

ADD ON

6-6-1

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

ADD ON

Meeting Date: April 10, 2007

Consent Regular
 Workshop Public Hearing

Department:

Submitted By: Engineering and Public Works

Submitted For: Engineering and Public Works

I. EXECUTIVE BRIEF

Motion and Title:

A) Staff recommends motion to deny the Village of Wellington and the District Six Commissioner's request for a span wire traffic signal at Forest Hill Boulevard and Quercus Lane (which, if approved, would be installed with District Six funds) and,

B) If the Board determines that a signal should not be installed, staff requests Board direction on the contingent concept to not construct the new northbound lane on Forest Hill Boulevard in the area and consider the initiation of a CRALLS for this road section and,

C) Staff requests the Board reaffirm the intention of constructing improvements in a priority fashion along this road segment and direct staff to take all actions necessary to accomplish the above directions.

Summary: The County is completing plans to widen Forest Hill Boulevard from 4 lanes to 6 lanes between Wellington Trace and Southern Boulevard and is awaiting a drainage permit to be able to bid the work. It is on the Five Year Road Program for construction this year and there is a development that is phased to the construction. About 1200 feet south of the Southern Boulevard intersection is the intersection at Quercus Lane. On the east side is a fully built out community of approximately 86 homes with a single entrance/exit at Forest Hill Boulevard, while the neighborhood on the west side has approximately 17 homes.

District 6 (MRE)

(Summary Continued Page 3)

Background and Justification: The District Commissioner believes that a traffic signal is the best solution to address the concerns of the Village of Wellington council members and the neighborhood. Justification for a signal is based on the following points: there is poor sight distance since the intersection is just north of a curve, traffic will only increase on Forest Hill Boulevard as more development occurs in the western communities (making an already bad situation trying to leave the community worse), a signal will help prevent right angle accidents at this location, as traffic increases, available gaps in Forest Hill Boulevard traffic will get fewer and there will be more chances taken by drivers trying to cross, there is no other way out of the neighborhood other than the Forest Hill entrance, a suggested option of restricting all existing traffic to right turns places more traffic through the Southern Boulevard intersection - which is already overcrowded, and, given the close proximity of the Southern Boulevard intersection, it is hazardous to try and cross three lanes of Forest Hill boulevard to get into the left turn lane at Southern Boulevard.

(Background Continued Page 3)

Attachments:

1. Location Sketch
2. Aerial
3. Signal Study
4. 2006 Signals Denied List

Approved by:

S. J. T. Williams
County Engineer

4/9/07
Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2007	2008	2009	2010	2011
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	_____	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	=====	=====	=====	=====	=====

ADDITIONAL FTE POSITIONS (Cumulative) _____

Is Item Included In Current Budget? Yes ___ No ___

Budget Account No: Fund _____ Dept _____ Unit _____ Object _____

B. Recommended Sources of Funds/Summary of Fiscal Impact:

Depending on the Board's decision, the fiscal impact of this item will vary.

C. Department Fiscal Review: at will hit for R. Farguhar

III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Dev. and Control Comments:

Jan 2007 4-9-07
 OFMB
 CN 4/9/07
 atw 4.9.07

Dr. J. Jueol 4/9/07
 Contract Development & Control

B. Approved as to Form and Legal Sufficiency:

Marlene Pettit 4/9/07
 Assistant County Attorney

C. Other Department Review:

 Department Director

Summary (Continued)

They have requested a traffic signal and the Village Council and the District Commissioner supports the request. The recent signal warrant study showed that no single hour of the 8 hours required to meet the warrant was met. An additional study showed an average of 12 seconds of delay was experienced during the peak morning hour. During a Village Council meeting there was discussion that the southbound third lane should definitely be constructed to eliminate the current merge condition. There was no consensus on the need for the new third northbound lane. There seemed to be Council consensus that the entire widening project could be supported if a signal was installed for the neighborhood. Additional information/justification on the signal request can be found in the Background Section of this item.

Background and Justification (Continued)

Discussion

The installation of traffic signals is determined by the standards (warrants) set forth in the Manual of Uniform Traffic Control Devices (MUTCD). The County is required by statute to use the criteria in the Manual when installing any traffic control device (including a traffic signal). Very specific warrant criteria are laid out when considering whether a signal should be installed. The warrants can be met – historically, the County has, on average, been installing over 10-15 new traffic signals every year when it is determined that the signal warrants are met. We also tell 40-50 neighborhoods each year that they don't meet the criteria.

The 2006 Signal Study list of denied requests shows the major street traffic volumes and the side street traffic counts. The list is in numeric order, based on the amount of side street traffic (minus right turns). When comparing the Quercus volumes to the others on the list, it would fall approximately 24th.

