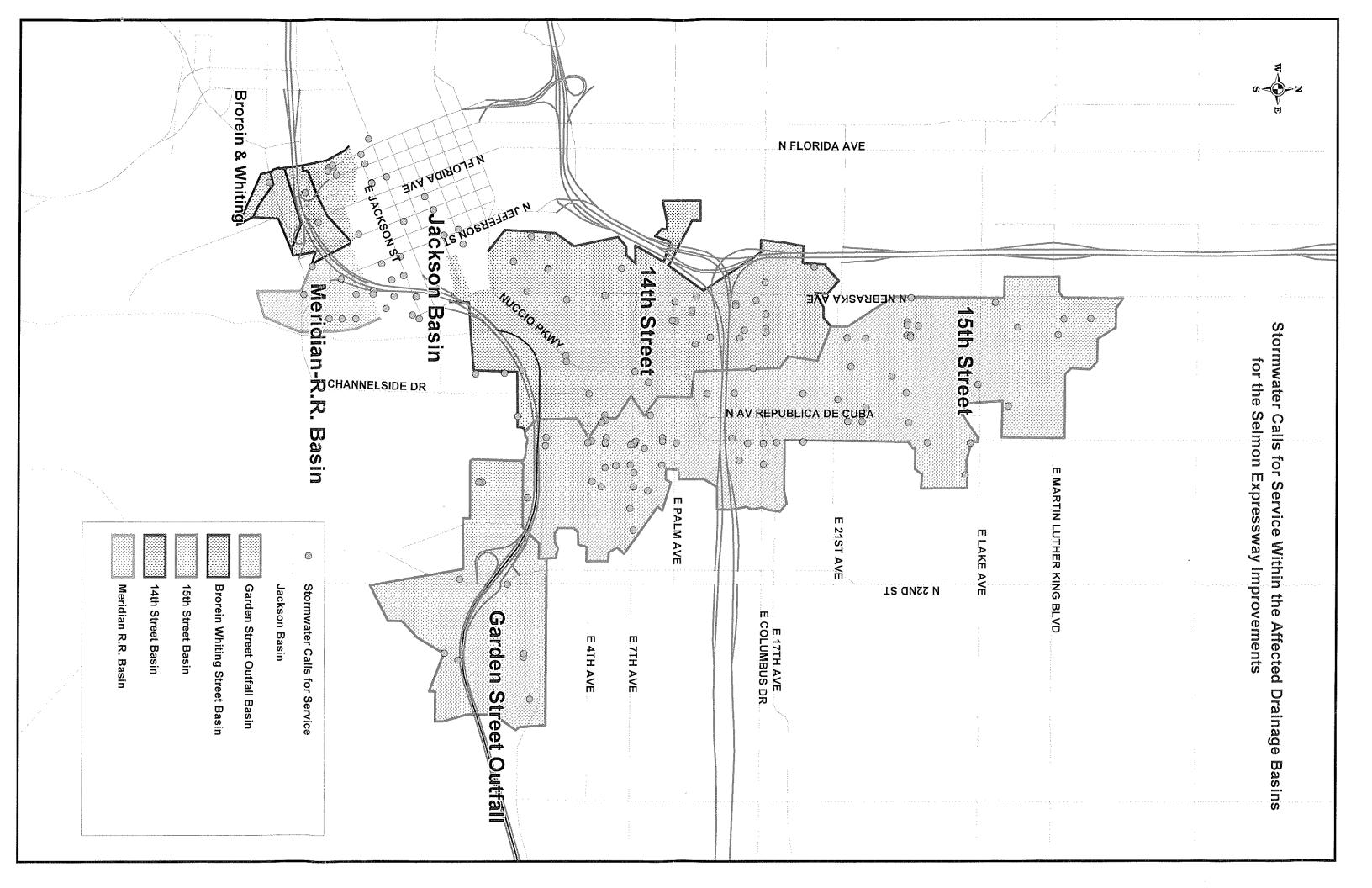
APPENDIX A

Coordination with the City of Tampa's Stormwater Department





Nork_Order_#	Date	MAP_ADDRESS	Problem_Code	Service_Action	Basin_Area
6,452	05/18/2005 12:00:00 AM	100 E WHITING ST		Line Maintenance	Brorein & Whiting Street Basin
6,903	08/29/2005 12:00:00 AM	2 W PLATT ST		Line Maintenance	Brorein & Whiting Street Basin
7,429	03/28/2006 12:00:00 AM	300 E BROREIN ST	the state of the s	Construction	Brorein & Whiting Street Basin
	08/03/2006 12:00:00 AM	100 N TAMPA ST	Cave-In (Pipe, sinkhole, depression)	Construction	Brorein & Whiting Street Basin
	09/05/2006 12:00:00 AM	100 N. ASHLEY, DR.	Structure Repair (manhole cover, inlet top, riser)	Construction	Brorein & Whiting Street Basin
0.000	09/27/2006 12:00:00 AM	102 W WHITING ST	Flooding		Brorein & Whiting Street Basin
	05/01/2007 12:00:00 AM	100 N ASHLEY DR	Structure Repair (manhole cover, inlet top, riser)	Insepection	Brorein & Whiting Street Basin
	07/20/2007 12:00:00 AM	100 S ASHLEY DR	Miscellaneous (anything that doesn't have a code)	Insepection	Brorein & Whiting Street Basin
	03/06/2008 12:00:00 AM	100 S ASHLEY DR	Flooding	System Cleaning	Brorein & Whiting Street Basin
	04/10/2008 12:00:00 AM	100 S ASHLEY DR	Structure Repair (manhole cover, inlet top, riser)	Construction	Brorein & Whiting Street Basin
	06/19/2008 12:00:00 AM	100 S ASHLEY DR	System Cleanig (inlet, catch basin, grate, pipe)	System Cleaning	Brorein & Whiting Street Basin
.,,,,,,,,	244			· · · · · · · · · · · · · · · · · · ·	Brorein & Whiting Street Basin
	11/20/2008 12:00:00 AM	100 E BROREIN ST	Damaged Structure	Construction	an a re- communication of the
	07/05/2009 12:00:00 AM	100 N ASHLEY DR	Miscellaneous	Emergency Response	Brorein & Whiting Street Basin
	07/05/2009 12:00:00 AM	100 N ASHLEY DR	Damaged Structure	Miscellaneous	Brorein & Whiting Street Basin
90000	11/05/2004 12:00:00 AM	100 N BRUSH ST		Line Maintenance	Jackson Basin
6,313	04/08/2005 12:00:00 AM	800 E JACKSON ST		Construction	Jackson Basin
6,439	05/17/2005 12:00:00 AM	300 N BRUSH ST	Cave-In (Pipe, sinkhole, depression)	Line Maintenance	Jackson Basin
6,454	05/20/2005 12:00:00 AM	600 N JEFFERSON ST		Construction	Jackson Basin
6,601	06/29/2005 12:00:00 AM	1011 E WASHINGTON ST		Line Maintenance	Jackson Basin
7,206	01/10/2006 12:00:00 AM	900 E WASHINGTON ST		Construction	Jackson Basin
8,891	10/06/2006 12:00:00 AM	306 E JACKSON ST		Admin-Non Productive ANN/SCK/ELV/FHL/ECT	Jackson Basin
8,892	10/06/2006 12:00:00 AM	306 E JACKSON ST		Admin Productive	Jackson Basin
8,946	10/13/2006 12:00:00 AM	306 E JACKSON ST		-	Jackson Basin
9.233	12/08/2006 12:00:00 AM	306 E JACKSON ST	The second secon	Capital Improvement Project	Jackson Basin
- Company	01/05/2007 12:00:00 AM	306 E JACKSON ST		Capital Improvement Project	Jackson Basin
	01/16/2007 12:00:00 AM	200 N. NEBRASKA AVE.	System Cleanig (inlet, catch basin, grate, pipe)	System Cleaning	Jackson Basin
9,644	04/16/2007 12:00:00 AM	306 E JACKSON ST	CAPITAL IMPROVEMENT PROJECT	Insepection	Jackson Basin
