

March 20, 2014

Mike Smolak
SBBG, LLLP
7711 N. Military Trail, Ste. 212
Palm Beach Gardens, FL 33410

**Re: Binks Pointe, F.K.A. Residences at Binks Forest Gold Club
Site Plan and Master Plan Amendment 2013-61 SP 2, MPA 2 (HTE 13-120)**

Dear Mr. Smolak,

Land Design South (LDS) received a copy of a letter from the City of Wellington traffic consultant addressed to the City's Planning, Zoning and Building department regarding the project traffic analysis dated October 1, 2013. A copy of the letter is included as Exhibit 1. This letter indicates two certification issues: One regarding the data and input values used in the HCS analysis for Southern Blvd and Binks Forest Dr, and the other regarding the Palm Beach County TPS approval.

As indicated in the *PTC Transportation Consultants* letter, we were asked to utilize the March 2012 turning movement counts for the Southern Blvd and Binks Forest Drive analysis. Exhibit 2 shows the latest turning movement counts available from Palm Beach County. As can be seen in this exhibit, Palm Beach County did not collect/report any turning movement counts at the Southern/Binks intersection in the year 2013. In addition, the NBL and EBR movements shown in the March 2012 counts are not consistent with previous years. Therefore, KMF Traffic Group was retained to collect AM and PM turning movement counts at the intersection. Exhibit 3 includes the latest signal and phasing plans for the Southern/Binks intersection provided by the County. Exhibit 4 includes both AM and PM HCS analysis with the latest counts collected on March 18, 2014, the vested projects as indicated in the *PTC Transportation Consultants* letter, and optimized signal plans that follow PBC guidelines for signal timing. As can be seen in Exhibit 4, the intersection of Southern Blvd and Binks Forest Dr will be expected to meet LOS 'D' at project build-out.

Exhibit 5 includes a copy of the TPS Approval letter from Palm Beach County. We believe that we have answered all of the City's traffic questions and concerns and there should not be any further analysis required. However, if there are additional changes, we will keep you posted. Please do not hesitate to contact our office if you have questions.

Sincerely,

LAND DESIGN SOUTH


Dr. Juan F. Ortega, P.E.
FL Registration No. 63422
Engineering Business No. 27550
03/20/14.

Encl.: Exhibit 1: Letter from PTC Transportation Consultants
Exhibit 2: Palm Beach County Historical Turning Movement Counts
Exhibit 3: Southern and Binks Signal Plans
Exhibit 4: Southern and Binks HCS analysis
Exhibit 5: Palm Beach County TPS Approval

2014_03_20_Binks Point_0128.80.docx



Transportation Consultants

November 4, 2013

Mr. Damian Newell
Wellington
Planning, Zoning & Building Department
12300 W. Forest Hill Boulevard
Wellington, FL 33414

Re: Binks Pointe - #PTC13-001M
Site Plan and Master Plan Amendment 2013-61 SP 2, MPA 2 (HTE 13-120)

Dear Mr. Newell:

Pinder Troutman Consulting, Inc. (PTC) has completed our review of the Site Plan Amendment Application date stamped October 3, 2013 for the November 13, 2013 DRC meeting for the above referenced project. Specifically, we have reviewed the Traffic Impact Analysis by Land Design South dated October 1, 2013. We have the following comments:

- The intersection analysis of Southern Boulevard and Binks Forest Drive needs to be revised as follows:
 - Utilize the most recent peak season counts (March 2012).
 - The committed development traffic volumes for the projects located at the intersection are incorrectly represented in the database. The attached worksheets show the correct traffic volumes for Palm Beach State College, Loxahatchee Groves Commons and Groves Town Center. These should be utilized in the analysis.
 - The current County signal timing should be used.
 - This intersection is not coordinated to the east or west. Therefore, Arrival Type 3 should be used. **CERTIFICATION ISSUE.**

- Palm Beach County TPS approval letter must be obtained. **CERTIFICATION ISSUE.**

Sincerely,

Rebecca J. Mulcahy
Rebecca J. Mulcahy, P.E.
Vice President

Attachments

cc: David Flinchum, AICP, ASLA
Bill Riebe, P.E.
Tim Stillings, AICP

2005 Vista Parkway, Suite 111
West Palm Beach, FL 33411-6700
(561) 296-9698 Fax (561) 684-6336
Certificate of Authorization Number: 7989

CRITICAL SUM INTERSECTION ANALYSIS SHEET PALM BEACH STATE COLLEGE Southern Boulevard & Binks Forest Drive Existing Geometry

Growth Rate = 0.50% * 0.40% actual growth rate
Peak Season = 1 1
Buildout Year = 2016 2016
Years = 5 5

PM Peak Hour														
	Northbound			Southbound			U	Eastbound			Westbound			RT
	LT	Thru	RT	LT	Thru	RT		LT	Thru	RT	LT	Thru	RT	
Existing Volume on 2/14/2011	170	31	181	19	13	9	0	4	1,187	126	241	1,004	35	
Peak Season Volume	170	31	181	19	13	9	0	4	1,187	126	241	1,004	35	
Traffic Volume Growth	4	1	5	0	0	0	0	0	30	3	6	25	1	
Committed Development	28	0	50	0	0	0	0	0	174	29	55	175	0	
0.5% Traffic Volume Growth	9	1	5	0	0	0	0	0	30	3	6	25	1	
Committed + 0.5% Growth	37	1	55	0	0	0	0	0	204	32	61	200	1	
Max (Committed + 0.5% or Historic Growth)	37	1	55	0	0	0	0	0	204	32	61	200	1	
Background Traffic Volumes	207	32	236	19	13	9	0	4	1,391	158	302	1,204	36	
Loxahatchee Groves Commons														
Inbound Traffic Assignment	10.0%	8.0%						30.0%				22.0%	12.0%	
Inbound Traffic Volumes	32	25						95				70	38	
Outbound Traffic Assignment				34.0%	18.0%	10.0%								
Outbound Traffic Volumes				117	62	34								
Project Traffic	32	25		117	62	34		95				70	38	
Project Traffic														
Inbound Traffic Assignment		5.0%						20.0%	20.0%			50.0%		
Inbound Traffic Volumes		9						38	38			95		
Outbound Traffic Assignment				40.0%	5.0%					10.0%				
Outbound Traffic Volumes				64	8					16				
Project Traffic		9		64	8			38	38	16		95		
Subtotal	239	66	236	200	83	43	38	137	1,407	158	302	1,369	74	
RTOR Reduction			(60)			(43)					(60)		(60)	
TOTAL TRAFFIC	239	66	176	200	83	0	38	137	1,407	98	302	1,369	14	
Critical Volume Analysis														
No. of lanes	1	1	1	1	1	0		1	2	1	2	2	1	
Approach Volume	481				283			1,543				1,685		
Per Lane Volume	239	66	176	200	83	0		175	704	98	151	685	14	
Overlap Reduction	0	0	(151)	0	0	0		0	0	(98)	0	0	(14)	
Net Per Lane Volume	239	66	25	200	83	0		175	704	0	151	685	0	
North-South Critical	NB LT + SB TH =			322				SB LT + NB TH =			266			
East-West Critical	EB LT + WB TH =			860				WB LT + EB TH =			855			
Maximum Critical Sum	322			+ 860				= 1,182			855			
STATUS 2 UNDER														

