Municipal-Regional Planning Commission
May 27, 2020
6:30 p.m.
Meeting Agenda
Atoka Town Hall 334 Atoka-Munford Avenue

I. Call to Order & Establishment of a Quorum

II. Approval of the Minutes

   1. Regular Commission meeting – February, 2020

III. Reports

   1. Code Enforcement Monthly Activity Report – Rex Wallace, Director of Code Enforcement

IV. New Business –

   I. Walker Parkway CTPR – Kamillah Kelly, Memphis Area Association of Governments – virtual presentation

   II. Concept Plan – Sterling Meadows

VI. Miscellaneous Items from the Planning Commission

VII. Citizen Concerns

VIII. Adjourn

Code Enforcement Monthly Report
2020

PERMIT INFORMATION	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Building Permit - Commercial		1											**1**
Building Permit - Industrial													**0**
Building Permit - Residential - Addition	1	1	2	1									**5**
Building Permit - Residential - New Build	5	8	6	14									**33**
Building Permit - Residential - Upstairs Finish	1			2									**3**
Misc Permit - Detached Garage													**0**
Misc Permit - Fence													
Misc Permit - Fireworks Stand													**0**
Misc Permit - Pool Permit		1											**1**
Misc Permit - Sign Permit			1										**1**
Misc Permit - Storage Shed	2	3											**5**
TOTAL PERMIT INFORMATION	**9**	**14**	**9**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**49**

CERTIFICATE OF OCCUPANCY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Certificate of Occupancy - Commercial													**0**
Certificate of Occupancy - Industrial													**0**
Certificate of Occupancy - Residential	5	7	11	7									**30**
TOTAL CERTIFICATE OF OCCUPANCIES	**5**	**7**	**11**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**

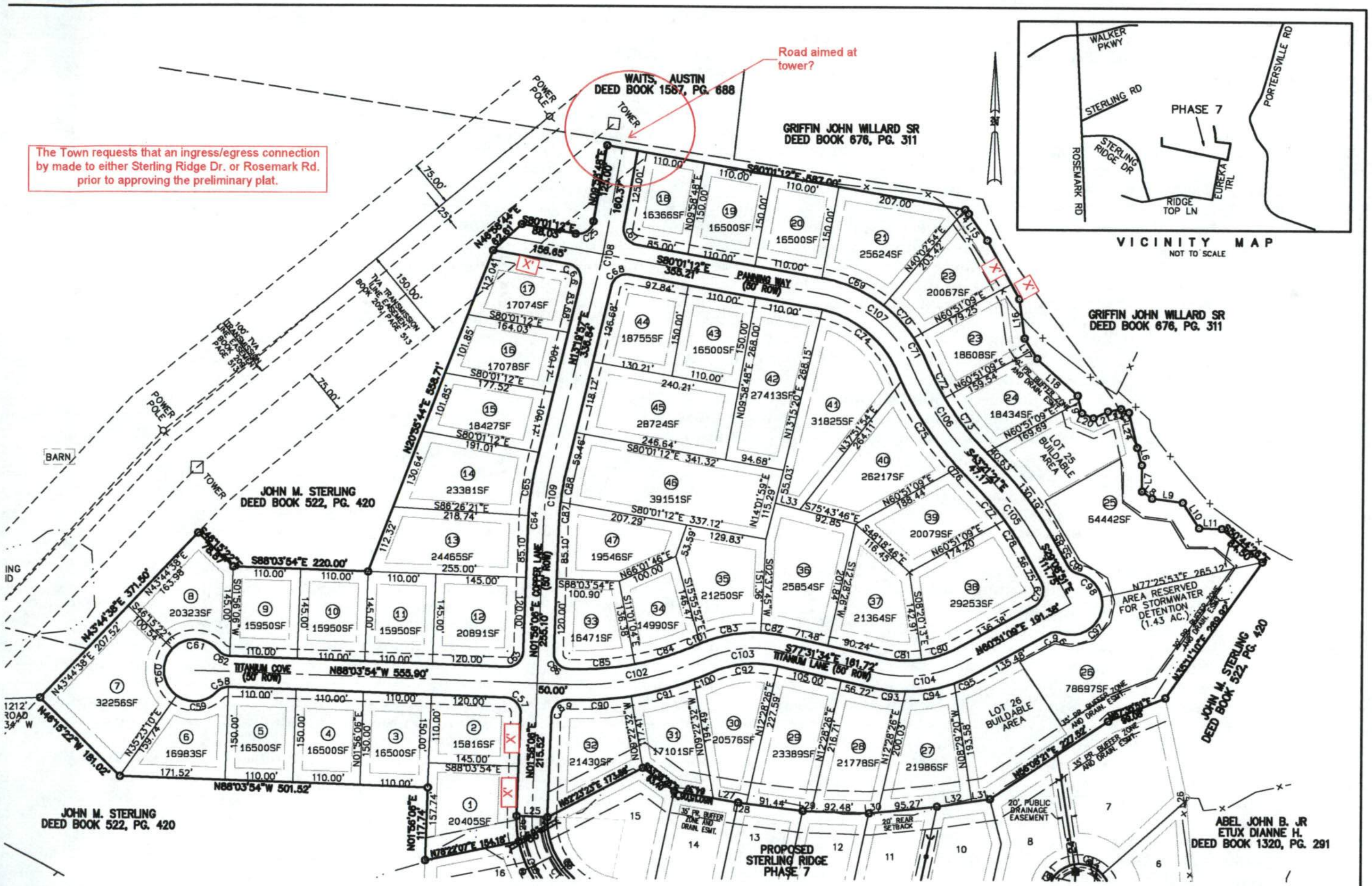
BUILDING INSPECTIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Form Board / Set Back Inspection	4	1	1	10									**16**
Footing Inspection				1									**1**
Plumbing Inspection	9	6	8	8									**31**
Sheeting Inspection	5		7	3									**15**
Brick Ties Inspection	12	9	7	6									**34**
Framing Inspection	9	12	7	9									**37**
Insulation Inspection	3	12	3	5									**23**
TOTAL BUILDLING INSPECTIONS	**42**	**40**	**33**	**42**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**157**

CODE ENFORCEMENT ACTIONS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Municipal Court Citations													**0**
Property Maintenance Complaints - Closed	17	22	18	28									**85**
Property Maintenance Complaints - Received	19	19	58	46									**142**
TOTAL CODE ENFORCEMENT ACTIONS	**36**	**41**	**76**	**74**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**227**

PERMIT FEES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
Collected Fees	$2,696	$3,672	$3,638	$7,700									**$17,706**
TOTAL PERMIT FEES	**$2,696**	**$3,672**	**$3,638**	**$7,700**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$17,706**

COMMENTS

2 Fence Permit



The Town requests that an ingress/egress connection by made to either Sterling Ridge Dr. or Rosemark Rd. prior to approving the preliminary plat.

Road aimed at tower?

LOT SIZE	-	10,000 SQ FT
LOT WIDTH	-	100 FT
SIDE YARD	-	15 FT
FRONT YARD	-	30 FT
REAR YARD	-	20 FT

Label front, side & rear yards for final plat, particularly on the lots where it can be confusing which is which.

