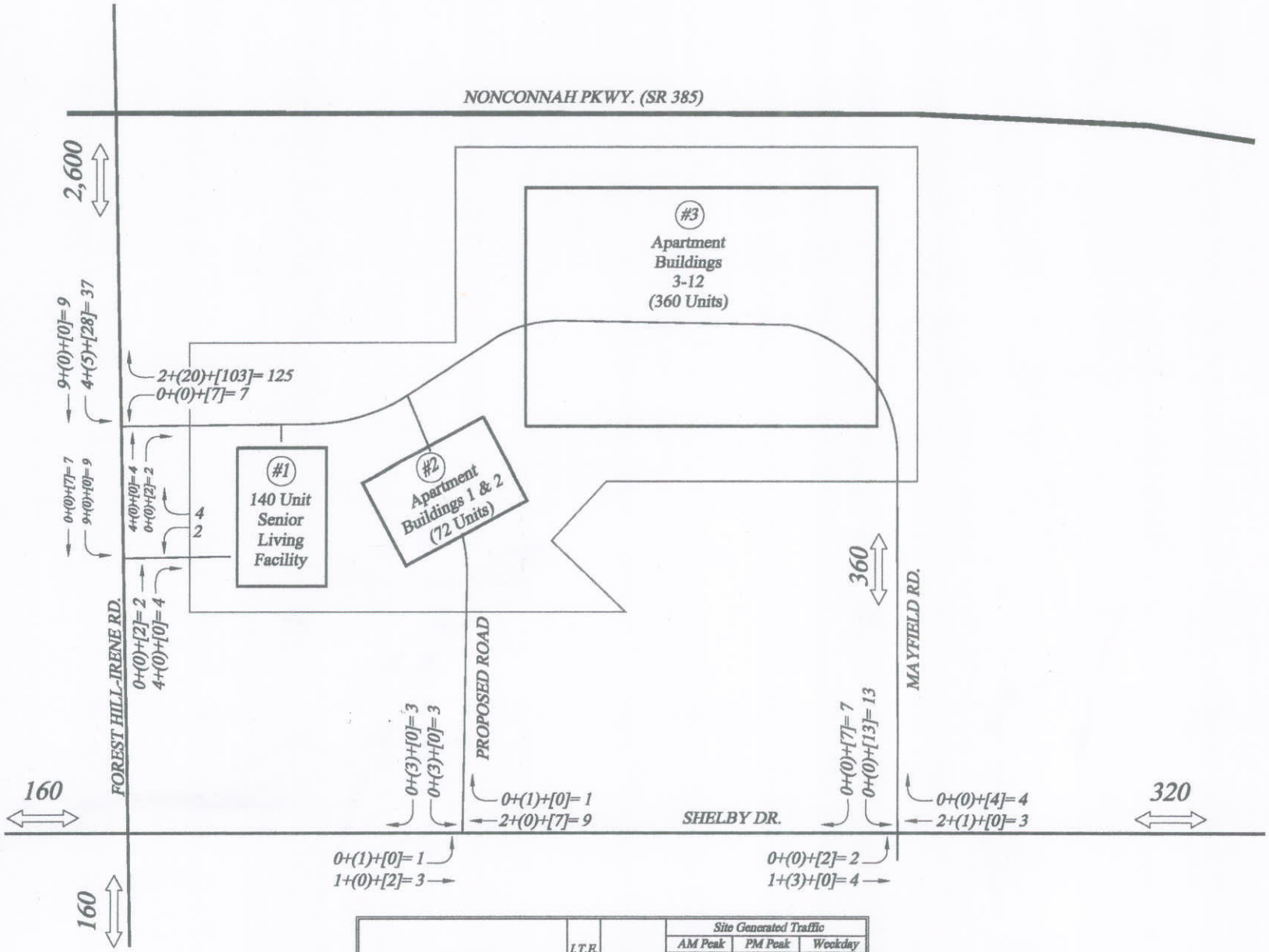
Figure 5 - Site Generated Traffic Volumes (AM Peak)