CRITICAL SUM INTERSECTION ANALYSIS SHEET
PALM BEACH STATE COLLEGE
Southern Boulevard & Binks Forest Drive
Existing Geometry

Growth Rate = 0.50% *-0.40% actual growth rate
Peak Season = 1 1
Buildout Year = 2016 2016
Years = 5 5

AM Peak Hour													
	Northbound			Southbound			Eastbound			Westbound			
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	
Existing Volume on 2/14/2011	162	10	410	19	24	9	0	1	1,066	114	137	792	20
Peak Season Volume	162	10	410	19	24	9	0	1	1,066	114	137	792	20
Traffic Volume Growth	4	0	10	0	1	0	0	0	27	3	3	20	1
Committed Development	16	0	28	0	0	0	0	0	94	12	15	94	0
0.5% Traffic Volume Growth	4	0	10	0	1	0	0	0	27	3	3	20	1
Committed + 0.5% Growth	20	0	38	0	1	0	0	0	121	15	18	114	1
Max (Committed + 0.5% or Historic Growth)	20	0	38	0	1	0	0	0	121	15	18	114	1
Background Traffic Volumes	182	10	448	19	25	9	0	1	1,187	129	155	906	21
Local/Archer Groves Corridor													
Inbound Traffic Assignment	10.0%	8.0%						30.0%			22.0%	12.0%	
Inbound Traffic Volumes	6	4						17			12	7	
Outbound Traffic Assignment				34.0%	18.0%	10.0%							
Outbound Traffic Volumes				12	6	4							
Project Traffic	6	4		12	6	4		17			12	7	
Project Traffic													
Inbound Traffic Assignment		5.0%					20.0%	20.0%			50.0%		
Inbound Traffic Volumes		12					48	48			120		
Outbound Traffic Assignment				40.0%	5.0%				10.0%				
Outbound Traffic Volumes				14	2				4				
Project Traffic		12		14	2		48	48	4		120		
Subtotal	188	26	448	45	33	13	48	66	1,191	129	155	1,038	28
RTOR Reduction			(60)			(13)				(60)			(28)
TOTAL TRAFFIC	188	26	388	45	33	0	48	66	1,191	69	155	1,038	0
Critical Volume Analysis													
No. of Lanes	1	1	1	1	1	0	1	2	1	2	2	1	
Approach Volume		602			78			1,308			1,193		
Per Lane Volume	188	26	388	45	33	0	114	596	69	78	519	0	
Overlap Reduction	0	0	(78)	0	0	0	0	0	(69)	0	0	0	
Net Per Lane Volume	188	26	310	45	33	0	114	596	0	78	519	0	
North-South Critical	NB LT + SB TH =					221	SB LT + NB RT =					277	
East-West Critical	EB LT + WB TH =					633	WB LT + EB TH =					674	
Maximum Critical Sum	277					+	674					= 951	
STATUS ?	UNDER												

DRAFT - 8/22/2012

Intersections 12-034 12-17-12

INTERSECTION ANALYSIS SHEET
Groves Town Center

Southern Blvd & Binks Forest Dr
(Existing Geometrics w/Project)

Growth Rate = 0.50%
Peak Season = 1.00
Buildout Year = 2017
Years = 5

AM Peak Hour												
Intersection Volume Development												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/1/12)	203	18	524	19	26	7	5	984	120	138	817	18
Peak Season Volume	203	18	524	19	26	7	5	984	120	138	817	18
Bkgd (Growth + Exist)	208	18	537	19	27	7	5	1,009	123	141	838	18
Committed Dev. Traffic	20	16	23	26	8	4	113	98	10	8	226	7
% Project Traffic	0%	13%	5%	15%	10%	5%	10%	20%	0%	27%	25%	2%
Direction	in	in	in	out	out	out	in	in	in	out	out	in
Project Traffic (1)	0	18	7	8	5	3	14	28	0	15	14	3
Total	228	52	567	53	40	14	132	1,135	133	164	1,078	28
Critical Volume Analysis												
No. of Lanes	1	1	1	1	1	< 0	1	2	1	2	2	1
Per Lane Volume	228	52	567	53	54	n/a	132	568	133	82	539	28
Right Turn on Red			60			10			60			28
Right Turn Resultant			-425			-142			-155			-53
North-South Critical	NB LT + SB TH =			272			SB LT + NB RT =			478		
East-West Critical	EB LT + WB TH =			671			WB LT + EB TH =			650		
Maximum Critical Sum	478			+			671			= 1,149		
STATUS ?	UNDER											

PM Peak Hour												
Intersection Volume Development												
	Northbound			Southbound			Eastbound			Westbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Existing Volume (3/1/12)	240	49	216	15	15	5	7	1,173	199	231	1,040	32
Peak Season Volume	240	49	216	15	15	5	7	1,173	199	231	1,040	32
Bkgd (Growth + Exist)	246	50	221	15	15	5	7	1,203	204	237	1,066	33
Committed Dev. Traffic	52	34	27	181	70	34	171	190	22	34	340	38
% Project Traffic	0%	13%	5%	15%	10%	5%	10%	20%	0%	27%	25%	2%
Direction	in	in	in	out	out	out	in	in	in	out	out	in
Project Traffic (1)	0	45	17	65	43	22	34	69	0	117	109	7
Total	298	129	265	261	128	61	212	1,462	226	388	1,515	78
Critical Volume Analysis												
No. of Lanes	1	1	1	1	1	< 0	1	2	1	2	2	1
Per Lane Volume	298	129	265	261	189	n/a	212	731	226	194	758	78
Right Turn on Red			60			10			60			60
Right Turn Resultant			11			-222			-132			-243
North-South Critical	NB LT + SB TH =			477			SB LT + NB TH =			390		
East-West Critical	EB LT + WB TH =			970			WB LT + EB TH =			925		
Maximum Critical Sum	477			+			970			= 1,447		
STATUS ?	OVER											

(1) Includes pass-by trips.