ER AND DEVELOPER

X HOMEBUILDER, LLC
ST CHERRYBARK DRIVE
ATOKA, TENNESSEE

OOK 1758 PAGE 589-591
P 128 PARCEL 16/SPLIT

GRAPHIC SCALE 1"=100'

100 0 100 200 300

WE PROPOSE TO USE A STEP (LOW PRESSURE) SANITARY SEWER SYSTEM

CONSULT THE ATOKA MUNICIPAL ZONING ORDINANCE FOR FURTHER RESTRICTIONS WHICH MAY APPLY

SHEET 1 OF 3

PRELIMINARY PLAT

STERLING MEADOWS SUBDIVISION

ATOKA, TENNESSEE

THIS PROPERTY IS NOT LOCATED IN THE 100-YEAR FLOOD PLAIN 470419 0320 G, DATE: MAY 4, 2009

DEVELOPER: APEX HOMESBUILDERS, LLC

ENGINEER: W. H. PORTER CONSULTANTS, PLLC
6055 PRIMACY PKWY, SUITE 115
MEMPHIS, TENNESSEE 38119
(901) 363-9453

SCALE: 1" = 100' DATE: SEPTEMBER 05, 2018
47 LOTS 29.26 ACRES
ZONED: R1

CERTIFICATION

:ATION OF THE FINAL PLAT BY W. H. PORTER CONSULTANTS, PLLC REFERS ONLY
T ITSELF, NOT THE FINAL CONSTRUCTION PROJECT AS A WHOLE.

R CONSULTANTS, PLLC PERFORMED NO CONTRACT ADMINISTRATION FOR THIS DEVELOPMENT,
NO GUARANTEE, WARRANTY OR CERTIFICATION CONCERNING THE SUITABILITY OF
/ORK FILL OR FOUNDATION CONDITION, OR THE SUITABILITY OF ANY LOT IN THIS
FOR ANY CONSTRUCTION.

**ER & CO., INC. MAKES NO GUARANTEE, WARRANTY OR CERTIFICATION
THE SUITABILITY OF ANY EARTHWORK FILL OR FOUNDATION
R SUITABILITY OF ANY LOT IN THIS SUBDIVISION FOR FOUNDATION
ON FOR ANY STRUCTURE PROPOSED HEREIN.**

ERTIFICATION

ION OF THE FINAL PLAT BY W. H. PORTER CONSULTANTS, PLLC
O THE PLAT ITSELF, NOT THE FINAL CONSTRUCTION PROJECT

:ONSULTANTS, PLLC PERFORMED NO CONTRACT ADMINISTRATION
.OPMENT, AND MAKES NO GUARANTEE, WARRANTY OR CERTIFICATION
E SUITABILITY OF ANY EARTHWORK FILL OR FOUNDATION CONDITION,
LITY OF ANY LOT IN THIS SUBDIVISION FOR ANY CONSTRUCTION.

OTES

15' UTILITY EASEMENT ALONG THE FRONT OF ALL LOTS IN THIS
D A 5' UTILITY EASEMENT ALONG THE SIDE AND REAR OF ALL
THERWISE NOTED.

)F 24-HOURS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY
\TOKA CODE ENFORCEMENT OFFICE AT 901.837.5308.

:UT OR FILLED AREAS LACKING ADEQUATE VEGETATION, SHALL BE SEEDED, MULCHED,
/OR SODDED AS REQUIRED TO EFFECTIVELY CONTROL SOIL EROSION.

IN OF EXISTING UNDERGROUND UTILITIES ARE APPROXIMATE AND NOT NECESSARILY
ME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY
CH MAINTAIN A UTILITY LINE WITHIN THE BOUNDARIES OF THE PROJECT. THE
HALL ALSO ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES
WITHIN CONSTRUCTION PERIMETERS, WHETHER SHOWN ON THE CONSTRUCTION PLANS
G THE WORK ON THE PROJECT. FOR SITE LOCATION OF EXISTING UTILITIES INVOLVING
POPLAR GROVE UTILITY,RITTER, AND/OR SOUTHWEST ELECTRIC, CALL 1-800-351-1111.
:ATIONS CALL 901-837-5300

: SHALL MAINTAIN ACCESS TO ALL PROPERTIES.

LS SHALL BE COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR DENSITY
WITHIN 3% OF OPTIMUM MOISTURE CONTENT IN LIFTS NOT TO EXCEED SIX (6) INCHES
THICKNESS.

UCTION MATERIAL AND PROCEDURES SHALL MEET OR EXCEED THE REQUIREMENTS OF
\TOKA STANDARD CONSTRUCTION SPECIFICATION.

INES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION. GRADING, CLEARING AND
OR REMOVAL OF FENCES ALONG PROPERTY LINES SHALL BE FULLY COORDINATED
PROPERTY OWNERS.

CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE TOWN OF ATOKA INSPECTION
R 901-837-5300 OF ANY VARIATIONS PRIOR TO COMMENCEMENT OF WORK.

IG WORK SHALL BE PERFORMED IN SUCH A MANNER THAT ADJACENT PROPERTIES
GED OR ADVERSELY AFFECTED.

DENOTES PASSIVE PATH

. LOT DRAINAGE: FINISH GRADE SHALL BE SLOPED AWAY FROM THE FOUNDATIONS FOR DRAINAGE.
E FINISH GRADE MUST BEGIN AT LEAST 12 INCHES BELOW THE TOP OF THE FOUNDATION WALL
: THE GRADE OF THE CONCRETE SLAB AT THE INTERIOR IN THE CASE OF AN INTEGRAL SLAB AND
UNDATION. THE MINIMUM GRADE AWAY FROM THE FOUNDATION SHALL BE TWO PERCENT (2%) IN
L DIRECTIONS. THE DRIVEWAY SHALL BE SLOPED DOWN AT TWO PERCENT (2%) FOR AT LEAST
3HT FEET FROM THE STRUCTURE.

: W. H. PORTER CONSULTANTS, PLLC IS NOT RESPONSIBLE FOR THE CONSTRUCTION PRACTICES
THE CONTRACTOR. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION
:ANS AND METHODS AND SHALL COMPLY WITH ALL APPLICABLE HEALTH AND SAFETY RULES BE
LOCAL, STATE, OR FEDERAL FOR EACH AREA OF CONSTRUCTION.

. TRENCHES 5 FEET DEEP OR GREATER REQUIRE A PROTECTIVE SYSTEM. TRENCHES 20 FEET
EP OR GREATER REQUIRE THAT THE PROTECTIVE SYSTEM BE DESIGNED BY A REGISTERED
:OFESSIONAL STRUCTURAL ENGINEER.

. ALL STREETS ARE TO BE PROOF ROLLED AND TO ENSURE ANY YIELDING SOILS ARE IDENTIFIED.
:LDING SOILS SHALL BE CUT AND BACKFILLED PRIOR TO PAVING.

. THE UTILITY EASEMENT(S) SHOWN ON THIS PLAT IS (ARE) FOR THE SOLE BENEFIT OF POPLAR GROVE
ILITY DISTRICT, RITTER COMMUNICATION, SOUTHWEST ELECTRIC COOPERATIVE AND THE TOWN OF
OKA. NO PERSON MAY ERECT ANY STRUCTURE WITHIN THE EASEMENT(S), ENCROACH UPON THE
SEMENT(S) OR OBSTRUCT ACCESS TO THE EASEMENT(S) IN ANY WAY WITHOUT THE WRITTEN PERMISSION
EACH OF THESE UTILITES.