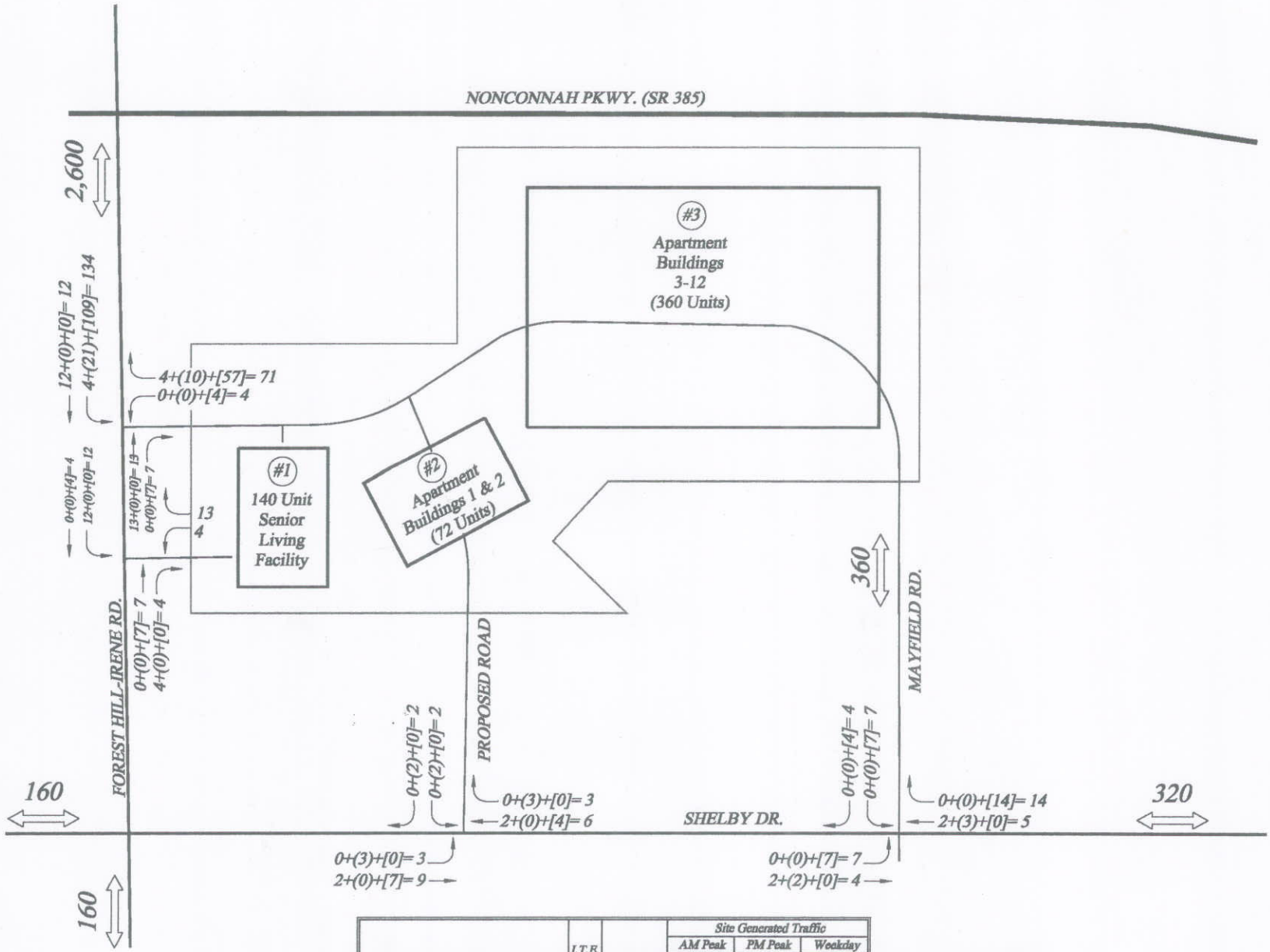


Land Use	I.T.E. Code	Size	Site Generated Traffic				
			AM Peak		PM Peak		Weekday
			IN	OUT	IN	OUT	24 hr Total
#1 - Senior Living Facility	255	140 units	17	8	20	21	393
#2 - Apartment Bldgs. 1 & 2	221	72 units	7	26	27	14	474
#3 - Apartment Bldgs. 3 - 12	221	360 units	36	130	137	72	2,372
TOTAL			60	164	184	107	3,239

LEGEND

- Peak Hour Volumes
- Average Daily Traffic Volumes (ADT)

Figure 6 - Site Generated Traffic Volumes (PM Peak)



Land Use	I.T.E. Code	Size	Site Generated Traffic				
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TOTAL			60	164	184	107	3,239