12/17/2012 12:00

SIGNAL_ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
30726	SOUTHERN BLVD	BIG BLUE TRACE	2/14/2011	7:15 AM	0	84	20	625	0	10	23	3	0	4	1461	61	0	228	1017	16	3552
30726	SOUTHERN BLVD	BIG BLUE TRACE	6/1/2010	7:15 AM	0	104	4	551	0	15	13	4	0	7	1384	58	1	172	947	13	3273
30726	SOUTHERN BLVD	BIG BLUE TRACE	3/23/2010	7:15 AM	0	121	10	536	0	10	17	9	1	2	1302	73	0	211	972	11	3275
30726	SOUTHERN BLVD	BIG BLUE TRACE	2/4/2013	5:00 PM	1	84	30	211	0	18	19	0	0	7	1222	105	0	623	1293	19	3632
30726	SOUTHERN BLVD	BIG BLUE TRACE	3/1/2012	5:00 PM	1	74	16	247	0	18	24	7	0	5	1255	116	3	552	1336	42	3696
30726	SOUTHERN BLVD	BIG BLUE TRACE	10/1/2012	4:45 PM	0	59	12	196	0	15	10	3	0	3	1038	97	2	569	1289	20	3313
30726	SOUTHERN BLVD	BIG BLUE TRACE	2/14/2011	5:00 PM	5	85	12	232	0	20	28	9	4	2	1094	70	15	604	1311	19	3510
30726	SOUTHERN BLVD	BIG BLUE TRACE	6/1/2010	5:00 PM	0	57	10	181	0	13	13	1	1	4	1132	121	2	565	1211	21	3332
30726	SOUTHERN BLVD	BIG BLUE TRACE	3/23/2010	5:00 PM	0	75	28	237	0	10	21	8	0	5	1353	132	2	588	1270	32	3761
30718	SOUTHERN BLVD	BINKS FOREST DR	10/4/2012	7:45 AM	0	189	6	422	0	11	18	7	3	2	993	144	2	148	783	10	2738
30718	SOUTHERN BLVD	BINKS FOREST DR	3/1/2012	7:15 AM	0	203	18	524	0	19	26	7	0	5	984	120	0	138	817	18	2879
30718	SOUTHERN BLVD	BINKS FOREST DR	2/14/2011	7:15 AM	0	162	10	410	0	19	24	9	0	1	1066	114	1	136	792	20	2764
30718	SOUTHERN BLVD	BINKS FOREST DR	6/1/2010	7:15 AM	1	145	9	421	0	18	18	8	0	4	1019	100	1	73	979	17	2813
30718	SOUTHERN BLVD	BINKS FOREST DR	3/24/2010	7:00 AM	0	146	14	350	0	24	25	8	1	0	1157	109	0	73	932	25	2864
30718	SOUTHERN BLVD	BINKS FOREST DR	10/4/2012	5:00 PM	0	131	12	166	0	13	9	2	1	3	862	108	0	241	951	31	2530
30718	SOUTHERN BLVD	BINKS FOREST DR	3/1/2012	5:00 PM	0	240	49	216	0	15	15	5	0	7	1173	199	1	230	1040	32	3222
30718	SOUTHERN BLVD	BINKS FOREST DR	2/14/2011	5:00 PM	0	170	31	181	0	19	13	9	0	4	1187	126	1	240	1004	35	3020
30718	SOUTHERN BLVD	BINKS FOREST DR	6/1/2010	5:00 PM	1	157	15	68	0	20	9	6	0	2	1297	112	0	270	1032	37	3026
30718	SOUTHERN BLVD	BINKS FOREST DR	3/24/2010	5:00 PM	1	150	26	92	0	29	14	2	0	3	1531	99	2	219	1004	40	3212
30815	SOUTHERN BLVD	CLEARY RD	10/3/2011	7:30 AM	0	0	0	0	0	59	0	71	16	79	3307	0	7	0	1616	66	5221
30815	SOUTHERN BLVD	CLEARY RD	10/3/2011	4:45 PM	0	0	0	0	0	84	0	73	31	73	1743	0	10	0	2974	33	5021
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	2/3/2011	7:30 AM	0	0	1375	0	0	0	517	0	0	1324	0	0	0	608	0	0	3824
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	9/20/2011	7:30 AM	0	0	1473	0	0	0	336	0	0	1394	0	0	0	410	0	0	3613
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	10/7/2009	7:30 AM	0	0	1505	0	0	0	586	0	0	1492	0	0	0	565	0	0	4148
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	2/3/2011	4:45 PM	0	0	871	0	2	0	1230	0	0	451	0	0	0	680	0	0	3234
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	9/20/2011	4:45 PM	0	0	1216	0	0	0	911	0	0	459	0	0	0	679	0	0	3265
30875	SOUTHERN BLVD	CONGRESS AVE/AUS	10/7/2009	4:30 PM	0	0	1231	0	0	0	1380	0	0	413	0	0	0	587	0	0	3611
30910	SOUTHERN BLVD	DIXIE HWY	9/14/2011	7:45 AM	0	158	449	92	0	52	260	87	0	318	739	135	0	52	311	34	2687
30910	SOUTHERN BLVD	DIXIE HWY	9/14/2011	3:00 PM	0	234	376	48	0	47	445	172	0	121	298	184	0	111	603	55	2694
30812	SOUTHERN BLVD	FL TURNPIKE (EAST)	2/7/2013	7:30 AM	0	0	0	0	0	398	0	288	1	641	3189	0	7	0	2121	209	6854
30812	SOUTHERN BLVD	FL TURNPIKE (EAST)	2/17/2011	7:30 AM	0	0	0	0	0	324	1	249	0	702	3279	0	13	0	1784	201	6553
30812	SOUTHERN BLVD	FL TURNPIKE (EAST)	10/3/2011	7:30 AM	0	0	0	0	0	329	0	213	2	581	3252	0	11	0	1675	154	6217
30812	SOUTHERN BLVD	FL TURNPIKE (EAST)	2/7/2013	4:45 PM	0	0	0	0	0	238	0	320	6	378	2105	0	27	0	3498	46	6618

Juan F. Ortega

From: Kimberly Lane-Palmer <KLane@pbcgov.org>
Sent: Friday, March 14, 2014 10:51 AM
To: Juan F. Ortega
Subject: FW: Southern Blvd and Binks Forest Dr
Attachments: 30718.xls

Good Morning,

The timing sheet that you have for Southern Bl and Binks Forest Dr is the latest information.