Taking the justification points one at a time:

Sight Distance - The current sight distance for the 4 lane Forest Hill Boulevard does just meet the minimum sight distance criteria. Widening the road will require the County to acquire property from two properties and move the existing wall and landscaping to the east - whether or not a signal is present at the Quercus intersection.

Increasing traffic – Traffic will be increasing in the future.

Accidents – Traffic signals typically reduce the frequency of right angle accidents. There were two right angle accidents last year at this location. Correspondingly, traffic signals will increase the frequency of rear end accidents on the main street, many times resulting in more accidents at a given intersection than before the installation of a signal.

Fewer gaps in main street traffic – Staff agrees that as Forest Hill Boulevard traffic increases that there will be fewer acceptable gaps for exiting drivers.

Single entrance/exit for neighborhood - There is no other exit. There does not appear to be any way of acquiring additional access without buying a home and potentially piping a canal to gain access to the south.

Restricting all exiting traffic to right turns – This takes the neighborhood traffic away from the Village and places it into the Southern Boulevard intersection. Given the close proximity of the intersection, getting into the leftmost left turn lane is not much different from crossing directly into the median at Quercus and making the left turn in two stages as

it is regularly done today. There is no opportunity to provide a u-turn on Forest Hill before cars would get into the Southern Boulevard left turn lane.

Options

Approve a signal - PRO - This would satisfy the neighbors and the Village Council. The 6-lane widening project could proceed. CON - The Board would have to address the MUTCD criteria and base the decision on other criteria.

Deny a signal and continue with full 6-lane project (including increasing the sight distance at the Quercus intersection) - PRO - This would be consistent with the MUTCD. CON - Most of the neighborhood concerns about traffic access and safety will remain. The County widening project is likely to be delayed.

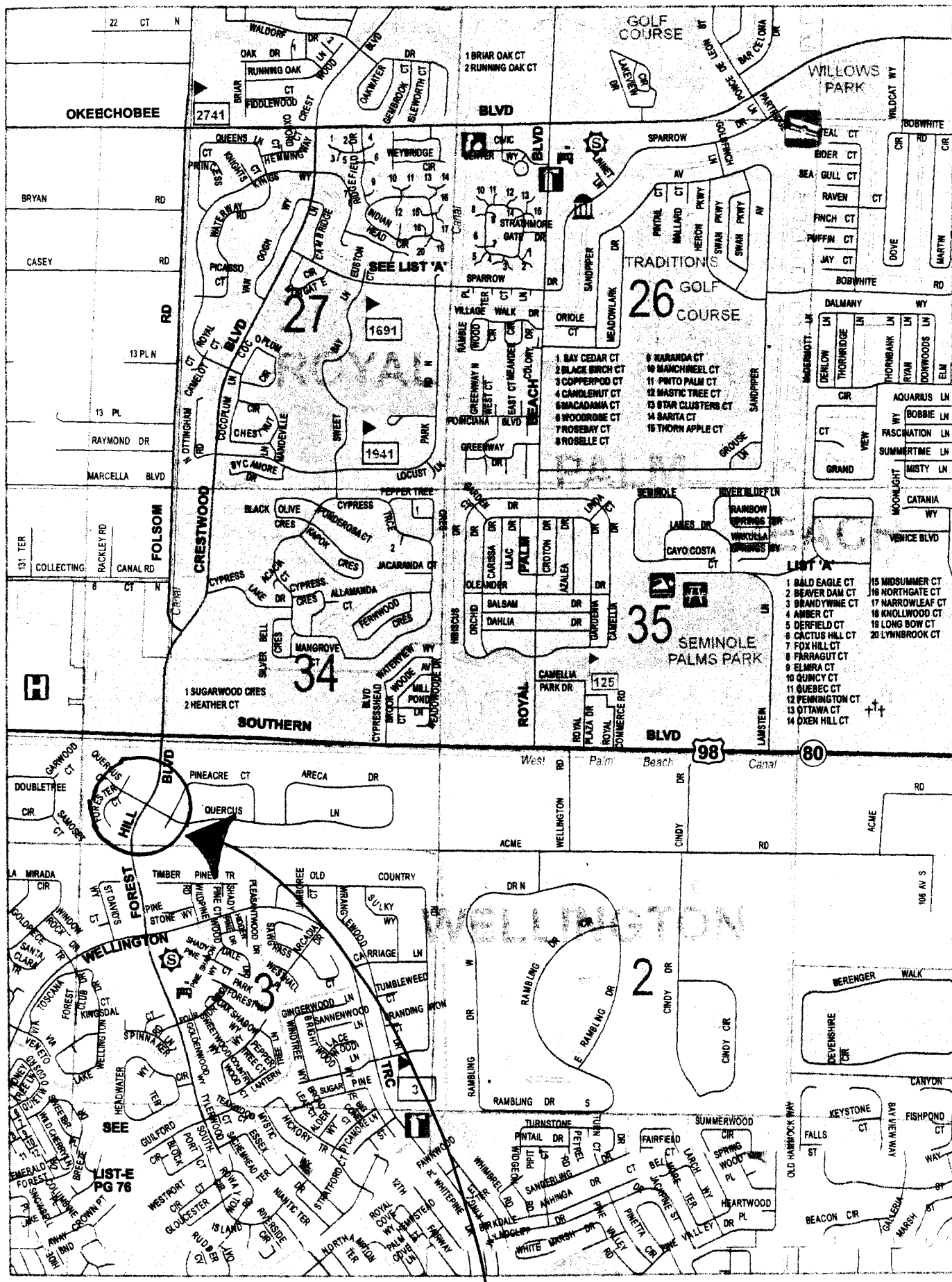
Deny a signal and modify 6-lane project to eliminate northbound lane until significantly improved sight distance can be achieved and traffic conditions show the need for the lane. PRO - This would be consistent with the MUTCD. CON - Most of the neighborhood concerns about traffic access and safety will remain. The County widening project is likely to be delayed. While the initial construction project will be less expensive, if the northbound lane is constructed separately in the future, the total widening will be more expensive done as two projects instead of a single project.