	05/24/2007 12:00:00 AM	600 E KENNEDY BLVD	Curbing (Gutterline maintenance, curbing)	Insepection	Jackson Basin
	06/19/2007 12:00:00 AM	300 E JACKSON ST	Structure Repair (manhole cover, inlet top, riser)	Insepaction	Jackson Basin
	07/11/2007 12:00:00 AM	306 E JACKSON ST	CAPITAL IMPROVEMENT PROJECT	Capital Improvement Project	Jackson Basin
	07/17/2007 12:00:00 AM	808 E ZACK ST		Insepection	Jackson Basin
		The state of the s	Flooding	ilisepection	Jackson Basin
	07/30/2007 12:00:00 AM	308 E JACKSON ST	·		
	07/30/2007 12:00:00 AM	308 E JACKSON ST		and the second s	Jackson Basin
	07/30/2007 12:00:00 AM	308 E JACKSON ST			Jackson Basin
	08/09/2007 12:00:00 AM	300 E KENNEDY BLVD	Structure Repair (manhole cover, inlet top, riser)	Construction	Jackson Basin
	08/21/2007 12:00:00 AM	306 E JACKSON ST	Security of a Miles Miles		Jackson Basin
10,593	08/30/2007 12:00:00 AM	306 E JACKSON ST	CAPITAL IMPROVEMENT PROJECT	Capital Improvement Project	Jackson Basin
10,865	11/16/2007 12:00:00 AM	600 E TWIGGS ST	Structure Repair (manhole cover, inlet top, riser)	Structure Repair Manhole Cover Repair	Jackson Basin
11,589	05/30/2008 12:00:00 AM	505 E TWIGGS ST	Miscellaneous (anything that doesn't have a code)	Inspection	Jackson Basin
12,127	07/18/2008 12:00:00 AM	306 E JACKSON ST	Damaged Structure	Inspection	Jackson Basin
12,131	07/18/2008 12:00:00 AM	100 W KENNEDY BLVD	Damaged Structure	Inspection	Jackson Basin
12,359	08/04/2008 12:00:00 AM	500 N JEFFERSON ST	Standing Water	Inspection	Jackson Basin
12,775	11/06/2008 12:00:00 AM	1205 E JACKSON ST	Erosion	Line Maintenance	Jackson Basin
	01/12/2009 12:00:00 AM	100 N MORGAN ST	Damaged Structure	Construction	Jackson Basin
***************************************	01/20/2009 12:00:00 AM	300 N TAMPA ST	Cave-In	Inspection	Jackson Basin
	01/30/2009 12:00:00 AM	107 S NEBRASKA AVE	Damaged Structure	Construction	Jackson Basin
	03/23/2009 12:00:00 AM	801 E WASHINGTON ST	Damaged Structure	Construction	Jackson Besjin
The same of the sa	06/26/2009 12:00:00 AM	306 E JACKSON ST	Damaged Structure	Miscellaneous	Jackson Basin
	08/06/2009 12:00:00 AM	905 E JACKSON ST	- Committee of the comm	Construction	Jackson Basin
	10/16/2009 12:00:00 AM	100 E JACKSON ST	Damaged Structure	The state of the s	Jackson Basin
TAILS COMMISSION		- y // // // //	Damaged Structure	Inspection	
	05/06/2005 12:00:00 AM	350 S JEFFERSON ST	When the state of	Misc. Wk not coverd under another service action	Meridian / R.R. Basin
	05/17/2005 12:00:00 AM	300 S CAESAR ST		Construction	Meridian / R.R. Basin
	07/12/2005 12:00:00 AM	500 Channelside Dr		Construction	Meridian / R.R. Basin
	03/29/2006 12:00:00 AM	400 S CAESAR ST	THE STATE OF THE S	Line Maintenance	Meridian / R.R. Basin
7,434	03/29/2006 12:00:00 AM	200 S CAESAR ST	and the second s	Construction	Meridian / R.R. Basin
11,399	04/07/2008 12:00:00 AM	649 E EUNICE AVE	Standing Water		Meridian / R.R. Basini
12 010	01/09/2009 12:00:00 AM	200 S NEBRASKA AVE	Damaged Structure		Meridian / R.R. Basin