CURVE	DELTA	RADIUS	ARC	TANGENT	CHORD	CHORD BEARING
C1	80°06'57"	150.00'	209.74'	126.12'	193.07'	N38°07'23"W
C2	11°20'06"	775.00'	153.32'	76.91'	153.07'	S18°29'59"W
C3	80°06'57"	125.00'	174.79'	105.10'	160.89'	N38°07'23"W
C4	95°02'27"	25.00'	41.47'	27.30'	36.88'	S30°39'38"E
C5	85°34'18"	25.00'	37.34'	23.14'	33.96'	N59°02'00"E
C6	7°18'26"	750.00'	95.65'	47.89'	95.59'	S20°30'49"W
C7	7°55'11"	800.00'	110.58'	55.38'	110.49'	S20°12'27"W
C8	90°00'00"	25.00'	39.27'	25.00'	35.36'	S56°49'09"W
C9	48°11'23"	25.00'	21.03'	11.18'	20.41'	N12°16'32"W
C10	24°36'41"	50.00'	21.48'	10.91'	21.31'	S24°03'53"E
C11	92°35'48"	50.00'	80.81'	52.32'	72.29'	S34°32'21"W
C12	57°21'11"	50.00'	50.05'	27.35'	47.99'	N70°29'09"W
C13	66°01'17"	50.00'	57.61'	32.48'	54.48'	N08°47'56"W
C14	35°47'49"	50.00'	31.24'	16.15'	30.73'	N42°06'37"E
C15	48°11'23"	25.00'	21.03'	11.18'	20.41'	S35°54'50"W
C16	90°00'00"	25.00'	39.27'	25.00'	35.36'	N33°10'51"W
C17	87°43'37"	30.00'	45.93'	28.83'	41.58'	S34°19'03"E
C18	30°44'36"	175.00'	93.90'	48.11'	92.78'	N27°00'11"W
C19	23°35'10"	175.00'	72.04'	36.54'	71.53'	S54°10'05"E
C20	46°34'03"	30.00'	24.38'	12.91'	23.72'	N32°49'47"E
C21	96°44'57"	50.00'	84.43'	56.27'	74.75'	S07°44'20"W
C22	84°06'45"	50.00'	73.40'	45.11'	66.99'	S82°41'31"E
C23	46°34'03"	30.00'	24.38'	12.91'	23.72'	S78°32'08"W
C24	12°13'11"	175.00'	37.32'	18.73'	37.25'	N72°04'15"W
C25	90°00'00"	25.00'	39.27'	25.00'	35.36'	N54°58'48"E
C26	13°33'59"	175.00'	41.44'	20.82'	41.34'	N04°50'54"W
C57	90°00'00"	25.00'	39.27'	25.00'	35.36'	N43°03'54"W
C58	48°11'23"	25.00'	21.03'	11.18'	20.41'	S67°50'24"W
C59	81°38'28"	50.00'	71.25'	43.19'	65.37'	N84°33'57"E
C60	98°21'28"	50.00'	85.83'	57.88'	75.68'	S05°26'06"E
C61	96°22'50"	50.00'	84.11'	55.90'	74.54'	S88°03'57"E
C62	48°11'23"	25.00'	21.03'	11.18'	20.41'	S63°58'13"E
C63	90°00'00"	25.00'	39.27'	25.00'	35.36'	S46°56'06"W
C64	1°37'33"	525.00'	14.90'	7.45'	14.90'	N02°44'52"E
C65	9°46'18"	525.00'	89.54'	44.88'	89.43'	S08°26'48"W
C66	93°21'09"	25.00'	40.73'	26.51'	36.37'	S33°20'38"E
C67	90°00'00"	25.00'	39.27'	25.00'	35.36'	N35°01'12"W
C68	86°38'51"	25.00'	37.81'	23.58'	34.31'	S56°39'22"W
C69	27°50'30"	225.00'	109.33'	55.77'	108.26'	N66°05'57"W
C70	18°14'08"	225.00'	71.61'	36.11'	71.31'	N43°03'38"W
C71	9°36'22"	225.00'	37.72'	18.91'	37.68'	S29°08'23"E
C72	6°22'16"	475.00'	52.82'	26.44'	52.79'	N27°31'20"W
C73	12°38'53"	475.00'	104.86'	52.64'	104.64'	N37°01'54"W
C74	52°24'28"	175.00'	160.07'	86.13'	154.55'	S50°32'26"E
C75	18°21'10"	525.00'	168.17'	84.81'	167.45'	S33°30'47"E
C76	0°39'59"	525.00'	6.11'	3.05'	6.11'	S43°01'21"E
C77	7°09'53"	475.00'	59.40'	29.74'	59.36'	S39°46'24"E
C78	7°02'37"	475.00'	58.39'	29.23'	58.36'	S32°40'09"E
C79	90°00'00"	30.00'	47.12'	30.00'	42.43'	S15°51'09"W
C80	20°48'38"	175.00'	63.56'	32.14'	63.21'	S71°15'28"W
C81	20°48'38"	175.00'	63.56'	32.14'	63.21'	N87°55'53"W
C82	9°50'41"	225.00'	38.66'	19.38'	38.61'	N82°26'55"W
C83	25°40'45"	225.00'	100.84'	51.28'	100.00'	S79°47'23"W
C84	12°57'10"	475.00'	107.38'	53.92'	107.15'	S72°30'21"W
C85	12°57'10"	475.00'	107.38'	53.92'	107.15'	S85°27'31"W
C86	90°00'00"	25.00'	39.27'	25.00'	35.36'	S43°03'54"E
C87	4°40'43"	475.00'	38.79'	19.40'	38.78'	N04°16'27"E
C88	6°43'08"	475.00'	55.70'	27.88'	55.67'	N09°58'22"E
C89	90°00'00"	25.00'	39.27'	25.00'	35.36'	N46°56'06"E
C90	11°18'38"	525.00'	103.64'	51.99'	103.47'	N86°16'47"E
C91	11°32'13"	525.00'	105.71'	53.04'	105.53'	N74°51'21"E
C92	36°26'40"	175.00'	111.31'	57.61'	109.45'	N84°15'06"E
C93	12°23'27"	225.00'	48.66'	24.42'	48.56'	S83°43'18"E
C94	20°28'51"	225.00'	80.43'	40.65'	80.00'	N79°50'34"E
C95	8°44'59"	225.00'	34.36'	17.21'	34.33'	N65°13'39"E
C96	48°11'23"	25.00'	21.03'	11.18'	20.41'	N84°56'51"E
C97	121°36'39"	50.00'	106.13'	89.48'	87.30'	N48°14'12"E
C98	64°46'06"	50.00'	56.52'	31.71'	53.56'	S44°57'11"E
C99	48°11'23"	25.00'	21.03'	11.18'	20.41'	N53°14'32"W
C100	3°03'29"	525.00'	28.02'	14.01'	28.02'	N67°33'30"E
C101	0°55'14"	225.00'	3.62'	1.81'	3.62'	S66°29'23"W
C102	25°54'20"	500.00'	226.07'	115.00'	224.15'	S78°58'56"W
C103	36°26'40"	200.00'	127.22'	65.84'	125.08'	N84°15'06"E
C104	41°37'17"	200.00'	145.29'	76.02'	142.11'	N81°39'47"E
C105	14°12'30"	500.00'	123.99'	62.32'	123.67'	S36°15'06"E
C106	19°01'09"	500.00'	165.97'	83.76'	165.21'	N33°50'46"W
C107	55°41'01"	200.00'	194.37'	105.63'	186.81'	N52°10'42"W
C108	3°21'09"	500.00'	29.26'	14.63'	29.25'	N11°39'22"E
C109	11°23'51"	500.00'	99.46'	49.90'	99.30'	N07°38'01"E

LINE	BEARING	DISTANCE
L1	S24°10'02"W	13.25'
L2	S78°10'51"E	78.71'
L3	N83°03'27"W	21.48'
L4	N78°12'25"W	16.03'
L5	S24°10'02"W	18.74'
L6	N14°44'28"W	29.29'
L7	N00°59'12"W	42.50'
L8	N54°44'15"W	19.85'
L9	N82°38'29"W	50.12'
L10	N32°48'47"W	49.01'
L11	N88°31'38"W	37.04'
L12	S78°10'51"E	5.71'
L13	S09°32'46"W	12.57'
L14	S40°23'15"E	8.66'
L15	S34°53'26"E	52.37'
L16	S07°41'37"E	64.67'
L17	S31°44'53"E	38.55'
L18	S47°36'03"E	88.74'
L19	S14°01'49"E	29.32'
L20	S66°31'54"E	20.03'
L21	N64°48'35"E	25.67'
L22	N78°41'07"E	21.22'
L23	S65°57'23"E	14.05'
L24	S13°33'15"E	58.40'
L25	N88°03'54"W	50.00'
L26	S04°26'36"E	4.37'
L27	N80°15'06"W	40.77'
L28	S82°41'24"E	13.88'
L29	N88°16'38"W	14.18'
L30	S84°11'41"W	14.90'
L31	S81°30'40"W	29.39'
L32	S81°30'40"W	56.36'
L33	N75°43'46"W	41.40'