LEGEND

- Peak Hour Volumes
- Average Daily Traffic Volumes (ADT)

FOREST CREEK 1/12/2009

SUMMARY OF TRIP GENERATION CALCULATION FOR SENIOR LIVING

FOR **140** OCCUPIED DWELLING UNITS
(ITE CODE: 255, CONTINUING CARE RETIREMENT COMMUNITY)

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVEWAY VOLUME
AVG WKDY 2-WAY VOL	2.81	1.99	1.00	**393**
7-9 AM PK HR ENTER	0.12	0	1.00	**17**
7-9 AM PK HR EXIT	0.06	0	1.00	**8**
7-9 AM PK HR TOTAL	0.18	0.43	1.00	**25**
4-6 PM PK HR ENTER	0.14	0	1.00	**20**
4-6 PM PK HR EXIT	0.15	0	1.00	**21**
4-6 PM PK HR TOTAL	0.29	0.54	1.00	**41**
AM GEN PK HR ENTER	0	0	1.00	**0**
AM GEN PK HR EXIT	0	0	1.00	**0**
AM GEN PK HR TOTAL	0	0	1.00	**0**
PM GEN PK HR ENTER	0	0	1.00	**0**
PM GEN PK HR EXIT	0	0	1.00	**0**
PM GEN PK HR TOTAL	0	0	1.00	**0**
SATURDAY 2-WAY VOL	0	0	1.00	**0**
GEN PK HR ENTER	0	0	1.00	**0**
GEN PK HR EXIT	0	0	1.00	**0**
GEN PK HR TOTAL	0	0	1.00	**0**
SUNDAY 2-WAY VOL	0	0	1.00	**0**
GEN PK HR ENTER	0	0	1.00	**0**
GEN PK HR EXIT	0	0	1.00	**0**
GEN PK HR TOTAL	0	0	1.00	**0**

Note: A zero indicates no rate data available

Source: Institute of Transportation Engineers, Trip Generation Manual, 7th Edition

FOREST CREEK 1/12/2009

SUMMARY OF TRIP GENERATION CALCULATION FOR RESIDENTIAL (Bldgs. 1 & 2)

FOR **72** OCCUPIED DWELLING UNITS OF LOW-RISE APARTMENTS
(ITE CODE: 221, LOW-RISE APARTMENT)

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVEWAY VOLUME
AVG WKDY 2-WAY VOL	6.59	2.84	1.00	**474**
7-9 AM PK HR ENTER	0.10	0	1.00	**7**
7-9 AM PK HR EXIT	0.36	0	1.00	**26**
7-9 AM PK HR TOTAL	0.46	0.70	1.00	**33**
4-6 PM PK HR ENTER	0.38	0	1.00	**27**
4-6 PM PK HR EXIT	0.20	0	1.00	**14**
4-6 PM PK HR TOTAL	0.58	0.77	1.00	**42**
AM GEN PK HR ENTER	0.10	0	1.00	**7**
AM GEN PK HR EXIT	0.41	0	1.00	**30**
AM GEN PK HR TOTAL	0.51	0.73	1.00	**37**
PM GEN PK HR ENTER	0.40	0	1.00	**29**
PM GEN PK HR EXIT	0.22	0	1.00	**16**
PM GEN PK HR TOTAL	0.62	0.80	1.00	**45**
SATURDAY 2-WAY VOL	7.16	2.96	1.00	**516**
GEN PK HR ENTER	0.31	0	1.00	**22**
GEN PK HR EXIT	0.27	0	1.00	**19**
GEN PK HR TOTAL	0.58	0.77	1.00	**42**
SUNDAY 2-WAY VOL	6.07	2.71	1.00	**437**
GEN PK HR ENTER	0.30	0	1.00	**22**
GEN PK HR EXIT	0.26	0	1.00	**19**
GEN PK HR TOTAL	0.56	0.76	1.00	**40**

Note: A zero indicates no rate data available

Source: Institute of Transportation Engineers, Trip Generation Manual, 7th Edition

FOREST CREEK 1/12/2009

SUMMARY OF TRIP GENERATION CALCULATION FOR RESIDENTIAL (Bldgs. 3-12)

FOR **360** OCCUPIED DWELLING UNITS OF LOW-RISE APARTMENTS
(ITE CODE: 221, LOW-RISE APARTMENT)