ork_Order_#	Date	MAP_ADDRESS	Problem_Code	Service_Action	Basin_Area
2,633	01/28/2004 12:00:00 AM	1000 NELSON CT		Line Maintenance	14th Street Basin
5,238	07/20/2004 12:00:00 AM	1000 INDIA ST		Line Maintenance	14th Street Basin
5,986	12/06/2004 12:00:00 AM	800 E COLUMBUS DR		Construction	14th Street Basin
- man	01/11/2005 12:00:00 AM	1611 N NEBRASKA AVE		Construction	14th Street Basin
6.227	03/15/2005 12:00:00 AM	915 E 11TH AVE		Line Maintenance	14th Street Basin
	05/10/2005 12:00:00 AM	913 E 11TH AVE	The state of the s	Line Maintenance	14th Street Basin
	06/23/2005 12:00:00 AM	930 E 11TH AVE	The state of the s	Line Maintenance	14th Street Basin
4 March 17 17 17 17 17 17 17 17 17 17 17 17 17	06/23/2005 12:00:00 AM	1004 E 12TH AVE	чения	Line Maintenance	14th Street Basin
W- 49/4W-	06/27/2005 12:00:00 AM	1600 N AV REPUBLICA DE CUBA	эмгий так сырынаны пинанананын сырыны сырынын сырын сы	Line Maintenance	14th Street Basin
mree	07/07/2005 12:00:00 AM	914 E 14TH AVE		Construction	14th Street Basin
	07/12/2005 12:00:00 AM	2500 N 10TH ST		Construction	14th Street Basin
	09/05/2005 12:00:00 AM	1202 E HARRISON ST		Line Maintenance	14th Street Basin
	02/21/2006 12:00:00 AM	922 E 14TH AVE		w//	14th Street Basin
		PROVINCE AND ADDRESS OF THE PR		Construction	
	02/21/2006 12:00:00 AM	922 E 14TH AVE		Construction	14th Street Basin
· · · · · · · · · · · · · · · · · · ·	07/11/2006 12:00:00 AM	1242 INDIA ST	P*1	Line Maintenance	14th Street Basin
	08/21/2006 12:00:00 AM	701 E. ROBLES ST.	Flooding	Miscellaneous	14th Street Basin
	09/05/2006 12:00:00 AM	701 E ROBLES ST	System Cleanig (inlet, catch basin, grate, pipe)	-	14th Street Basin
20 a 7 in a paperne	09/05/2006 12:00:00 AM	900 E PALM AVE	Structure Repair (manhole cover, inlet top, riser)	Construction	14th Street Basin
1/1	09/05/2006 12:00:00 AM	1244 INDIA ST	System Cleanig (inlet, catch basin, grate, pipe)	System Cleaning	14th Street Basin
8,515	09/06/2006 12:00:00 AM	2700 N. 10TH ST.	System Cleanig (inlet, catch basin, grate, pipe)	System Cleaning	14th Street Basin
8,947	10/13/2006 12:00:00 AM	1002 E PALM AVE	Structure Repair (manhole cover, inlet top, riser)		14th Street Basin
9,040	11/02/2006 12:00:00 AM	1002 E 14TH AVE	Structure Repair (manhole cover, inlet top, riser)	Construction	14th Street Basin
9,461	02/28/2007 12:00:00 AM	1800 N 14TH ST	Structure Repair (manhole cover, inlet top, riser)	Construction	14th Street Basin
9,596	04/04/2007 12:00:00 AM	1400 E 5TH AVE	Structure Repair (manhole cover, inlet top, riser)	Construction	14th Street Basin
9,755	05/14/2007 12:00:00 AM	1100 N NEBRASKA AVE	TV Inspection	T.V. Inspection	14th Street Basin
9,984	06/28/2007 12:00:00 AM	1542 NUCCIO PKWY	Structure Repair (manhole cover, inlet top, riser)	Insepection	14th Street Basin
10,042	07/03/2007 12:00:00 AM	900 E 15TH AVE	Miscellaneous (anything that doesn't have a code)		14th Street Basin
10,269	07/24/2007 12:00:00 AM	701 E ROBLES ST	Flooding	Insepection	14th Street Basin
The second secon	07/26/2007 12:00:00 AM	1415 E 5TH AVE	TV Inspection	T.V. Inspection	14th Street Basin
- war and the second	07/26/2007 12:00:00 AM	1200 E TWIGGS ST	Structure Repair (manhole cover, inlet top, riser)	Construction	14th Street Basin
The state of the s	07/30/2007 12:00:00 AM	1001 E PALM AVE	Cave-In (Pipe, sinkhole, depression)	Insepection	14th Street Basin
or the recommendation of the recommendation	08/02/2007 12:00:00 AM	635 N 12TH ST	System Cleanig (inlet, catch basin, grate, pipe)	Insepection	14th Street Basin
~	08/28/2007 12:00:00 AM	1800 NUCCIO PKWY	TV Inspection	Insepection	14th Street Basin
a a cara a servicio a cara a secución municipal	08/29/2007 12:00:00 AM	1417 TAMPA PARK PLZ	Structure Repair (manhole cover, inlet top, riser)	Insepection	14th Street Basin
war and the same of the same o	01/31/2008 12:00:00 AM	1236 E 8TH AVE	Structure Repair (manhole cover, inlet top, riser)	Insepection	14th Street Basin
	03/27/2008 12:00:00 AM	802 N 12TH ST	Cave-In (Pipe, sinkhole, depression)	Construction	14th Street Basin
mer comprise over the extension	05/21/2008 12:00:00 AM	732 E HENDERSON AVE		System Cleaning	14th Street Basin
	09/25/2008 12:00:00 AM	2105 N NEBRASKA AVE	System Cleanig (inlet, catch basin, grate, pipe)	- Commenter the same that the same the	remains the company of anomaly remains an analysis of the company
			Clogged Pipe or Inlet	Inspection	14th Street Basin
	10/15/2008 12:00:00 AM	2612 N 12TH ST	Damaged Structure	Construction	14th Street Basin
	06/10/2009 12:00:00 AM	102 E 4TH AVE	Cave-In	Construction	14th Street Basin
	06/26/2009 12:00:00 AM	1577 NUCCIO PKWY	Miscellaneous	The Additional Control of the Contro	14th Street Basin
	07/23/2009 12:00:00 AM	2701 N 9TH ST	Clogged Pipe or Inlet	Line Maintenance	14th Street Basin
L. 1 V.	10/15/2009 12:00:00 AM	2703 N 10TH ST	Damaged Structure	Construction	14th Street Basin
	08/29/2007 12:00:00 AM	110 S NEBRASKA AVE	Structure Repair (manhole cover, inlet top, riser)	Construction	Jackson Basin
	07/02/2003 12:00:00 AM	1616 PENNY ST		Cave-In Pipe Sinkhole or Depression	15th Street Basin
5,852	10/14/2004 12:00:00 AM	1018 E 32ND AVE		Line Maintenance	15th Street Basin
VI. 11. 11. 11. 11. 11. 11. 11. 11. 11. 1	11/05/2004 12:00:00 AM	1616 PENNY ST	name and the second	Construction	15th Street Basin
5,955	11/12/2004 12:00:00 AM	1500 E 5TH AVE	Language many to proceed the control of the control	Construction	15th Street Basin
6,130	02/04/2005 12:00:00 AM	1916 N AV REPUBLICA DE CUBA		Construction	15th Street Basin
6,140	02/09/2005 12:00:00 AM	1500 E 7TH AVE		SPECIAL EVENT MAINTENANCE	15th Street Basin
6,149	02/12/2005 12:00:00 AM	1700 E 7TH AVE		Construction	15th Street Basin
6,204	03/07/2005 12:00:00 AM	1500 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
6,252	03/22/2005 12:00:00 AM	1401 E 23RD AVE		Construction	15th Street Basin
6,273	03/28/2005 12:00:00 AM	1500 E 5TH AVE		Construction	15th Street Basin
6,291	04/05/2005 12:00:00 AM	908 E NORTH BAY ST		Line Maintenance	15th Street Basin
	04/14/2005 12:00:00 AM	1501 N 15TH ST		Construction	15th Street Basin
	05/18/2005 12:00:00 AM	1500 E 5TH AVE		Construction	15th Street Basin