Kim

From: Giridhar Jeedigunta
Sent: Friday, March 14, 2014 9:45 AM
To: Kimberly Lane-Palmer
Subject: FW: Southern Blvd and Binks Forest Dr

Kim, could you please confirm and reply to Juan? Thanks.

From: Juan F. Ortega [<mailto:jortega@landdesignsouth.com>]
Sent: Friday, March 14, 2014 9:44 AM
To: Giridhar Jeedigunta
Subject: RE: Southern Blvd and Binks Forest Dr

Good Morning Giri, I haven't heard from your office on the request below. Are the attached plans the latest?

-juan

From: Juan F. Ortega
Sent: Friday, February 28, 2014 1:22 PM
To: Giri Jeedigunta (gjeedigu@co.palm-beach.fl.us)
Subject: Southern Blvd and Binks Forest Dr

Good afternoon Giri, could you please email me the latest timing and phasing plans for the Southern Blvd and Binks Forest Dr intersection?

Thanks,

Dr. Juan F. Ortega, P.E.
561.537.4504
jortega@landdesignsouth.com

Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

CONTROLLER TIME SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD AND BINKS FOREST DR	CONTROLLER TYPE:	NAZTEC
SIGNAL #	30718	SYSTEM #	2195

PHASE NUMBER	APPROACH	MIN GREEN	GAP EXT	MAX 1	MAX 2	YEL CLR	RED CLR	WALK	PED CLR	MIN RCL	MAX RCL	PED RCL	LOCK CALLS	DETECTOR SETTINGS
	INTERVAL													
1	WALT	4.0	2.0	20.0		4.0	2.0	0.0	0.0	0	0		0	L1:NORMAL
2	EA	20.0	4.0	60.0		5.0	1.0	7.0	14.0	1	1		1	ADV:NORMAL
3														
4	SA	6.0	3.0	25.0		4.0	3.0	7.0	36.0	0	0		0	L4:D/N (5) L4R:D/N (10)
5	EALT	4.0	2.0	20.0		4.0	2.0	0.0	0.0	0	0		0	L5:NORMAL
6	WA	20.0	4.0	60.0		5.0	1.0	0.0	0.0	1	1		1	ADV:NORMAL
7														
8	NA	6.0	3.0	25.0		4.0	3.0	7.0	35.0	0	0		0	L8:D/N (5) L8R:D/N (10)

PRE-EMPTION TIMING							SPECIAL FUNCTIONS					
	GREEN BEFORE	TRACK CLR	TRACK CLR YEL	MIN DWELL	YEL AFTER	RED AFTER		START Φ	DUAL ENTRY	DET SWITCH	OUT OF FLASH	INTO FLASH
									YES	NO		
								2 - 6			2 - 6	4 - 8
COMMENTS	TEMPORARY SYSTEM TIMING - BAD LOOPS ON MAIN STREET						TIMING DESIGNED BY:	S. LEWIS			DATE:	7/7/2005
							APPROVED BY:	G.V. JEEDIGUNTA, P.E.			DATE:	

SYSTEM TIMING SHEET

DATE TIMING INSTALLED: _____

INTERSECTION:	SOUTHERN BLVD AND BINKS FOREST DR	CONTROLLER TYPE:	NAZTEC
SYSTEM:		INTERSECTION #	30718
		SYSTEM #	2195

TOD SCHEDULER											
WEEKDAY				WEEKEND							
				SATURDAY				SUNDAY			
TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN	TIME	PATTERN
0:00	1	5:30	100	0:00	1	5:30	100	0:00	1	5:30	100
22:00	1			22:00	1			22:00	1		

TIMING PLANS													
DIAL		1		2		3		4		5		6	
CYCLE LENGTH (SEC)		0											
OFFSET (SEC)		0											
PERMISSIVES		AUTO		AUTO		AUTO		AUTO		AUTO		AUTO	
SEQUENCE		1											
COORDINATED PHASE		0											
	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	SPLIT	MODE	
FORCE-OFF 1 (SEC)	WALT	0	NON										
FORCE-OFF 2 (SEC)	EA	0	MAX										
FORCE-OFF 3 (SEC)													
FORCE-OFF 4 (SEC)	SA	0	NON										
FORCE-OFF 5 (SEC)	EALT	0	NON										
FORCE-OFF 6 (SEC)	WA	0	MAX										
FORCE-OFF 7 (SEC)													
FORCE-OFF 8 (SEC)	NA	0	NON										
Special Features:													
1)	TEMPORARY SYSTEM TIMING DUE TO BAD LOOPS ON EAST/WEST APPROACHES												
2)	PATTERN 1 IS FREE WITH ALTERNATE MAX TIMES. 02 & 06 MAX1 = 25												
3)													
TIMING DESIGNED BY:	S. LEWIS										DATE:	7/7/2005	
APPROVED BY:	G.V. JEEDIGUNTA, P.E.										DATE:		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	LDS	Intersection	Southern/Binks
Agency or Co.	LDS	Area Type	All other areas
Date Performed	2014.03.19	Jurisdiction	PBC
Time Period	AM [Optimized]	Analysis Year	2018
		Project ID	128.80 Binks Pointe