	AVERAGE RATE	STANDARD DEVIATION	ADJUSTMENT FACTOR	DRIVEWAY VOLUME
AVG WKDY 2-WAY VOL	6.59	2.84	1.00	**2372**
7-9 AM PK HR ENTER	0.10	0	1.00	**36**
7-9 AM PK HR EXIT	0.36	0	1.00	**130**
7-9 AM PK HR TOTAL	0.46	0.70	1.00	**166**
4-6 PM PK HR ENTER	0.38	0	1.00	**137**
4-6 PM PK HR EXIT	0.20	0	1.00	**72**
4-6 PM PK HR TOTAL	0.58	0.77	1.00	**209**
AM GEN PK HR ENTER	0.10	0	1.00	**36**
AM GEN PK HR EXIT	0.41	0	1.00	**148**
AM GEN PK HR TOTAL	0.51	0.73	1.00	**184**
PM GEN PK HR ENTER	0.40	0	1.00	**144**
PM GEN PK HR EXIT	0.22	0	1.00	**79**
PM GEN PK HR TOTAL	0.62	0.80	1.00	**223**
SATURDAY 2-WAY VOL	7.16	2.96	1.00	**2578**
GEN PK HR ENTER	0.31	0	1.00	**112**
GEN PK HR EXIT	0.27	0	1.00	**97**
GEN PK HR TOTAL	0.58	0.77	1.00	**209**
SUNDAY 2-WAY VOL	6.07	2.71	1.00	**2185**
GEN PK HR ENTER	0.30	0	1.00	**108**
GEN PK HR EXIT	0.26	0	1.00	**94**
GEN PK HR TOTAL	0.56	0.76	1.00	**202**

Note: A zero indicates no rate data available

Source: Institute of Transportation Engineers, Trip Generation Manual, 7th Edition

TETRA TECH

MEMO

TO:	Brian S. Bacchus (Principal Planner – Land Use Control)
FROM:	Alex Farmer
CC:	
DATE:	January 22, 2009
PROJECT:	Forest Creek P.D.
RE:	Fiscal Impact Information and Additional Restrictions

Mr. Bacchus:

Concerning the upcoming submittal to the County of Forest Creek Planned Development, we have discussed three items that you needed us to provide to complete the submission package.

First, in order to complete the Shelby County Fiscal Impact Model, you needed a cost per square foot for the proposed apartment buildings (including clubhouse), and a cost per square foot for the senior living component. The costs are as follows:

Multi-family

$55.71 per square foot
X 38,807 square foot per building
= $2,161,725 per building

X 12 Buildings (including 5000 square foot community building)
= $25,940,700 (total for multi-family component)

Seniors

$65.00 per square foot
X 156,773 square feet
= $10,191,245 (total for senior component)

Combining the above estimates yields a total development cost of $36,131,945.00.

In addition to the related costs, we would also like to comment in regards to the manner in which the average number of pupils is calculated. Our projected distribution of apartments yields 175 one bedroom units, 237 two bedroom units and 20 three bedroom units. With reasonable consideration, it would not be likely that a one bedroom unit would generate a pupil at all. In addition, according to Edward Rose's historical data, the number of tenants with children is very low. It is our opinion that these combined factors should be taken into

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consideration when estimating the average number of pupils per unit.

Another item needed to complete the submission package was the list of additional architectural restrictions. Both the developer and property owner have agreed to the following:

1. All buildings shall have a minimum brick façade of 30%.
2. Total developed area shall contain a minimum of 45% open space.
3. The development shall contain at minimum a 4000 square foot community building with amenities available for use by multi-family residents.

Finally, a preliminary traffic analysis was performed to evaluate the impact of the additional residents in the area. A field investigation of surrounding destinations was completed, and standard traffic analysis and trip generation models were applied to the proposed number of units. According to the preliminary traffic analysis, during peak hour flows, trips generated by the proposed apartment and senior community will not have a great effect on congestion in the area. More importantly, the analysis points out that residents living and traveling along Mayfield Drive should not perceive a noticeable increase in traffic. In addition to a minimal increase of traffic on Mayfield drive, the connector also provides an opportunity for decreased traffic at the intersection of Mayfield Drive and Shelby Drive, thus potentially offsetting the imposed increase. See the attached letter and supporting documents for further explanation.

Please let me know if there is anything else that you need from us to include with this submittal.

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