Work_Order_#	Date	MAP_ADDRESS	Problem_Code	Service_Action	Basin_Area
6,	512 06/09/2005 12:00:00 A	M 1002 E 23RD AVE		Line Maintenance	15th Street Basin
6,	552 06/23/2005 12:00:00 A	M 2900 N 13TH ST	The state of the s	Construction	15th Street Basin
6,8	559 06/23/2005 12:00:00 A	M 1701 E 5TH AVE	The state of the s	Emergency response before, during & after a storm	15th Street Basin
6,0	610 06/30/2005 12:00:00 Al	M 1500 E 7TH AVE		Preventive Maintenance	15th Street Basin
6,0	694 07/13/2005 12:00:00 A	1600 E 9TH AVE		Construction	15th Street Basin
6,3	726 07/20/2005 12:00:00 Al	M 2701 N 16TH ST	and the same	Line Maintenance	15th Street Basin
6,8	891 08/26/2005 12:00:00 Al	M 1305 E LOUISE AVE		Line Maintenance	15th Street Basin
6,9	954 09/08/2005 12:00:00 Al	900 E 26TH AVE		Construction	15th Street Basin
6,9	960 09/09/2005 12:00:00 Al	1506 E 5TH AVE		Construction	15th Street Basin
6.9	968 09/14/2005 12:00:00 AI	Л 3413 N 15th St		Construction	15th Street Basin
6,9	990 09/22/2005 12:00:00 AI	1616 PENNY ST	TV Inspection	T.V. Inspection	15th Street Basin
	058 10/24/2005 12:00:00 Al			SPECIAL EVENT MAINTENANCE	15th Street Basin
	085 11/09/2005 12:00:00 Al		(HA-1-1 - 0.00)-0-0-1-0-0 (H-1-1-1-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-	Construction	15th Street Basin
	091 11/10/2005 12:00:00 Al	=0110 14#uluhununn#17454	and the second section of the second section of the second	Line Maintenance	15th Street Basin
	200 01/09/2006 12:00:00 AI		· Harring Manager 1997	Construction	15th Street Basin
	207 01/10/2006 12:00:00 AI	The second secon		Construction	15th Street Basin
	208 01/10/2006 12:00:00 Al	The state of the s		Line Maintenance	15th Street Basin
	216 01/12/2006 12:00:00 Al		Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
- 1-1-	295 02/07/2006 12:00:00 At		on out office pring	SPECIAL EVENT MAINTENANCE	15th Street Basin
	318 02/11/2006 12:00:00 At	***************************************		Street Sweeping and Bobcat Work	15th Street Basin
-	355 02/21/2006 12:00:00 Al	To contract the contract of th	VII	Line Maintenance	15th Street Basin
	380 03/07/2006 12:00:00 Al	The state of the s		1 271174 1211 121	The same and the same of the s
	385 03/08/2006 12:00:00 Al	The least of the l		Construction	15th Street Basin
	424 03/24/2006 12:00:00 Al			SPECIAL EVENT MAINTENANCE	15th Street Basin
The state of the s	479 04/17/2006 12:00:00 Ai			Preventive Maintenance	15th Street Basin
				Miscellaneous	15th Street Basin
	511 04/27/2006 12:00:00 AI			SPECIAL EVENT MAINTENANCE	15th Street Basin
	533 05/10/2006 12:00:00 Al	e versioners teams value	One Is (Plan shall be a second a)	Construction	15th Street Basin
	176 08/23/2006 12:00:00 Al	- To a resident of the country of th	Cave-In (Pipe, sinkhole, depression)	Construction	15th Street Basin
	449 09/05/2006 12:00:00 Af	1 10000	System Cleanig (inlet, catch basin, grate, pipe)		15th Street Basin
	967 10/18/2006 12:00:00 AM	CONTRACTOR DESCRIPTION OF THE PROPERTY OF THE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
	033 11/01/2006 12:00:00 AM		Standing Water		15th Street Basin
	072 11/07/2006 12:00:00 AM	The second secon	Preventive Maintenance	Preventive Maintenance	15th Street Basin
	203 11/30/2006 12:00:00 AM		Cave-In (Pipe, sinkhole, depression)	Cave-In Pipe Sinkhole or Depression	15th Street Basin
	216 12/05/2006 12:00:00 Af		Structure Repair (manhole cover, inlet top, riser)	Construction	15th Street Basin
	274 01/02/2007 12:00:00 AM		Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
	283 01/04/2007 12:00:00 AM		Structure Repair (manhole cover, inlet top, riser)	· VIII	15th Street Basin
	295 01/09/2007 12:00:00 AM		Miscellaneous (anything that doesn't have a code)	Miscellaneous	15th Street Basin
	309 01/15/2007 12:00:00 AM	//	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
	335 01/23/2007 12:00:00 AM	Walled Andrews and	Structure Repair (manhole cover, inlet top, riser)	Construction	15th Street Basin
5	401 02/13/2007 12:00:00 AM		Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	584 04/02/2007 12:00:00 AM		Cave-In (Pipe, sinkhole, depression)	Construction	15th Street Basin
	638 04/15/2007 12:00:00 AM	The second secon	Flooding		15th Street Basin
	776 05/17/2007 12:00:00 AM		Street Sweeping	Insepection	15th Street Basin
	914 06/14/2007 12:00:00 AM		Standing Water	Insepection	15th Street Basin
	915 06/14/2007 12:00:00 AM		Structure Repair (manhole cover, inlet top, riser)	Construction	15th Street Basin
10,1	179 07/19/2007 12:00:00 AM	1510 N 17TH ST	System Cleanig (inlet, catch basin, grate, pipe)		15th Street Basin
10,1	193 07/21/2007 12:00:00 AM	VI 4-12-34114 4-16-37-	Flooding	Emergency Response	15th Street Basin
10,3	319 07/28/2007 12:00:00 AM	1 1900 E 7TH AVE	Structure Repair (manhole cover, inlet top, riser)	- 14 - 15 - 15 - 15 - 15 - 15 - 15 - 15	15th Street Basin
	492 08/16/2007 12:00:00 AM	· · · · · · · · · · · · · · · · · · ·	Flooding	Insepection	15th Street Basin
10,5	578 08/29/2007 12:00:00 AM	1306 E 23RD AVE	Flooding	Insepection	15th Street Basin
10,7	784 10/23/2007 12:00:00 AM	1 1500 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
10,9	964 12/21/2007 12:00:00 AM	1 1801 E 7TH AVE	Structure Repair (manhole cover, inlet top, riser)	Structure Repair Manhole Cover Missing	15th Street Basin
10,9	981 01/01/2008 12:00:00 AM	1 1500 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
11,0	064 01/25/2008 12:00:00 AN	2508 N 16TH ST	Flooding	Inspection	15th Street Basin
11,1	104 02/11/2008 12:00:00 AM	1515 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
11,2	245 03/11/2008 12:00:00 AN	1650 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
44.0	316 03/25/2008 12:00:00 AM	1 2306 N 13TH ST	Cave-In (Pipe, sinkhole, depression)	Insepection	15th Street Basin