Volume and Timing Input

			EB			WB			NB			SB		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N _l			1	2	1	2	2	1	1	1	1	1	0	
Lane Group			L	T	R	L	T	R	L	T	R	L	TR	
Volume, V (vph)			128	953	132	138	863	22	116	42	285	49	33	14
% Heavy Vehicles, %HV			2	2	2	2	2	2	2	2	2	2	2	
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
Pretimed (P) or Actuated (A)			A	A	A	A	A	A	A	A	A	A	A	
Start-up Lost Time, I _l			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Extension of Effective Green, e			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		
Arrival Type, AT			3	3	3	3	3	3	3	3	3	3		
Unit Extension, UE			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Filtering/Metering, I			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
Initial Unmet Demand, Q _b			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Ped / Bike / RTOR Volumes			0	0	60	0	0	0	0	0	60	0	0	0
Lane Width			12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0		
Parking / Grade / Parking			N	0	N	N	0	N	N	0	N	N	0	N
Parking Maneuvers, N _m														
Buses Stopping, N _b			0	0	0	0	0	0	0	0	0	0		
Min. Time for Pedestrians, G _p			3.2			3.2			3.2			3.2		
Phasing	Excl. Left	WB Only	Thru & RT		04		NB Only		NS Perm		07		08	
Timing	G = 19.0	G = 4.0	G = 66.0		G =		G = 21.0		G = 14.0		G =		G =	
	Y = 6	Y = 0	Y = 6		Y =		Y = 7		Y = 7		Y =		Y =	
Duration of Analysis, T = 0.25									Cycle Length, C = 150.0					

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	135	1003	76	145	908	23	122	44	237	52	50	
Lane Group Capacity, c	224	1561	981	664	1655	739	402	522	823	127	166	
v/c Ratio, X	0.60	0.64	0.08	0.22	0.55	0.03	0.30	0.08	0.29	0.41	0.30	
Total Green Ratio, g/C	0.13	0.44	0.62	0.19	0.47	0.47	0.28	0.28	0.52	0.09	0.09	
Uniform Delay, d ₁	61.9	32.8	11.4	51.0	28.7	21.6	41.8	39.8	20.3	64.1	63.4	
Progression Factor, PF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Delay Calibration, k	0.19	0.22	0.11	0.11	0.15	0.11	0.11	0.11	0.11	0.11	0.11	
Incremental Delay, d ₂	4.5	0.9	0.0	0.2	0.4	0.0	0.4	0.1	0.2	2.1	1.0	
Initial Queue Delay, d ₃	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay	66.5	33.7	11.4	51.1	29.1	21.7	42.2	39.9	20.5	66.2	64.5	
Lane Group LOS	E	C	B	D	C	C	D	D	C	E	E	
Approach Delay	35.9			31.9			29.2			65.4		
Approach LOS	D			C			C			E		
Intersection Delay	34.5			X _c = 0.53			Intersection LOS			C		

HCS+™ DETAILED REPORT

General Information		Site Information	
Analyst	LDS	Intersection	Southern/Binks
Agency or Co.	LDS	Area Type	All other areas
Date Performed	2014.03.18	Jurisdiction	PBC
Time Period	PM [Optimized]	Analysis Year	2018
		Project ID	128.80 Binks Pointe

Volume and Timing Input

			EB			WB			NB			SB		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Number of Lanes, N _l			1	2	1	2	2	1	1	1	1	1	0	
Lane Group			L	T	R	L	T	R	L	T	R	L	TR	
Volume, V (vph)			212	1125	164	399	1314	81	229	97	238	258	124	60
% Heavy Vehicles, %HV			2	2	2	2	2	2	2	2	2	2	2	2
Peak-Hour Factor, PHF			0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Pretimed (P) or Actuated (A)			A	A	A	A	A	A	A	A	A	A	A	A
Start-up Lost Time, I _l			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Extension of Effective Green, e			2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Arrival Type, AT			3	3	3	3	3	3	3	3	3	3	3	
Unit Extension, UE			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Filtering/Metering, I			1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Initial Unmet Demand, Q _b			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Ped / Bike / RTOR Volumes			0	0	60	0	0	60	0	0	60	0	0	10
Lane Width			12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	
Parking / Grade / Parking			N	0	N	N	0	N	N	0	N	N	0	N
Parking Maneuvers, N _m														
Buses Stopping, N _b			0	0	0	0	0	0	0	0	0	0	0	
Min. Time for Pedestrians, G _p			3.2			3.2			3.2			3.2		
Phasing	Excl. Left	WB Only	Thru & RT		04		Excl. Left		NS Perm		07		08	
Timing	G = 26.0	G = 3.0	G = 61.0		G =		G = 22.0		G = 22.0		G =		G =	
	Y = 6	Y = 0	Y = 6		Y =		Y = 7		Y = 7		Y =		Y =	
Duration of Analysis, T = 0.25									Cycle Length, C = 160.0					

Lane Group Capacity, Control Delay, and LOS Determination

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Adjusted Flow Rate, v	223	1184	109	420	1383	22	241	102	187	272	184	
Lane Group Capacity, c	288	1420	881	774	1490	910	342	256	544	410	245	
v/c Ratio, X	0.77	0.83	0.12	0.54	0.93	0.02	0.70	0.40	0.34	0.66	0.75	
Total Green Ratio, g/C	0.16	0.38	0.56	0.22	0.40	0.57	0.32	0.14	0.34	0.32	0.14	
Uniform Delay, d ₁	64.2	44.9	16.9	55.4	45.8	14.7	43.9	63.0	39.1	44.1	66.4	
Progression Factor, PF	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Delay Calibration, k	0.32	0.37	0.11	0.14	0.44	0.11	0.27	0.11	0.11	0.24	0.31	
Incremental Delay, d ₂	12.4	4.4	0.1	0.8	10.5	0.0	6.5	1.0	0.4	4.0	12.2	
Initial Queue Delay, d ₃	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay	76.6	49.3	17.0	56.2	56.3	14.7	50.4	64.0	39.5	48.1	78.6	
Lane Group LOS	E	D	B	E	E	B	D	E	D	D	E	
Approach Delay	51.0			55.8			49.2			60.4		
Approach LOS	D			E			D			E		
Intersection Delay	53.8			X _c = 0.88			Intersection LOS			D		

Intersection Volume Development



Southern Blvd and Binks Forest Dr

Input Data

GR	=	0.50%
Peak Season	=	1.00
Traffic Count Year	=	2014
Buildout Year	=	2018
Years	=	4

AM Peak Hour		PM Peak Hour	
In	Out	In	Out
6	27	25	13

<u>AM Peak Hour</u>												
Intersection Volume Development												
AM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 18-Mar-14	1	865	121	104	681	12	97	8	244	14	19	7
Peak Season Volume	1	865	121	104	681	12	97	8	244	14	19	7
2018 Historic Growth	1	882	123	106	695	12	99	8	249	14	19	7
Major Project Traffic	127	53	5	27	154	10	10	34	17	34	13	7
Major Project Traffic + 1% growth	128	953	131	135	863	22	111	42	271	49	33	14
% Project Traffic	-	-	20%	50%	-	-	20%	-	50%	-	-	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	-	OUT	-	-	-
Project Traffic	-	-	1	3	-	-	5	-	14	-	-	-
2018 Total Traffic*	128	953	132	138	863	22	116	42	285	49	33	14