Deny a signal and stop the entire widening project - PRO - This would be consistent with the MUTCD. The Village of Wellington Council has requested the County consider keeping this section 4 lanes instead of widening it to 6 lanes. Existing development tied to the construction will be delayed. CON - Most of the neighborhood concerns about traffic access and safety will remain. Development tied to the construction will be delayed and it is possible that some sort of legal challenge will result. If widening is done in the future it will be more expensive.

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Location Map

Southern Blvd

Areaca Dr

Pineacre Ln

Quercus Ln

Pineacre Ct

Quercus Ct

Forester Ct

Old Country Rd

Jamboree Ct

Wranglewood Dr

Sawgrass Ct

Hidden Pine Dr

Sandy Pine Ct

Timber Pine Trl

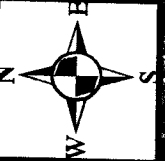
Wild Pine Rd

Stone Pine Way

Wellington Trce

Forest Hill Blvd

Sulky Way



**PALM BEACH COUNTY TRAFFIC
ENGINEERING SIGNAL STUDY
SUMMARY SHEET**

DATE: **2007/02/05**

COMMISSION **DISTRICT #6**

SIGNAL STUDY
LOCATION -

FOREST HILL BL AT QUERCUS LN/CT

As set forth on the Manual on Uniform Traffic Control Devices for Streets and Highways, the following warrant(s) is / are summarized below.

WARRANT # (-100% RT) YES / NO

(SENIOR) WARRANT) YES / NO

CONDITION A: **NO**

1: **NO**

CONDITION B: **NO**

2: **NO**

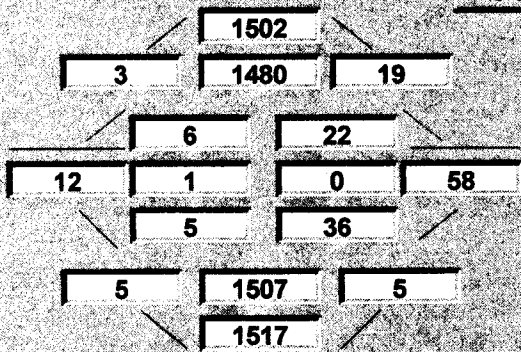
TIME	AM/PM	MAJOR ST	MAJOR ST	MAJOR ST	MINOR ST	-100% RT	SENIOR
		DIRECTION	DIRECTION	TOTAL	VOLUME - DIR		20 %RT
		NA	SA	630	EA-70	EA-70	EA - 70
1: 6-7	AM	787	1001	1788	30	18	20
2: 7-8	AM	1308	1412	2720	68	41	46
3: 8-9	AM	1324	1306	2630	36	22	24
4: 12-1	PM	1061	1088	2149	30	18	20
5: 1-2	PM	974	1098	2072	34	20	23
6: 2-3	PM	1161	1197	2358	35	21	24
7: 4-5	PM	1545	1510	3055	32	19	22
8: 6-7	PM	1378	1243	2621	30	18	20

Vehicle accident records available to the Traffic Engineering Division reveal that: **0** reported signal correctable accidents occurred at this intersection beginning **1/1/2005** and ending: **12/31/2005**