SHEET 2 OF 3

PRELIMINARY PLAT

STERLING MEADOWS SUBDIVISION

ATOKA, TENNESSEE

THIS PROPERTY IS NOT LOCATED IN THE 100-YEAR FLOOD PLAIN
470419 0320 G, DATE: MAY 4, 2009

DEVELOPER: APEX HOMESBUILDERS, LLC

ENGINEER: W. H. PORTER CONSULTANTS, PLLC
6055 PRIMACY PKWY, SUITE 115
MEMPHIS, TENNESSEE 38119
(901) 363-9453

SCALE: 1" = 100' DATE: SEPTEMBER 05, 2018
47 LOTS 29.26 ACRES
ZONED: R1

IFICATE

________________, THE UNDERSIGNED OWNER OF
IOWN HEREON, HEREBY ADOPT THIS AS MY PLAN OF
DEDICATE THE STREETS, EASEMENTS, RIGHT-OF-
ACCESS AS SHOWN AND ALL UTILITIES TO THE TOWN
:R, AND HEREBY CERTIFY THAT I AM THE OWNER IN
AUTHORIZED SO TO ACT, AND THAT SAID PROPERTY
BY ANY TAXES THAT HAVE BECOME DUE AND

________________________________ ____________
/ELOPER) DATE

:TIFICATE

SEE
N

JNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE
TY AFORESAID, DULY COMMISSIONED AND QUALIFIED,
:ARED ________________________________, WITH WHOM
ACQUAINTED AND WHO, UPON OATH, ACKNOWLEDGE
WNER OF THE ________________________________
HE AS SUCH OWNER, EXECUTED THE FOREGOING
THE PURPOSE THEREIN CONTAINED BY SIGNING HIS

:OF, I HEREUNTO SET OUT MY HAND AND AFFIX MY
__________________ DAY OF __________________,
_____

____

XPIRES: ________________________________

ERTIFICATE

3NED, ________________________, MORTGAGEE OF
IOWN HEREON, HEREBY ADOPT THIS PLAT AS OUR PLAN
ND DEDICATE THE STREETS, RIGHT-OF-WAYS, UTILITIES,
RIGHTS OF ACCESS AS SHOWN TO THE TOWN OF ATOKA
REBY CERTIFY THAT WE ARE THE MORTGAGEE DULY
O ACT AND THAT SAID PROPERTY IS UNENCUMBERED BY
HAVE BECOME DUE AND PAYABLE.

________________________________ ____________
DATE

:TIFICATE

SEE
N

JNDERSIGNED, A NOTARY PUBLIC IN AND FOR THE
TY AFORESAID, DULY COMMISSIONED AND QUALIFIED,
:ARED ________________________________, OF
__________ SUBDIVISION, AND HE AS SUCH REPRESENTATIVE
REGOING INSTRUMENT FOR THE PURPOSE THEREIN
3NING HIS NAME AS REPRESENTATIVE OF THE

:OF, I HEREUNTO SET OUT MY HAND AND AFFIX MY
__________________ DAY OF __________________,
_____

____

XPIRES: ________________________________

CERTIFICATE OF ADEQUACY OF STORM DRAINAGE

I, ________________________, DO HEREBY CERTIFY THAT I AM A REGISTERED PROFESSIONAL CIVIL ENGINEER, AND THAT I HAVE DESIGNED ALL STORM WATER DRAINAGE FOR THIS SUBDIVISION IN ACCORDANCE WITH THE ATOKA MUNICIPAL SUBDIVISION REGULATIONS TO ASSURE THAT IN MY PROFESSIONAL OPINION NEITHER SAID SUBDIVISION OR THE ADJOINING PROPERTIES WILL BE DAMAGED.

IN WITNESS WHERE OF, I, ________________________, THE SAID PROFESSIONAL CIVIL ENGINEER, HEREUNTO SET OUT MY HAND AND AFFIX MY SEAL THIS __________________ DAY OF ________________________, 20______.

BY: ____ ____________
. ________________________, CIVIL ENGINEER DATE
. TENNESSEE CERTIFICATE No. (SEAL)

SURVEYOR'S CERTIFICATE

I, ____________________________, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HAVE SURVEYED THE LANDS, EMBRACED WITHIN THE PLAT OR MAP DESIGNATED AS THE ________________________ SUBDIVISION, A SUBDIVISION LYING WITHIN THE TOWN OF ATOKA, TENNESSEE; SAID PLAT OR MAP IS A TRUE AND CORRECT PLAT OR MAP OF THE LANDS EMBRACED THEREIN, SHOWING THE SUBDIVISION THEREOF IN ACCORDANCE WITH THE MUNICIPAL SUBDIVISION REGULATIONS OF ATOKA, TENNESSEE; I FURTHER CERTIFY THAT THE SURVEY OF THE LANDS EMBRACED WITHIN SAID PLAT OR MAP HAVE BEEN CORRECTLY MONUMENTED IN ACCORDANCE WITH THE MUNICIPAL SUBDIVISION REGULATIONS OF ATOKA, TENNESSEE.

IN WITNESS WHERE OF, I, ____________________________, THE SAID REGISTERED LAND SURVEYOR, HEREUNTO SET OUT MY HAND AND AFFIX MY SEAL THIS ____________________ DAY OF ____________________________, 20______

BY: ______________________________ ____________
. WILLIAM D. PORTER, R.L.S. DATE
. TENNESSEE CERTIFICATE No. 1664

ENGINEER'S CERTIFICATE

IT IS HEREBY CERTIFIED THAT THIS PLAT IS TRUE AND CORRECT, IS IN CONFORMANCE WITH THE DESING REQUIRMENTS OF THE ZONING ORDINANCE, THE SUBDIVISION REGULATIONS AND THE SPECIFIC CONDITIONS IMPOSED ON THIS DEVELOPMENT, AND TAKES INTO ACCOUNT ALL APPLICABLE FEDERAL, STATE AND LOCAL BUILDING LAWS AND REGULATIONS.

BY: ____ ____________
. ________________________, CIVIL ENGINEER DATE
. TENNESSEE CERTIFICATE No. (SEAL)

CERTIFICATE OF APPROVAL OF WATER, SEWER AND DRAINAGE SYSTEMS PLANS

I, ________________________, DO HEREBY CERTIFY THAT I HAVE REVIEWED THE WATER, SEWER AND DRAINAGE SYSTEMS PLANS FOR THIS SUBDIVISION AND CERTIFY THAT THEY MEET THE REQUIREMENTS OF THE MUNICIPAL SUBDIVISION REGULATIONS AND TECHNICAL SPECIFICATIONS OF THE TOWN OF ATOKA AND ARE HEREBY APPROVED.

____________ ________________________________
DATE PUBLIC WORKS SUPERVISOR

CERTIFICATE OF RECEIPT OF APPROVED WATER SYSTEM PLANS

I, ________________________, DO HEREBY CERTIFY THAT A SET OF CONSTRUCTION PLANS REGARDING THE WATER SUPPLY AND/OR SANITARY SEWERS FOR THIS SUBDIVISION BEARING THE SEAL OF THE TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION WHICH INDICATES SAID PLANS MEET THE DEPARTMENT'S REQUIREMENTS, HAVE BEEN RECEIVED.

____________ ________________________________
DATE PUBLIC WORKS SUPERVISOR

CERTIFICATE OF APPROVAL OF STREETS

I HEREBY CERTIFY: (1) THAT THE STREETS HAVE BEEN INSTALLED IN AN ACCEPTABLE MANNER AND ACCORDING TO SPECIFICATIONS, OR (2) THAT A SECURITY BOND IN THE AMOUNT OF $________________HAS BEEN POSTED WITH THE PLANNING COMMISSION TO ASSURE COMPLETION OF ALL REQUIRED IMPROVEMENTS FOR THIS SUBDIVISION, IN CASE OF DEFAULT.