Vork_Order_#	Date	MAP_ADDRESS	Problem_Code	Service_Action	Basin_Area
11,473	04/24/2008 12:00:00 AM	1510 E 7TH AVE	Street Sweeping	SPECIAL EVENT MAINTENANCE	15th Street Basin
11,697	06/16/2008 12:00:00 AM	2502 N 15TH ST	Structure Repair (manhole cover, inlet top, riser)	Inspection	15th Street Basin
11,957	07/10/2008 12:00:00 AM	3618 N 16TH ST	Damaged Structure	Inspection	15th Street Basin
11,999	07/15/2008 12:00:00 AM	1601 E 7TH AVE	Cave-In	Construction	15th Street Basin
12,195	07/28/2008 12:00:00 AM	1200 N 15TH ST		Preventive Maintenance	15th Street Basin
12,620	09/10/2008 12:00:00 AM	1217 E 26TH AVE	Cave-In	Inspection	15th Street Basin
12,639	09/18/2008 12:00:00 AM	1500 E 5TH AVE	Cave-In	Construction	15th Street Basin
12,729	10/16/2008 12:00:00 AM	1500 E 7TH AV	Street Sweeping	Special Events	15th Street Basin
12,944	01/20/2009 12:00:00 AM	1515 E 7TH AVE	Street Sweeping	Special Events	15th Street Basin
12,952	01/21/2009 12:00:00 AM	1501 E 4TH AVE	Damaged Structure	Inspection	15th Street Basin
13,047	02/12/2009 12:00:00 AM	1724 E 8TH AVE	Cave-In	Construction	15th Street Basin
13,102	03/04/2009 12:00:00 AM	1515 E 7TH AVE	Street Sweeping	Special Events	15th Street Basin
13,213	04/09/2009 12:00:00 AM	1210 E 25TH AVE	Cave-In	Inspection	15th Street Basin
13,358	05/14/2009 12:00:00 AM	1515 E 8TH AVE	Clogged Pipe or Inlet	Line Maintenance	15th Street Basin
13,640	06/04/2009 12:00:00 AM	1501 E 4TH AVE	Cave-In	Inspection	15th Street Basin
13,720	06/22/2009 12:00:00 AM	1001 E 22ND AVE	Standing Water	Inspection	15th Street Basin
13,762	06/27/2009 12:00:00 AM	1006 E 26TH AVE	Flooding	Emergency Response	15th Street Basin
14,229	08/06/2009 12:00:00 AM	1215 E LAKE AVE	Damaged Structure	Construction	15th Street Basin
14,398	09/04/2009 12:00:00 AM	1200 N 15TH ST		Preventive Maintenance	15th Street Basin
14,504	09/23/2009 12:00:00 AM	2901 N 15TH ST	Cave-In	Construction	15th Street Basin
14,528	09/30/2009 12:00:00 AM	3000 N 12TH ST	Standing Water	Inspection	15th Street Basin
14,582	10/20/2009 12:00:00 AM	1700 E 7TH AVE	Street Sweeping	Special Events	15th Street Basin
14,621	10/29/2009 12:00:00 AM	1016 E 26TH AVE	Cave-In	Construction	15th Street Basin
11,051	01/22/2008 12:00:00 AM	919 E 26TH AVE	System Cleanig (inlet, catch basin, grate, pipe)	Insepection	15th Street Basin
12,886	12/29/2008 12:00:00 AM	1502 E COLUMBUS DR	Standing Water	Inspection	15th Street Basin
6,445	05/18/2005 12:00:00 AM	1200 N 28TH ST		Line Maintenance	Garden Street O/F Basin
6,677	07/12/2005 12:00:00 AM	400 N 26TH ST		Construction	Garden Street O/F Basin
7,322	02/14/2006 12:00:00 AM	1600 SAHLMAN DR		Preventive Maintenance	Garden Street O/F Basin
7,921	08/03/2006 12:00:00 AM	1101 N. 26TH ST.	Standing Water		Garden Street O/F Basin
8,302	08/29/2006 12:00:00 AM	1601 SAHLMAN DR.	Washout (Washout, erosion edge pavement)		Garden Street O/F Basin
9,068	11/07/2006 12:00:00 AM	1100 N 26TH ST	Preventive Maintenance	Preventive Maintenance	Garden Street O/F Basin
9,499	03/08/2007 12:00:00 AM	2600 LONG ST	Structure Repair (manhole cover, inlet top, riser)		Garden Street O/F Basin
12,191	07/28/2008 12:00:00 AM	1100 N 26TH ST		Preventive Maintenance	Garden Street O/F Basin
	08/20/2008 12:00:00 AM	1101 N 26TH ST	Clogged Pipe or Inlet	Line Maintenance	Garden Street O/F Basin
	03/03/2009 12:00:00 AM	500 N 22ND ST	Damaged Structure	Inspection	Garden Street O/F Basin
14,063	07/24/2009 12:00:00 AM	1103 N 22ND ST	Ditch Issue	Inspection	Garden Street O/F Basin
14,394	09/04/2009 12:00:00 AM	1100 N 26TH ST		Preventive Maintenance	Garden Street O/F Basin