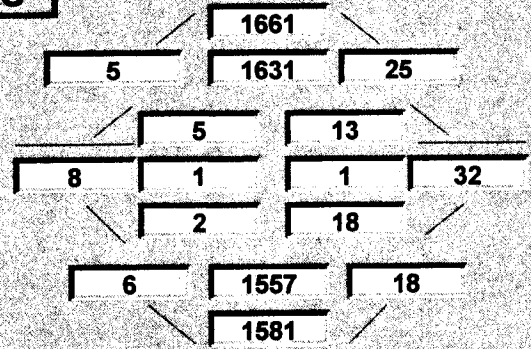
WARRANT 7: YES/NO

NO

TURN COUNT VOLUMES



N



A.M. PEAK HOUR

P.M. PEAK HOUR

TOTAL: **3089**

TOTAL: **3282**

DATE: **5/22/2006**

TIME: **7:30-8:30**

DATE: **5/22/2006**

TIME: **16:30-17:30**



PALM BEACH COUNTY TRAFFIC 2006 SIGNAL STUDY WARRANT LIST - SIGNALS DENIED

RANK	LOCATION	MAIN ST DAILY VOL	SIDE STREET HIGHEST 8 HOUR VOLUMES	
			100%	100%-RT
1	UNIVERSE BL AT ELLISON WILSON RD	11890	1815	1187
2	13TH ST AT AUSTRALIAN AVE	19956	1407	1069
3	HANK AARON DR AT CONGRESS AVE	19378	1051	999
4	PALMETTO PARK RD AT SHOREWIND DR W/BOCA FALLS DR	8452	1016	967
5	GUN CLUB RD AT PBSO/SFWMD	15498	1483	773
6	RIVER WALK LANE AT CENTRAL BLVD	14086	890	762
7	LANTANA RD AT BRENTWOOD BL	40211	1236	662
8	BELVEDERE RD AT PIKE RD	35396	1445	614
9	MELALEUCA LN AT DAVIS RD **	21914	1174	596
10	JFK HOSPITAL CENTER ENTRANCE AT CONGRESS AVE	38511	1056	579
11	LAKE WORTH RD AT BLANCHETTE TR	35811	778	554
12	TARGET DRIVEWAY AT HAGEN RANCH RD	17793	906	544
13	50TH ST/WINDSOR LAKES RD AT SR 7	44540	1007	491
14	DEL VERDE BL AT JOG RD	33758	998	463
15	BELVEDERE RD AT CLEARY RD	34392	1018	461
16	VISTA PARKWAY N AT JOG RD	26430	870	454
17	ROBERTS LN AT CONGRESS AVE	40395	770	437
18	GARDENS BL/IDLEWILD RD AT PROSPERITY FARMS RD ***	16596	951	403
19	GATEWAY BL AT NW 23RD AVE ***	32698	1102	366
20	PALMETTO PARK RD AT SHOREWIND DR E/BOCA FALLS DR	10052	2087	321
21	JUPITER GARDENS BL/CHASEWOOD AT CENTRAL BL *	32218	606	278
22	EQUUS CIR AT LYONS RD	12775	662	269
23	OKEECHOBEE BL AT BENOIST FARMS RD *	55589	1198	246
24	PIPERS GLEN BLVD AT HAGEN RANCH RD ***	10993	429	232
25	WILLOW POND RD AT HAVERHILL RD	32972	642	231
26	GLADES RD AT PONDEROSA DR	9983	1441	152
27	GLADES RD AT ORIOLE COUNTRY RD	14779	1593	110
28	VILLAGE BL/CANAL CT AT US-1	26411	537	88
29	NORTHLAKE BL AT BAYHILL DR	27618	629	79
30	CYPRESS LAKES PRESERVE DR AT SR 7	45231	300	0
31	EARNEST ST AT HAVERHILL RD	33674	196	0
32	FLAVOR PICT RD AT EL CLAIR RANCH RD	5563	1768	0
33	LANTANA RD AT VIA VERMILYA RD/PBC PARK AIRPORT	46524	465	0
34	OKEECHOBEE BL AT D RD	16054	387	0
35	OMAR RD AT LAKE AVE	4298	364	0
36	PALM BEACH LAKES BL AT DIVISION AVE	33975	294	0
37	SONOMA LAKE BL/ S CHARLESTON AT LYONS RD	33723	428	0
38	VISTA DEL LAGO AT LYONS RD	21611	553	0
39	VISTA PARKWAY S AT JOG RD	30777	478	0

- * EXISTING OR FUTURE EMERGENCY SIGNAL
- ** EXISTING SCHOOL SIGNAL
- *** EXISTING OR FUTURE FLASHER CONVERTIBLE

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