____________ ________________________________
DATE TOWN OR COUNTY ROAD ENGINEER
OR OTHER APPROVING AGENT

CERTIFICATE OF APPROVAL OF UTILITIES

I HEREBY CERTIFY: (1) THAT UTILITIES HAVE BEEN INSTALLED IN AN ACCEPTABLE MANNER AND ACCORDING TO SPECIFICATIONS, OR (2) THAT A SECURITY BOND IN THE AMOUNT OF $__________ HAS BEEN POSTED WITH THE PLANNING COMMISSION TO ASSURE COMPLETION OF ALL REQUIRED IMPROVEMENTS FOR THIS SUBDIVISION, IN CASE OF DEFAULT.

____________ ________________________________
DATE PLANNING COMMISSION ATOKA, TENNESSEE

CERTIFICATE OF APPROVAL FOR SUBDIVISION AND STREET NAMES

I, ______________________, DO HEREBY CERTIFY THAT I HAVE REVIEWED THE PROPOSED SUBDIVISION AND CERTIFY THAT THE NAME OF THE SUBDIVISION AND/OR NAME (S) OF THE STREET (S) WITHIN THIS PROPOSED SUBDIVISION DO NOT CONFLICT WITH OTHER SUBDIVISIONS AND STREET NAMES FOR EMERGENCY SERVICE PURPOSES.

____________ ________________________________
DATE DIRECTOR OF 911 ADDRESSING

PLANNING COMMISSION CERTIFICATE OF APPROVAL OF THE FINAL PLAT

I, ______________________________, DO HEREBY CERTIFY THAT THE ATOKA MUNICIPAL/REGIONAL PLANNING COMMISSION HAS APPROVED THIS FINAL PLAT OR SUBDIVISION FOR RECORDING.

____________ ________________________________
DATE SECRETARY,
ATOKA MUNICIPAL/PLANNING COMMISSION

PRELIMINARY PLAT

STERLING MEADOWS SUBDIVISION

ATOKA, TENNESSEE

THIS PROPERTY IS NOT LOCATED IN THE 100-YEAR FLOOD PLAIN
470419 0320 G, DATE: MAY 4, 2009

DEVELOPER: APEX HOMESBUILDERS, LLC

ENGINEER: W. H. PORTER CONSULTANTS, PLLC
6055 PRIMACY PKWY, SUITE 115
MEMPHIS, TENNESSEE 38119
(901) 363-9453

SCALE: 1" = 100' DATE: SEPTEMBER 05, 2018
47 LOTS 29.26 ACRES
ZONED: R1

+/- 3.0 AC.
NOT INCLUDED
IN DEVELOPMENT
ACTUAL
PROPERTY
LINE

Smith
Seckman
Reid, Inc.

Rosemark Road Capacity Analysis

Prepared February 2020
for the Town of Atoka

SSR, Inc.
2650 Thousand Oaks Blvd., Ste. 4200
Memphis, TN 38118
Phone: 901.683.3900
E-mail: jkarafa@ssr-inc.com

1. EXPLANATION OF RESULTS

A roadway analysis was performed on Rosemark Road to determine if it has the capacity to accept future traffic from the proposed Sterling Meadows subdivision. Rosemark Road was analyzed from Atoka-Idaville Road in the north to Tracy Road in the south, a total of 2.1 miles. Rosemark Road is a two (2) lane road with ten (10) foot lanes in each direction throughout the majority of the analyzed length.

Traffic volumes were taken from two (2) locations. The first location was a Tennessee Department of Transportation count taken at the intersection of Rosemark Road and Sterling Farm Drive. The second location was a Town of Atoka count taken at the intersection of Rosemark Road and Jaimes Lane. The second count also provided the Free Flow Speed for the study (forty-five (45) miles per hour). The data is shown in Table 1 (Town of Atoka, 2017).

Table 1: Traffic Counts

Rosemark/Jaimes	
Year	AADT
2015	7180
2014	7144
2013	6847
3-yr Avg	**7057**

Rosemark/Sterling Farm	
Year	AADT
2015	7283
2014	7261
2013	6768
3-yr Avg	**7104**

The three (3) year average of the Rosemark/Sterling Farm traffic count was used for the analysis. To bring the analysis date to the present, an annual growth percentage of two (2) was applied to the count using the following formula:

$$TC_f = TC_{ex} * 1.02^n$$

where TC_f is the future traffic volume, TC_{ex} is the present traffic volume and n is the number of years of annual growth. Applying this equation gave an Annual Average Daily Traffic (AADT) volume of 8,660. To convert the AADT to directional volume, two (2) factors were used. First, a K-factor of 0.118 was used. This number was taken from Exhibit 3-11 of the Highway Capacity Manual, which gives average K-factors based on a range of AADT's (Transportation Research Board, 2016). The second factor was the directional distribution, which was taken from Exhibit 3-12 of the Highway Capacity Manual (Transportation Research Board, 2016). The directional distribution factor that was used was 0.60 which corresponds to a suburban radial road. The resultant hourly volume was 930 passenger cars/hour (pc/hr) for the base year of 2020.

The hourly volume was used to conduct a roadway Level of Service (LOS) analysis (see Appendix A). The results show that Rosemark Road currently functions at a LOS E. According to the Highway Capacity Manual, at LOS E a two (2) lane roadway is approaching capacity during the peak hour, with speeds and functionality of the roadway being seriously curtailed.

Obviously, adding any traffic to Rosemark Road will further reduce the capability of the roadway to convey traffic. Appendix B shows the data generated by W.H. Porter Consultants, PLLC, showing the proposed peak hour trips generated by the Sterling Meadows subdivision. A five (5) year build-out was assumed for the proposed subdivision, resulting in 2025 as the analysis year. The annual growth factor, K-factor and directional distribution factors that were used to conduct the existing year analysis were used for the future year analysis, as well. The results of the future year analysis are shown in Appendix C.

The result is that Rosemark Road will continue to function at a LOS E in 2025 with the addition of the Sterling Meadow subdivision, but with all of the metrics used to analyze LOS further reduced. Adding further traffic to the roadway will cause the congestion currently experienced during the peak hours to begin to extend throughout the day. It is our recommendation that the subdivision be built only if it allows access from an additional roadway.

REFERENCES

Town of Atoka. (2017, April 18). *Roadway Data and Traffic Counts*. Retrieved from Atoka Tennessee: https://www.townofatoka.com/pview.aspx?id=2943&catid=29

Transportation Research Board. (2016). Highway Capacity Manual, 6th Edition. Washington, D.C.

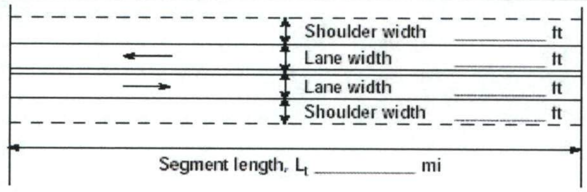
APPENDIX A

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		Site Information	
Analyst	Jeffery Karafa, P.E.	Highway / Direction of Travel	Rosemark Rd.
Agency or Company	SSR	From/To	Sterling Farm Dr/Jaimes Ln
Date Performed	2/19/2020	Jurisdiction	Town of Atoka
Analysis Time Period		Analysis Year	2020

Project Description: *Rosemark Road Existing Conditions*

Input Data



Analysis direction vol., V_d	612veh/h
Opposing direction vol., V_o	408veh/h
Shoulder width ft	0.0
Lane Width ft	10.0
Segment Length mi	2.1

☑ Class I highway ☐ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Grade Length mi	Up/down
Peak-hour factor, PHF	0.88
No-passing zone	100%
% Trucks and Buses , P_T	2 %
% Recreational vehicles, P_R	0%
Access points *mi*	11/mi