<u>PM Peak Hour</u>												
Intersection Volume Development												
PM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 18-Mar-14	7	966	140	219	965	35	173	17	164	12	11	4
Peak Season Volume	7	966	140	219	965	35	173	17	164	12	11	4
2018 Historic Growth	7	985	143	223	984	36	176	17	167	12	11	4
Major Project Traffic	205	120	13	158	310	45	46	79	60	246	113	56
Major Project Traffic + 1% growth	212	1,125	159	386	1,314	81	226	97	231	258	124	60
% Project Traffic	-	-	20%	50%	-	-	20%	-	50%	-	-	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	-	OUT	-	-	-
Project Traffic	-	-	5	13	-	-	3	-	7	-	-	-
2018 Total Traffic*	212	1,125	164	399	1,314	81	229	97	238	258	124	60

*Build out year traffic was estimated using the greater of the historical growth rate and committed development traffic+1% historical growth rate. Then, existing traffic and development traffic were added to the growth in the build-out year.

** Includes RTOR

E-W Street: Southern Blvd
N-S STREET: Binks Forest Dr
TIME PERIOD: AM
GROWTH RATE: -2.54%
SIGNAL ID: 30718

Input Data

COUNT DATE: 3/18/2014
CURRENT YEAR: 2014
ANALYSIS YEAR: 2018
PSF: 1

Report Created: 03/14/2014

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	1	865	121	104	681	12	97	8	244	14	19	7		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	1	865	121	104	681	12	97	8	244	14	19	7		
Committed Developments													Type	% Complete
Bink's Corporate Center	0	0	4	12	0	0	3	0	10	0	0	0	NR	0%
Groves Town Center	14	28	0	15	14	3	0	18	7	8	5	3	NR	0%
Palm Beach State College	96	4			120			12		14	2		NR	0%
Loxahatchee Retail	0	1	0	0	1	0	0	0	0	0	0	0	NR	0%
Highland Dunes	0	27	2	0	9	0	1	0	0	0	0	0	Res	0%
Loxahatchee Groves Commons	17				12	7	6	4		12	6	4	NR	0%
Bink's Pointe	-	-	-	-	-	-	-	-	-	-	-	-	Res	0%
Total Committed Developments	127	60	6	27	156	10	10	34	17	34	13	7		
Total Committed Residential	0	27	2	0	9	0	1	0	0	0	0	0		
Total Committed Non-Residential	127	33	4	27	147	10	9	34	17	34	13	7		
Double Count Reduction	0	7	1	0	2	0	0	0	0	0	0	0		
Total Discounted Committed	127	53	5	27	154	10	10	34	17	34	13	7		
Historical Growth	0	-124	-17	-15	-97	-2	-14	-1	-35	-2	-3	-1		
Comm Dev+1% Growth	127	88	10	31	182	10	14	34	27	35	14	7		
Growth Volume Used	127	88	10	31	182	10	14	34	27	35	14	7		
Total Volume	128	953	131	135	863	22	111	42	271	49	33	14		

Input Data

E-W Street: Southern Blvd
N-S STREET: Binks Forest Dr
TIME PERIOD: PM
GROWTH RATE: -2.54%
SIGNAL ID: 30718

COUNT DATE: 3/18/2014
CURRENT YEAR: 2014
ANALYSIS YEAR: 2018
PSF: 1

Report Created: 03/14/2014

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound				
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right		
Existing Volume	7	966	140	219	965	35	173	17	164	12	11	4		
Diversions	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Peak Season Volume	7	966	140	219	965	35	173	17	164	12	11	4		
Committed Developments													Type	% Complete
Bink's Corporate Center	0	0	12	36	0	0	13	0	39	0	0	0	NR	0%
Groves Town Center	34	69	0	117	109	7	0	45	17	65	43	22	NR	0%
Palm Beach State College	76	16			95			9		64	8		NR	0%
Loxahatchee Retail	0	13	0	5	14	0	0	0	4	0	0	0	NR	0%
Highland Dunes	0	29	2	0	29	0	2	0	0	0	0	0	Res	0%
Loxahatchee Groves Commons	95				70	38	32	25		117	62	34	NR	0%
Bink's Pointe	-	-	-	-	-	-	-	-	-	-	-	-	Res	0%
Total Committed Developments	205	127	14	158	317	45	47	79	60	246	113	56		
Total Committed Residential	0	29	2	0	29	0	2	0	0	0	0	0		
Total Committed Non-Residential	205	98	12	158	288	45	45	79	60	246	113	56		
Double Count Reduction	0	7	1	0	7	0	1	0	0	0	0	0		
Total Discounted Committed	205	120	13	158	310	45	46	79	60	246	113	56		
Historical Growth	-1	-138	-20	-31	-138	-5	-25	-2	-23	-2	-2	-1		
Comm Dev+1% Growth	205	159	19	167	349	46	53	80	67	246	113	56		
Growth Volume Used	205	159	19	167	349	46	53	80	67	246	113	56		
Total Volume	212	1125	159	386	1314	81	226	97	231	258	124	60		

This Intersection Volume Development has been modified per communication dated November 4, 2013 from City of Wellington Traffic Engineer.

