. The specific elements are described in more detail below the table. The table is broken into four categories:

1. Site Design, Infrastructure, and Options. These options will be provided when the project is opened for operation.
2. Promotion, Education, and Incentives. These options will be provided while the project is in operation.
3. Monitoring and Enforcement. These techniques will be used to measure performance of the implemented strategies, ensure compliance, and assess whether the strategies applied are meeting the goals of the plan.
4. Adaptive Management. These additional techniques will be used is the implemented strategies are not sufficient to meet the goals of the plan. Note that this list is not exhaustive. Other strategies as needed will be used to be the performance goals.

Table 1: TDM and Parking Management Plan Elements

Site Design, Infrastructure, and Options	<ul style="list-style-type: none">• Possible shared minivan provided for carpooling• Electric golf cart provided for loading/unloading• Bike cage provided• Shared bicycles provided
Promotion, Education, and Incentives	<ul style="list-style-type: none">• Information kiosk in the community house with information on transit options, bike routes, and walking routes; as well as contact information for Commuter Connections• Carpool board maintained for daily needs (probably digital)• Parking spaces will not be sold with individual units. Parking hang tags will be issued by the condo board
Monitoring and Enforcement	<ul style="list-style-type: none">• TDM Coordinator duties assigned to one of the association officers

Shared minivan provided for carpooling

We are not able to commit to a shared minivan but are considering it since it is not clear that there would be enough demand to warrant the high per unit costs.

Electric golf cart provided for loading/unloading

An electric cart capable of holding four passengers plus a carry-all space in the rear will be provided so that owners have a convenient way to transport items (groceries, suitcases, etc.) from cars to cottages. The cart could also be used on City streets.

Bike cage provided

A secure bike cage will be provided so owners have a convenient and safe place to store their bikes, there by further encouraging such use.

Shared bicycles provided

3-4 bicycles will be provided when units are occupied to encourage their use as an alternative to automobiles.

Information kiosk in the community house with information on transit options, bike routes, and walking routes; as well as contact information for Commuter Connections

In addition to such information available in the common house, the same materials plus possible links to relevant resources will be available on the community's website.

Carpool board maintained for daily needs

This board also will be maintained on the community's website and is intended to permit residents to share short trips to doctors, shopping, outings, etc, to reduce the number of automobile trips as well as permitting the further development of "community."

Parking spaces will not be sold with individual units. Parking hang tags will be issued by the condo board and monitored by all residents.

TDM Coordinator duties assigned to one of the association officers

- Order repairs for the co-owned vehicle (if needed), golf cart, bicycles, etc.
- Maintain the information kiosk and carpool board

Be available to discuss local travel options with residents

**Attachment C
 Railroad Cottages Responses to Neighborhood Concerns
 May 2017**



Railroad Cottages

Section 7

**Statement & Data Regarding the
 Projected Net Revenues from the
 Project.**

Railroad Cottages will occupy land now vacant. The project will not only build community, but add positive net revenue to the City. A comparison of the proposed Railroad Cottages project verses development of the same land using by-right construction of four single family homes follows:

	4 SFD's at \$1.2 million each @ .63 ratio = 2.53 pupils	10 age-restricted cottage units at \$595,000 each = no pupils
Gross revenues	\$79,020	\$86,980
Gross expenses	\$56,475	\$13,084
Projected net annual fiscal impact	\$22,546	\$73,896