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	1.1	1.2
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	1.0	1.0
Heavy-vehicle adjustment factor, $f_{HV,ATS}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	0.998	0.996
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	1.00	1.00
Demand flow rate[2], v_i (pc/h) $v_i=V_i/(PHF*f_{g,ATS}*f_{HV,ATS})$	697	465

Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
		Base free-flow speed[4], BFFS	mi/h
Mean speed of sample[3], S_{FM}	45	Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	mi/h
Total demand flow rate, both directions, *v*		Adj. for access points[4], f_A (Exhibit 15-8)	mi/h
Free-flow speed, $FFS=S_{FM}+0.00776(v/f_{HV,ATS})$		Free-flow speed, FFS $(FSS=BFFS-f_{LS}-f_A)$	45.0 mi/h
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	2.4 mi/h	Average travel speed, $ATS_d=FFS-0.00776(v_{d,ATS}+v_{o,ATS})-f_{np,ATS}$	33.6 mi/h

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	1.0	1.0
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	1.0	1.0
Heavy-vehicle adjustment factor, $f_{HV}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	1.000	1.000
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	1.00	1.00
Directional flow rate[2], v_i(pc/h) $v_i=V_i/(PHF*f_{HV,PTSF}*f_{g,PTSF})$	695	464
Base percent time-spent-following[4], $BPTSF_d(\%)=100(1-e^{av_d^b})$	62.3	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	32.9	
Percent time-spent-following, $PTSF_d(\%)=BPTSF_d+f_{np,PTSF}*(v_{d,PTSF}/v_{d,PTSF}+v_{o,PTSF})$	82.0	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	E
Volume to capacity ratio, *v/c*	0.41
Capacity, $C_{d,ATS}$ (Equation 15-12) pc/h	1700
Capacity, $C_{d,PTSF}$ (Equation 15-13) pc/h	1700
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	74.6

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	695.5
Effective width, Wv (Eq. 15-29) ft	10.00

Effective speed factor, S_t (Eq. 15-30)	4.17
Bicycle level of service score, BLOS (Eq. 15-31)	4.87
Bicycle level of service (Exhibit 15-4)	E

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If v_i(v_d or v_o) >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

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APPENDIX B

Sterling Meadows S/D:

Traffic Impact Analysis – Summary

1. Description of the site, surrounding areas, and study area.

The 29.26-acre subject property is currently being utilized as open fields and pasture. The site sits approximately 1800 ft west of Rosemark Road and directly north of Sterling Ridge Phase 7, in Atoka, TN. The surrounding area is characterized by residential subdivision and farmland/ pastures. However, this the undeveloped property is positioned to be developed in the future due to the significant growth the town has seen recently. Access to the property will be via an access road from Rosemark Road..

2. Description of the proposed land use.

The 29.26-acre site will be developed into 47 single family residential lots ranging from approximately 14,990 s.f. to as large as 78,697 s.f., but will average closer to 20,000 s.f.

3. Estimate of trip generation

Trip Generation was based on the Institute of Transportation Engineer's (ITE) Trip Generation Manual, 9th Edition. The method uses the relationship of vehicle trips and land use characteristics to estimate the peak hour and daily traffic volumes for a specific site. Based on the land use schedule presented above, the trips generated for the site are as seen in the following tables.

Weekday Evening Peak Trip Generations				
Horizon 2021				
Landuse (ITE Landuse Reference Code)	**Mode**	**Entry**	**Exit**	**Total**
Single-Family Detached Housing (210)	Vehicle	33	20	53

Weekday Morning Peak Trip Generations				
Horizon 2021				
Landuse (ITE Landuse Reference Code)	**Mode**	**Entry**	**Exit**	**Total**
Single-Family Detached Housing (210)	Vehicle	11	34	45

ITE assembled over fifty years of data to develop graphs estimating the number of vehicle trips for specific land uses. The data received was separated into a.m., p.m., weekday, and weekend traffic patterns. We estimated the highest travel conditions.

Our project trip generations were conducted for two conditions; trips generated during the weekday A.M. Peak Hour and the P.M. Peak Hour. The weekday A.M. Peak Hour period is between 7:00 and 9:00 a.m. and the weekday P.M. Peak Hour period is between 4:00 and 6:00 P.M. When the project is fully built out, the total AM vehicle trips will be 45 vehicles. This can be broken down to **11** veh entering the site and **34** veh leaving the site. During the PM peak hour event a total of **53** veh are estimated. This can be broken down to **33** veh entering the site and 20 veh leaving the site. Therefore, in the morning peak hour, the site generates **45** veh and in the afternoon peak hours, the site generates **53** veh.

Attached:
Traffic Impact Analysis - Calculations
ITE's – PM Peak Hour Trip Generation
ITE's – AM Peak Hour Trip Generation

Traffic Impact Analysis: Sterling Meadows Development

Proposed: 47 Lots

Single Family Detached Housing Units – **Peak Hour Volume**

A.M. Peak Hour - (Trip Gen Manual, 9th Edition, pg 299)

Fitted Curve Equation: $T = 0.7(x) + 12.12$

$$Post - Developed = 0.70(47) + 12.12 \approx 45\ trips$$

P.M. Peak Hour - (Trip Gen Manual, 9th Edition, pg 298)

Fitted Curve Equation: $\ln(T) = 0.9\ln(x) + 0.51$

$$Post - Developed = \ln(T) = 0.9\ln(47) + 0.51 \rightarrow T = \mathrm{e}^{x}[0.9\ln(47) + 0.51] \approx 53\ trips$$

Single Family Detached Housing Units – **Weekday Volume**

Weekday - (Trip Gen Manual, 9th Edition, pg 296)

Fitted Curve Equation: $\ln(T) = 0.92\ln(x) + 2.72$

$$Post - Developed = \ln(T) = 0.92\ln(47) + 2.72 \rightarrow T = \mathrm{e}^{x}[0.92\ln(47) + 2.72] \approx 524\ trips$$

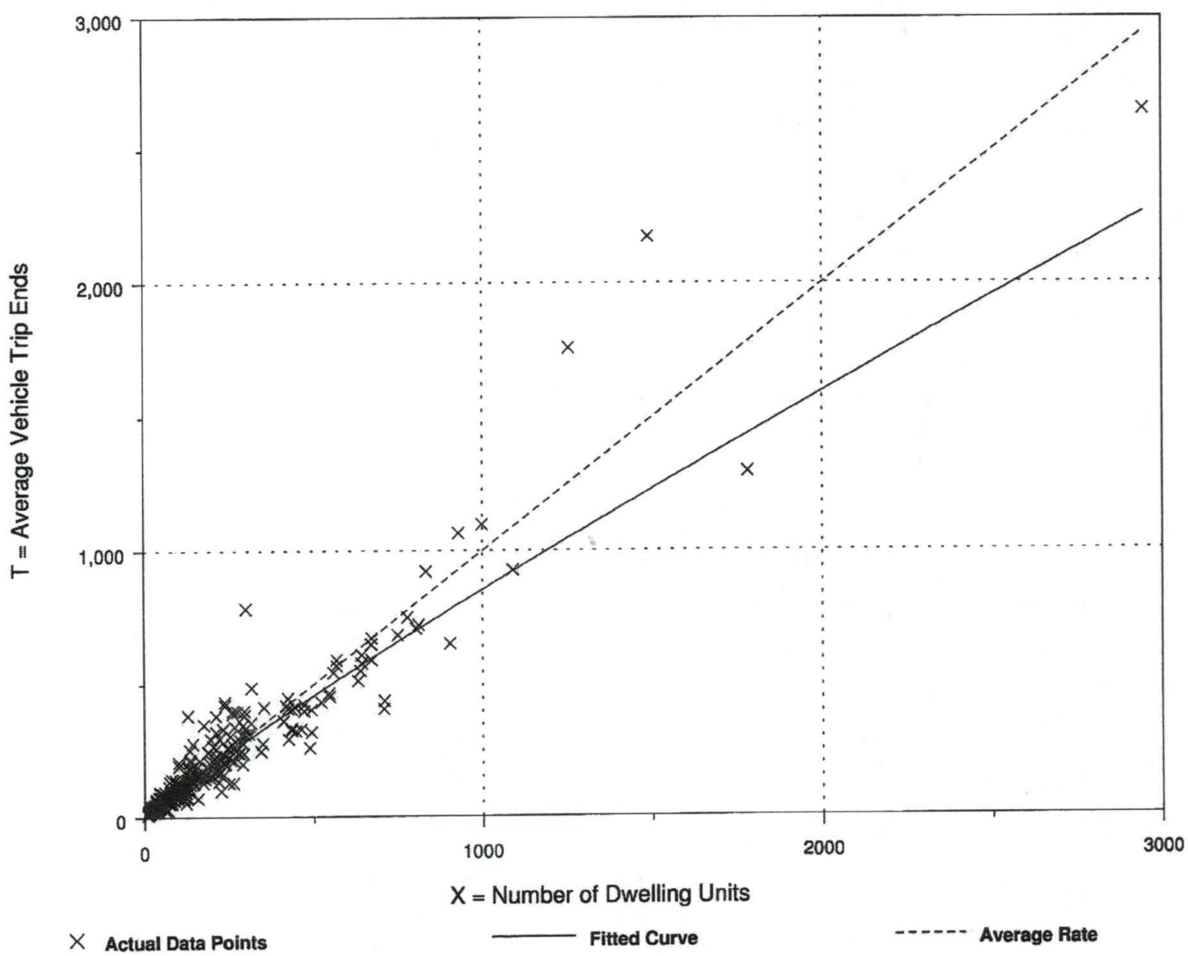
Single-Family Detached Housing
(210)