KMF Traffic Group, LLC

1669 SW College St., Stuart, FL 34997
772-2217971

Manual Turning Count - All Traffic
Southern Blvd and Binks Forest Dr
Wellington, FL

File Name : AMPM
Site Code : LDS1402
Start Date : 3/18/2014
Page No : 1

Groups Printed- All Traffic

	B Road SB			Southern Blvd WB			Binks Forest Dr NB			Southern Blvd EB			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	3	2	3	159	2	53	0	19	23	195	0	459
07:15 AM	0	4	4	7	206	5	44	1	20	23	200	2	516
07:30 AM	2	4	6	5	159	25	56	2	31	26	246	0	562
07:45 AM	1	4	3	3	161	22	76	2	25	32	193	0	522
Total	3	15	15	18	685	54	229	5	95	104	834	2	2059
08:00 AM	2	4	5	3	174	25	56	3	24	23	205	0	524
08:15 AM	2	7	0	1	187	32	56	1	17	40	221	1	565
08:30 AM	2	3	3	4	140	31	69	11	25	22	205	0	515
08:45 AM	0	3	7	6	137	31	50	0	8	24	190	2	458
Total	6	17	15	14	638	119	231	15	74	109	821	3	2062
*** BREAK ***													
04:00 PM	4	5	9	3	208	54	40	2	23	26	238	1	613
04:15 PM	1	1	4	10	209	47	42	4	32	22	182	1	555
04:30 PM	0	4	4	7	222	56	41	6	27	27	218	1	613
04:45 PM	1	3	2	7	225	52	41	6	29	28	220	1	615
Total	6	13	19	27	864	209	164	18	111	103	858	4	2396
05:00 PM	2	2	2	9	257	47	36	5	35	34	239	3	671
05:15 PM	1	4	3	10	234	73	45	3	50	43	275	1	742
05:30 PM	1	1	5	7	227	55	53	4	50	35	220	0	658
05:45 PM	0	4	2	9	247	44	30	5	38	28	232	3	642
Total	4	11	12	35	965	219	164	17	173	140	966	7	2713
Grand Total	19	56	61	94	3152	601	788	55	453	456	3479	16	9230
Apprch %	14	41.2	44.9	2.4	81.9	15.6	60.8	4.2	35	11.5	88.1	0.4	
Total %	0.2	0.6	0.7	1	34.1	6.5	8.5	0.6	4.9	4.9	37.7	0.2	

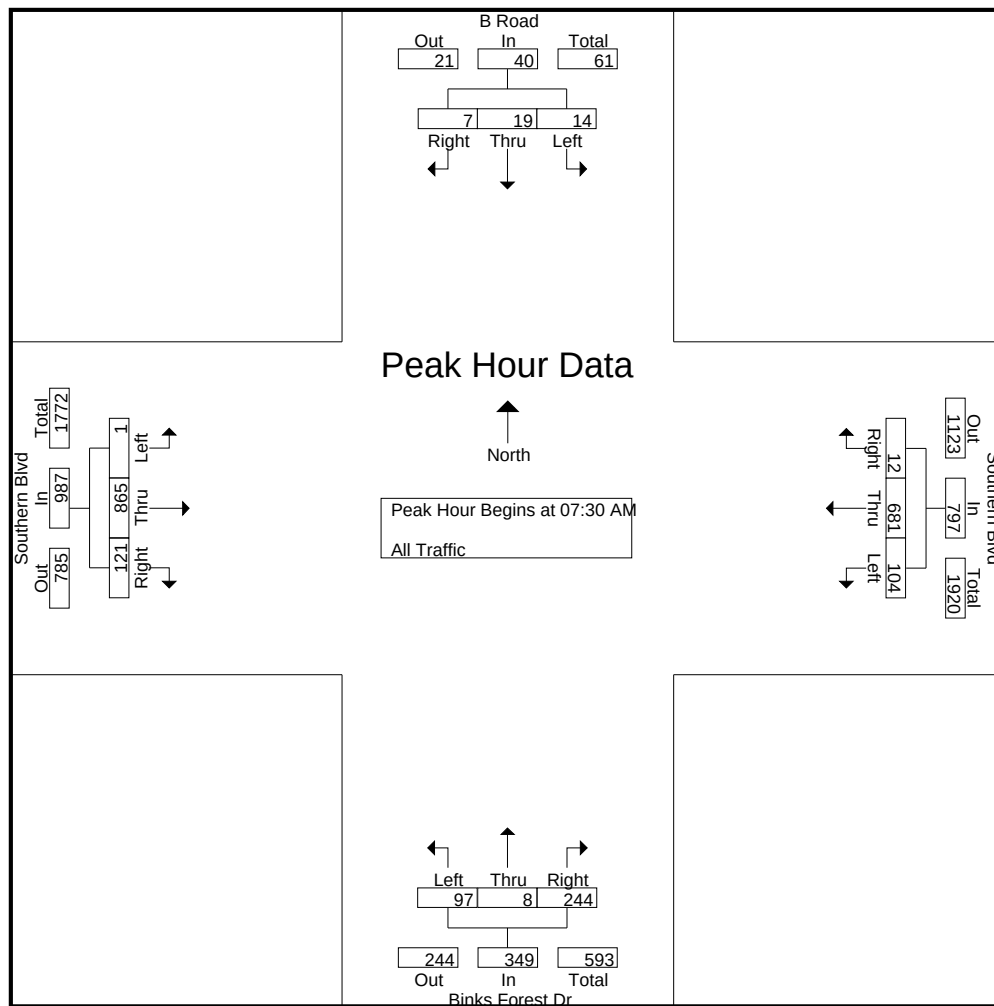
KMF Traffic Group, LLC

1669 SW College St., Stuart, FL 34997
772-2217971

Manual Turning Count - All Traffic
Southern Blvd and Binks Forest Dr
Wellington, FL

File Name : AMPM
Site Code : LDS1402
Start Date : 3/18/2014
Page No : 2

	B Road SB				Southern Blvd WB				Binks Forest Dr NB				Southern Blvd EB				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	4	6	12	5	159	25	189	56	2	31	89	26	246	0	272	562
07:45 AM	1	4	3	8	3	161	22	186	76	2	25	103	32	193	0	225	522
08:00 AM	2	4	5	11	3	174	25	202	56	3	24	83	23	205	0	228	524
08:15 AM	2	7	0	9	1	187	32	220	56	1	17	74	40	221	1	262	565
Total Volume	7	19	14	40	12	681	104	797	244	8	97	349	121	865	1	987	2173
% App. Total	17.5	47.5	35		1.5	85.4	13		69.9	2.3	27.8		12.3	87.6	0.1		
PHF	.875	.679	.583	.833	.600	.910	.813	.906	.803	.667	.782	.847	.756	.879	.250	.907	.962