Average Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Number of Studies:	321
Avg. Number of Dwelling Units:	207
Directional Distribution:	63% entering, 37% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
1.00	0.42 - 2.98	1.05

Data Plot and Equation



Fitted Curve Equation: $Ln(T) = 0.90\ Ln(X) + 0.51$ **$R^2 = 0.91$**

Single-Family Detached Housing
(210)

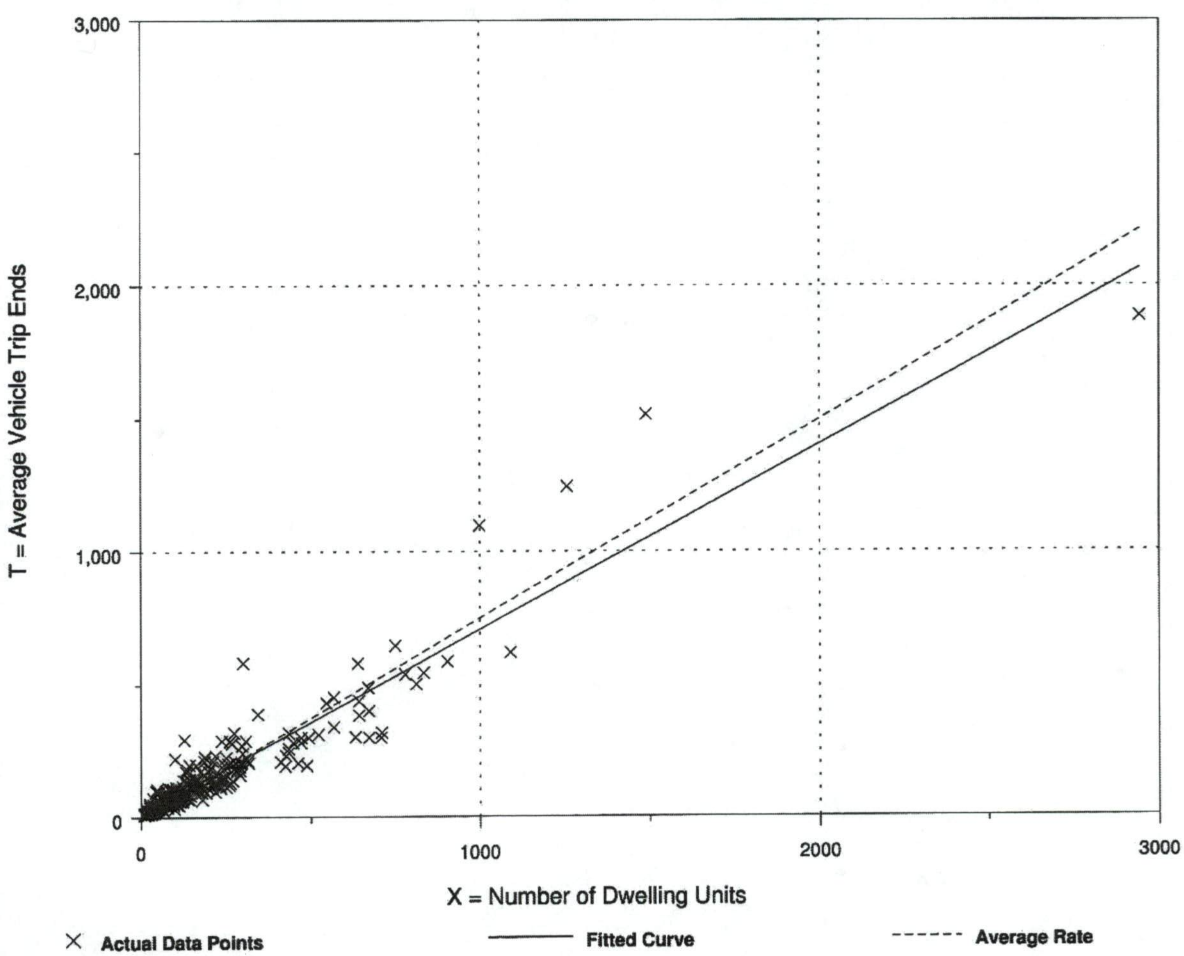
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 292
Avg. Number of Dwelling Units: 194
Directional Distribution: 25% entering, 75% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.75	0.33 - 2.27	0.90

Data Plot and Equation



Fitted Curve Equation: $T = 0.70(X) + 9.74$ **$R^2 = 0.89$**

Single-Family Detached Housing
(210)

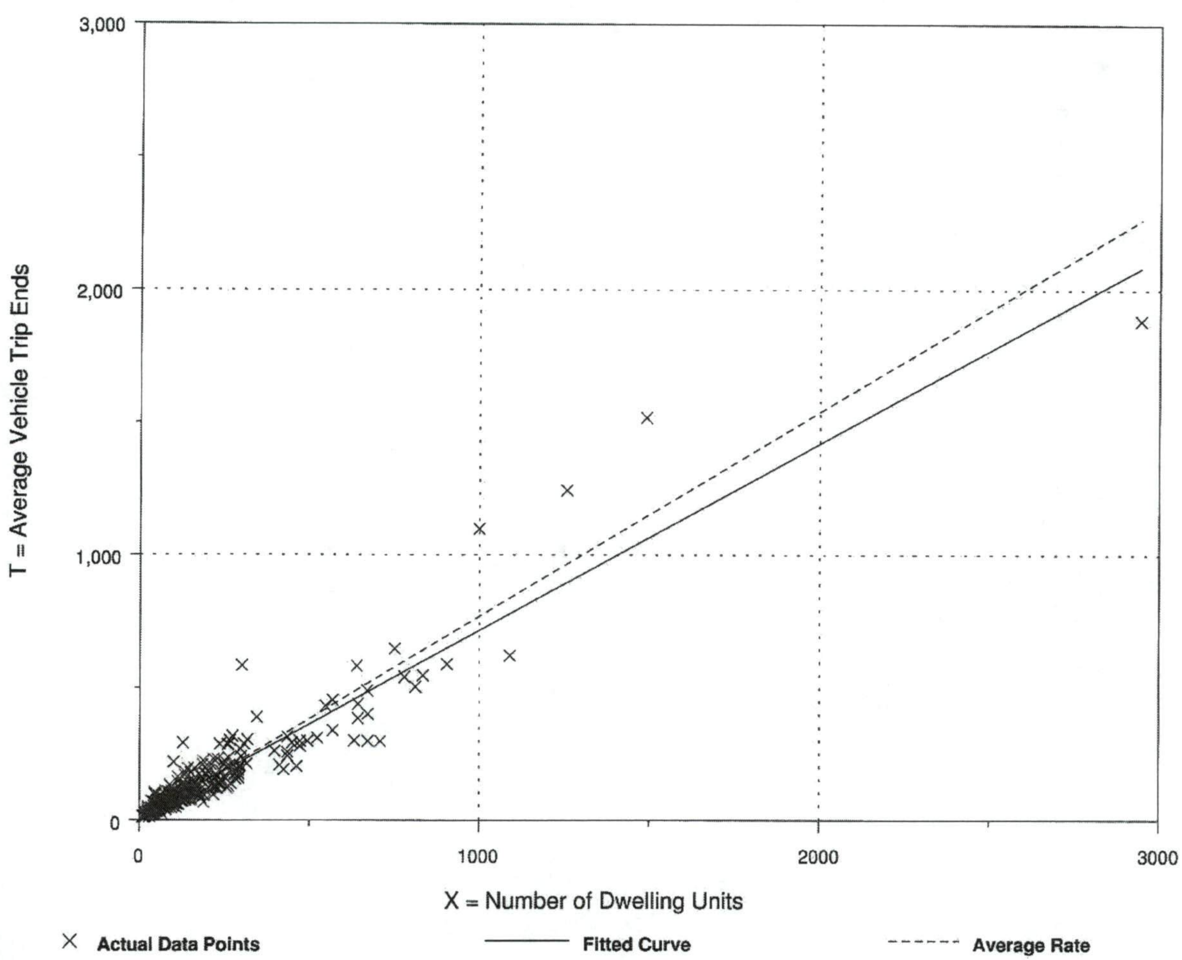
Average Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
A.M. Peak Hour of Generator

Number of Studies: 343
Avg. Number of Dwelling Units: 180
Directional Distribution: 26% entering, 74% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.77	0.33 - 2.27	0.91

Data Plot and Equation



Fitted Curve Equation: $T = 0.70(X) + 12.12$ **$R^2 = 0.89$**

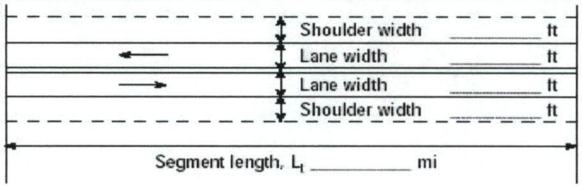
APPENDIX C

DIRECTIONAL TWO-LANE HIGHWAY SEGMENT WORKSHEET

General Information		Site Information	
Analyst	*Jeffery Karafa, P.E.*	Highway / Direction of Travel	*Rosemark Rd.*
Agency or Company	*SSR*	From/To	*Sterling Farm Dr/Jaimes Ln*
Date Performed	*2/19/2020*	Jurisdiction	*Town of Atoka*
Analysis Time Period	*Existing*	Analysis Year	*2025*

Project Description: *Rosemark Road w/out Sterling Meadows*

Input Data



Analysis direction vol., V_d	*612*veh/h
Opposing direction vol., V_o	*408*veh/h
Shoulder width ft	*0.0*
Lane Width ft	*10.0*
Segment Length mi	*2.1*

☑ Class I highway ☐ Class II highway ☐ Class III highway

Terrain ☑ Level ☐ Rolling

Grade Length mi	Up/down
Peak-hour factor, PHF	*0.88*
No-passing zone	*100%*
% Trucks and Buses , P_T	*2 %*
% Recreational vehicles, P_R	*0%*
Access points *mi*	*11*/mi

Average Travel Speed

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T (Exhibit 15-11 or 15-12)	*1.1*	*1.2*
Passenger-car equivalents for RVs, E_R (Exhibit 15-11 or 15-13)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV,ATS}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	*0.998*	*0.996*
Grade adjustment factor[1], $f_{g,ATS}$ (Exhibit 15-9)	*1.00*	*1.00*
Demand flow rate[2], v_i (pc/h) $v_i=V_i/(PHF*f_{g,ATS}*f_{HV,ATS})$	*697*	*465*

Free-Flow Speed from Field Measurement		Estimated Free-Flow Speed	
		Base free-flow speed[4], BFFS	*mi/h*
Mean speed of sample[3], S_{FM}	*45*	Adj. for lane and shoulder width,[4] f_{LS}(Exhibit 15-7)	*mi/h*
Total demand flow rate, both directions, v		Adj. for access points[4], f_A (Exhibit 15-8)	*mi/h*
Free-flow speed, $FFS=S_{FM}+0.00776(v/f_{HV,ATS})$		Free-flow speed, FFS ($FSS=BFFS-f_{LS}-f_A$)	*45.0 mi/h*
Adj. for no-passing zones, $f_{np,ATS}$ (Exhibit 15-15)	*2.4 mi/h*	Average travel speed, $ATS_d=FFS-0.00776(v_{d,ATS}+v_{o,ATS})-f_{np,ATS}$	*33.6 mi/h*

Percent Time-Spent-Following

	Analysis Direction (d)	Opposing Direction (o)
Passenger-car equivalents for trucks, E_T(Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Passenger-car equivalents for RVs, E_R (Exhibit 15-18 or 15-19)	*1.0*	*1.0*
Heavy-vehicle adjustment factor, $f_{HV}=1/(1+P_T(E_T-1)+P_R(E_R-1))$	*1.000*	*1.000*
Grade adjustment factor[1], $f_{g,PTSF}$ (Exhibit 15-16 or Ex 15-17)	*1.00*	*1.00*
Directional flow rate[2], v_i(pc/h) $v_i=V_i/(PHF*f_{HV,PTSF}*f_{g,PTSF})$	*695*	*464*
Base percent time-spent-following[4], $BPTSF_d(\%)=100(1-e^{av_d^b})$	*62.3*	
Adj. for no-passing zone, $f_{np,PTSF}$ (Exhibit 15-21)	*32.9*	
Percent time-spent-following, $PTSF_d(\%)=BPTSF_d+f_{np,PTSF}*(v_{d,PTSF}/v_{d,PTSF}+v_{o,PTSF})$	*82.0*	

Level of Service and Other Performance Measures

Level of service, LOS (Exhibit 15-3)	*E*
Volume to capacity ratio, *v/c*	*0.41*
Capacity, $C_{d,ATS}$ (Equation 15-12) pc/h	*1700*
Capacity, $C_{d,PTSF}$ (Equation 15-13) pc/h	*1700*
Percent Free-Flow Speed $PFFS_d$(Equation 15-11 - Class III only)	*74.6*

Bicycle Level of Service

Directional demand flow rate in outside lane, v_{OL} (Eq. 15-24) veh/h	*695.5*
Effective width, Wv (Eq. 15-29) ft	*10.00*

Effective speed factor, S_t (Eq. 15-30)	4.17
Bicycle level of service score, BLOS (Eq. 15-31)	4.87
Bicycle level of service (Exhibit 15-4)	E

Notes

1. Note that the adjustment factor for level terrain is 1.00,as level terrain is one of the base conditions. For the purpose of grade adjustment, specific downgrade segments are treated as level terrain.
2. If $v_i(v_d$ or $v_o)$ >=1,700 pc/h, terminate analysis--the LOS is F.
3. For the analysis direction only and for v>200 veh/h.
4. For the analysis direction only
5. Exhibit 15-20 provides coefficients a and b for Equation 15-10.
6. Use alternative Exhibit 15-14 if some trucks operate at crawl speeds on a specific downgrade.

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