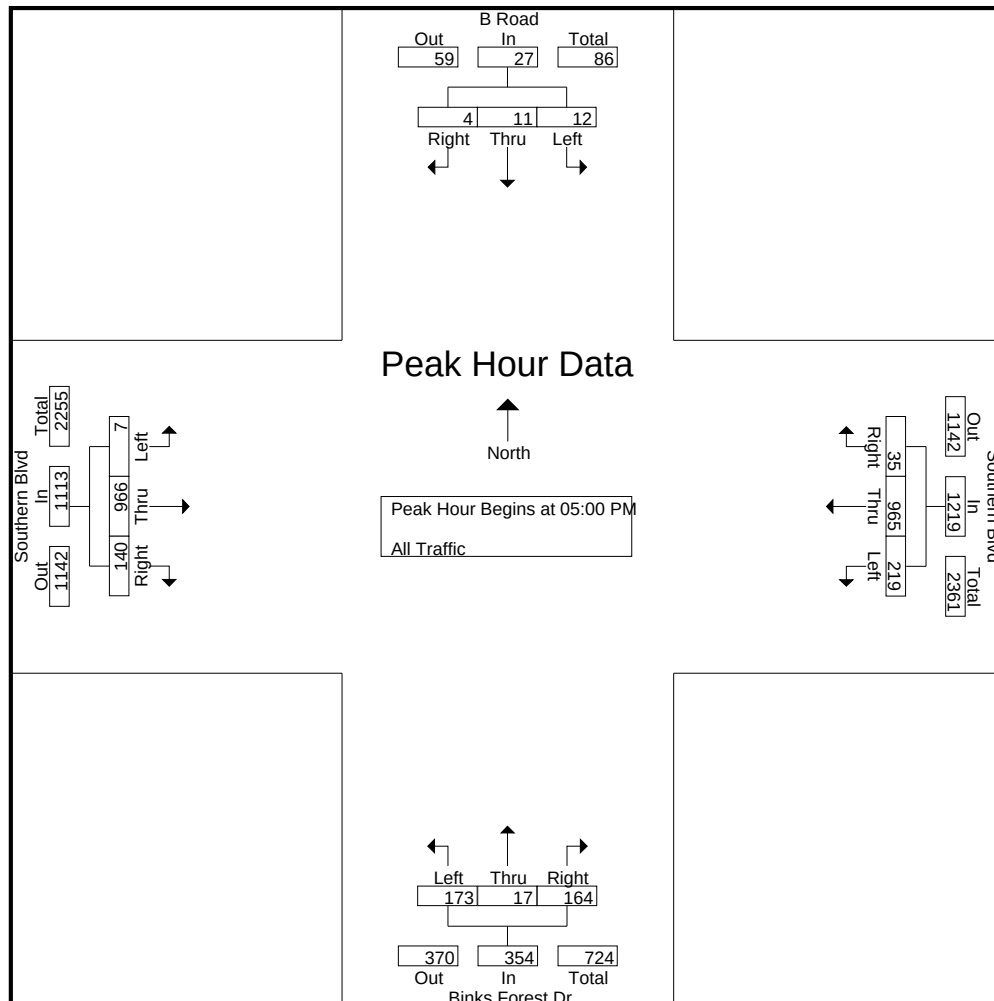
KMF Traffic Group, LLC

1669 SW College St., Stuart, FL 34997
772-2217971

Manual Turning Count - All Traffic
Southern Blvd and Binks Forest Dr
Wellington, FL

File Name : AMPM
Site Code : LDS1402
Start Date : 3/18/2014
Page No : 3

	B Road SB				Southern Blvd WB				Binks Forest Dr NB				Southern Blvd EB				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	2	2	2	6	9	257	47	313	36	5	35	76	34	239	3	276	671
05:15 PM	1	4	3	8	10	234	73	317	45	3	50	98	43	275	1	319	742
05:30 PM	1	1	5	7	7	227	55	289	53	4	50	107	35	220	0	255	658
05:45 PM	0	4	2	6	9	247	44	300	30	5	38	73	28	232	3	263	642
Total Volume	4	11	12	27	35	965	219	1219	164	17	173	354	140	966	7	1113	2713
% App. Total	14.8	40.7	44.4		2.9	79.2	18		46.3	4.8	48.9		12.6	86.8	0.6		
PHF	.500	.688	.600	.844	.875	.939	.750	.961	.774	.850	.865	.827	.814	.878	.583	.872	.914





**Department of Engineering
and Public Works**

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**Palm Beach County
Board of County
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Steven L. Abrams, Mayor

Priscilla A. Taylor, Vice Mayor

Hal R. Valeche

Paulette Burdick

Shelley Vana

Mary Lou Berger

Jess R. Santamaria

County Administrator

Robert Weisman

October 31, 2013

Mr. Timothy Stillings
Director of Planning and Development
Village of Wellington
12300 Forrest Hill Boulevard
Wellington, FL 33414

**RE: Binks Pointe
PBC Project#: 131002
Traffic Performance Standards Review**

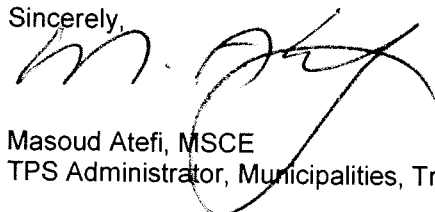
Dear Tim:

The Palm Beach County Traffic Division has reviewed the traffic study for the proposed residential project entitled; **Binks Pointe**, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code. The project is summarized as follows:

Location:	West side of Binks Forest Drive, south of Southern Blvd.
PCN:	73-41-44-06-03-010-0000, 73-41-44-06-03-022-0000, 73-41-44-06-03-023-0000, 73-41-43-31-01-006-0000.
Existing Use:	Vacant
Proposed Uses:	90 MF Residential Units (Townhomes)
New Daily Trips:	630
New PH Trips:	47 AM, 55 PM
Build-Out Date:	End of Year 2018

Based on our review, the Traffic Division has determined the proposed residential project meets the Traffic Performance Standards of Palm Beach County. It is suggested for the Village to look into potential sight distance issues at the project main access driveway, and require provision of NBL and SBR right turn lanes along Binks Forest Drive onto the site (as illustrated on the site plan) as a safety measure, if deemed needed. Note that this suggestion is not because of high driveway volume, but due to the specific location of the site main access driveway on a horizontal curve section along the roadway. No building permits are to be issued by the Village after the build-out date listed above. The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance. If you have any questions regarding this determination, please contact me at 684-4030 or e-mail me at matefi@pbcgov.org.

Sincerely,


Masoud Atefi, MSCE
TPS Administrator, Municipalities, Traffic Engineering Division

MA:sf

cc: Juan F. Ortega Ph.D., PE., - Land Design South
Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review
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