APPENDIX B

Drainage Photos









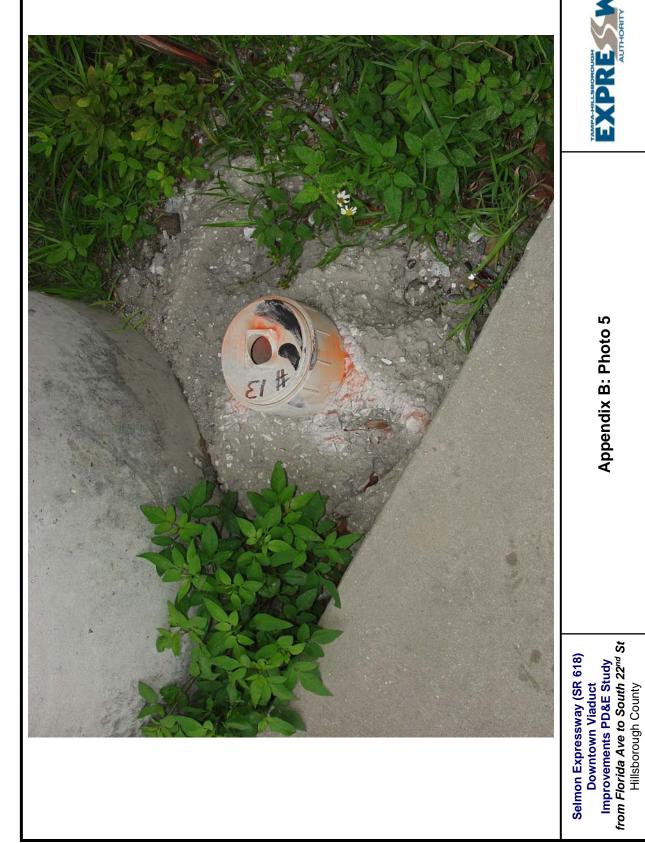
EXPRE STATEMENT

















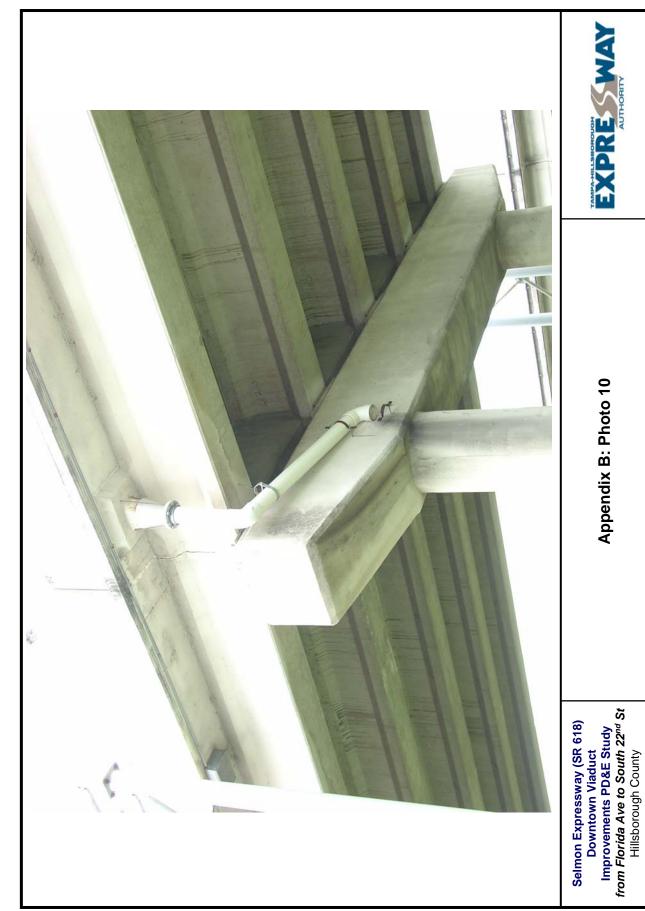


EXPRESMENTY AUTHORITY















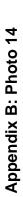






EXPRESMAN





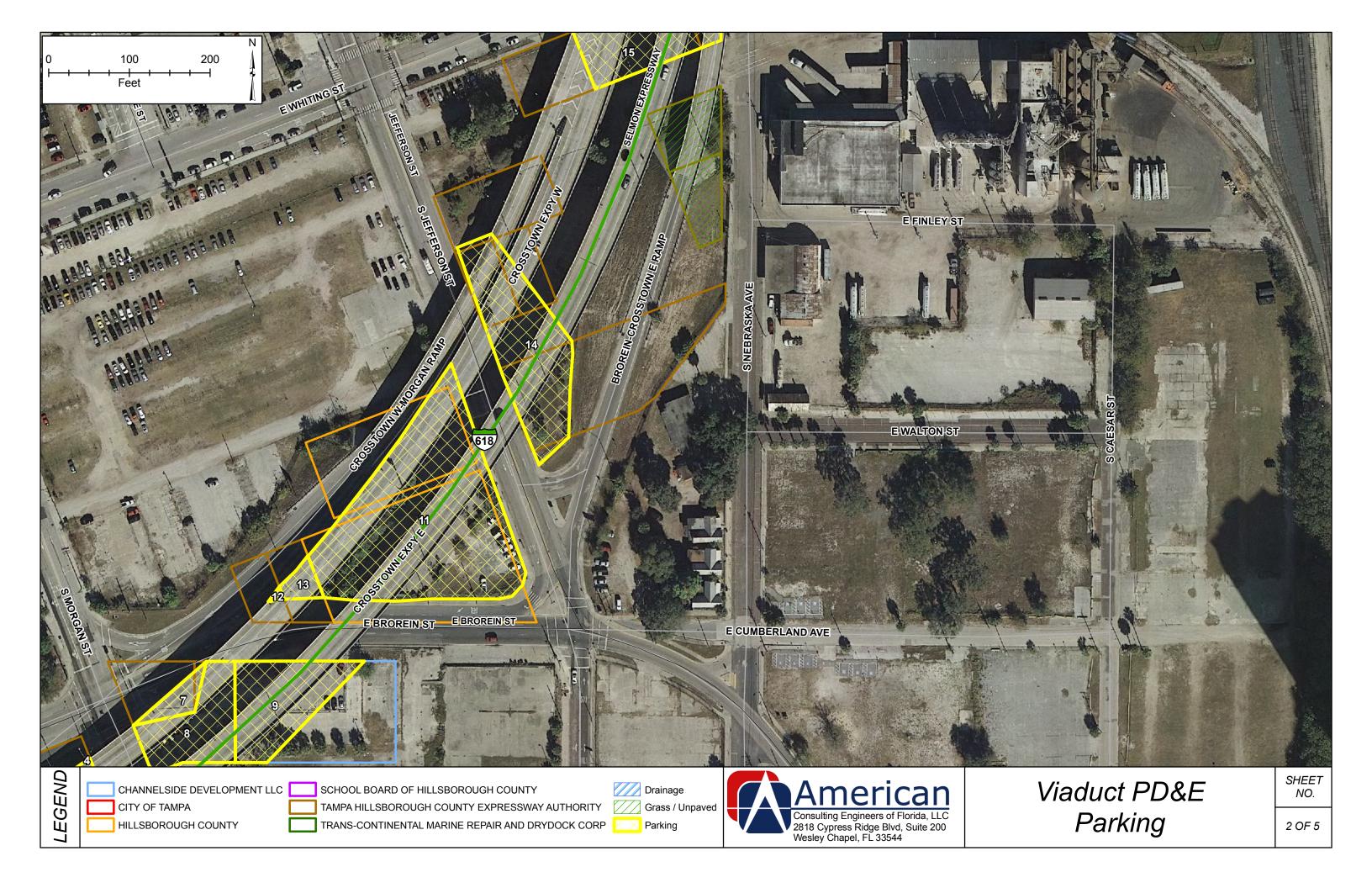


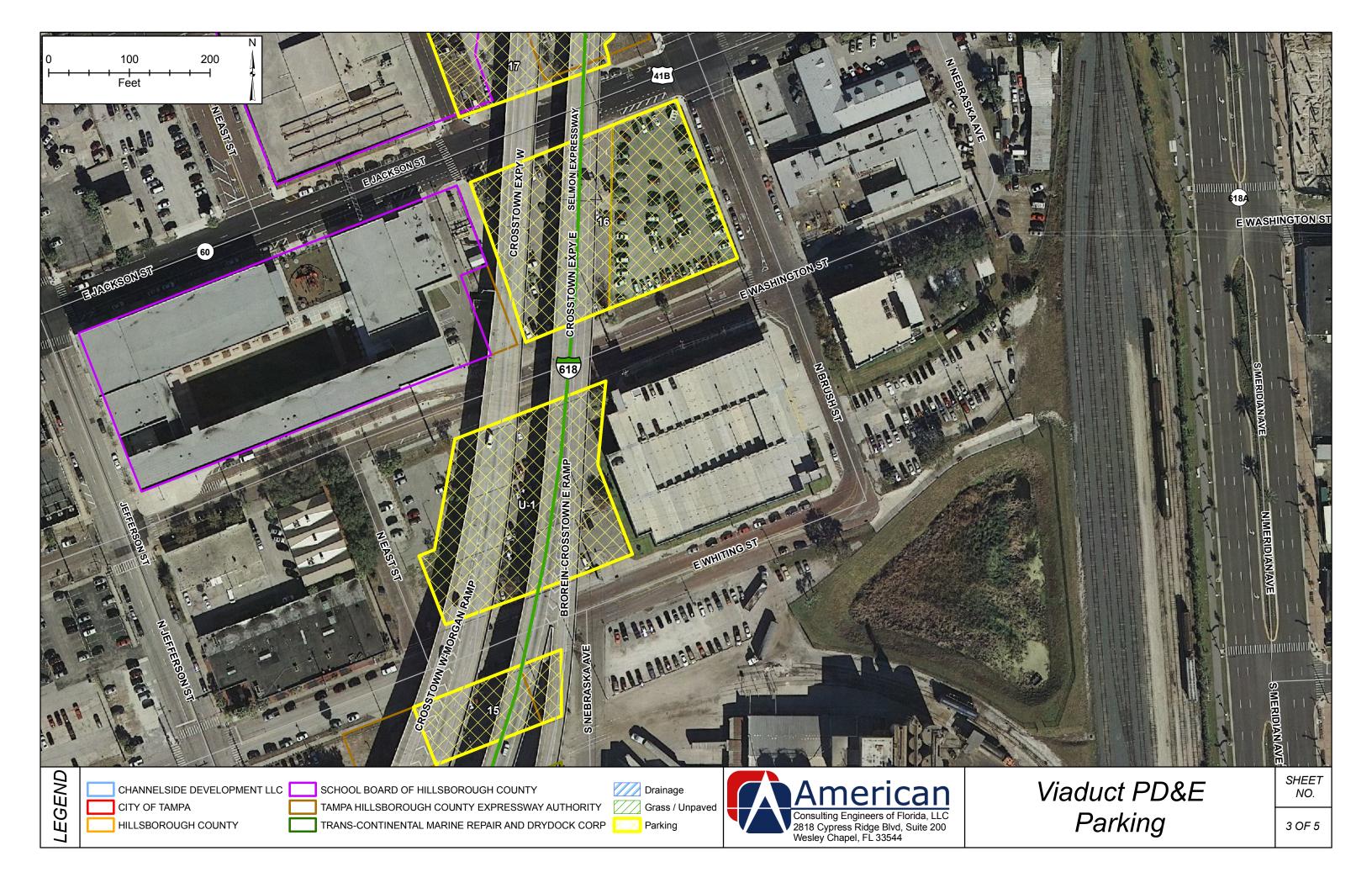
APPENDIX C

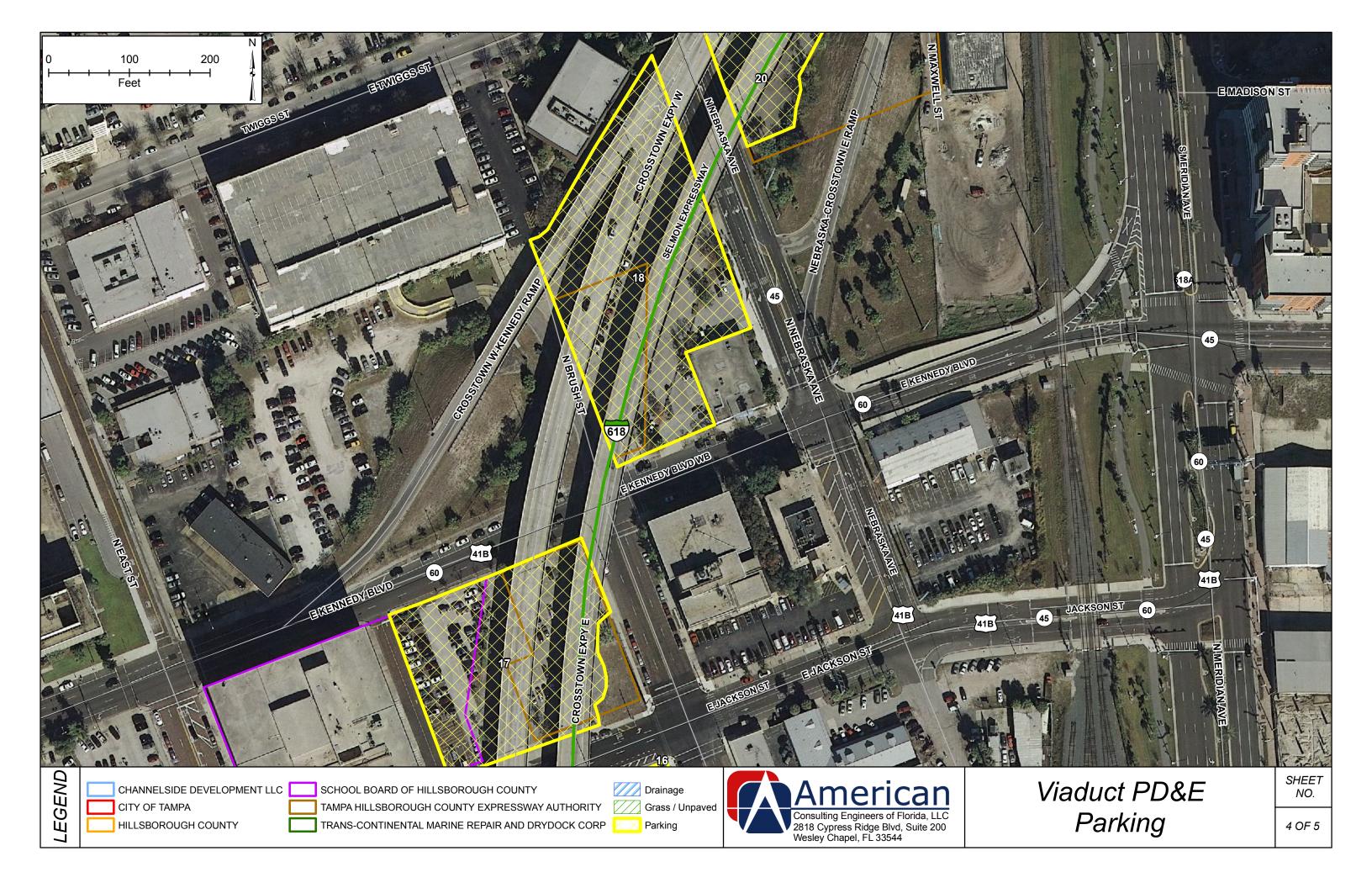
Parking Property Layouts

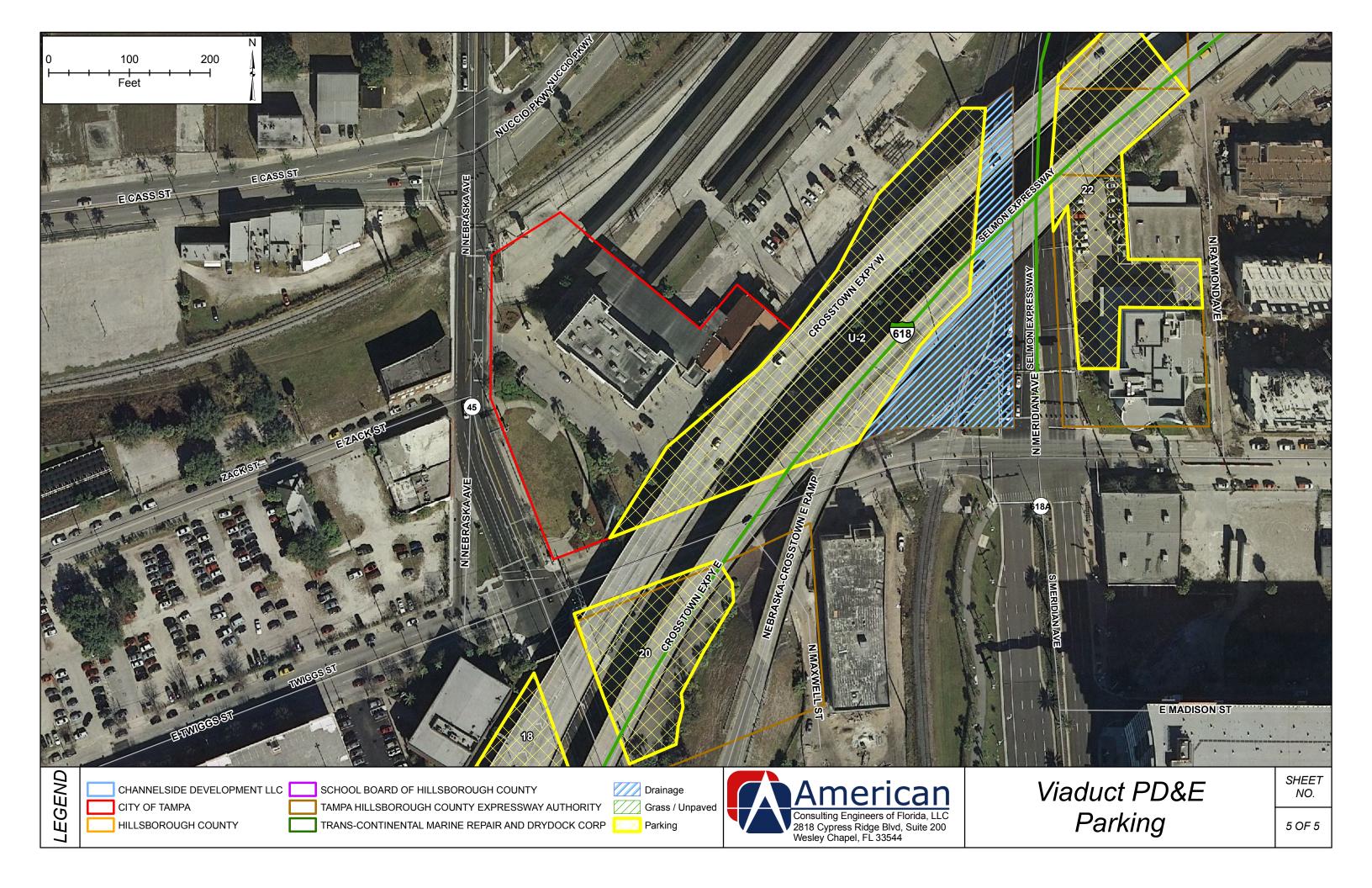














APPENDIX D Drainage Meeting Notes





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MEETING MINUTES

Meeting Date:July 2, 2009Date Issued:July 10, 2009Location:City of Tampa, Municipal Services Building 6th Floor Conference RoomProject Name:Downtown Viaduct Improvements PD&E Study (+Gandy Connector PD&E Study)Purpose:Stormwater Management & Drainage Req's - Approach/Partnering DiscussionsNotes by:Rick SowersAmerican Project #:5099618 (+5089600)Copies to:Attendees; Jeff Novotny, Jai Ramkissoon, ACE files

Attendees Charles "Chuck" Walter, P.G.	Representing City of Tampa (City)	<u>Phone</u>	Fax or e-mail
Brent A. Morris, P.E. Marty Stone	City of Tampa, Stormwater Dept. Tampa-Hillsborough Expressway Authority (THEA)	813-274-7446 813-272-6740	brent.morris@tampagov.net marty@tampa-xway.com
David Bredahl, AICP	American Consulting Engineers of FL (ACE)	813-435-2701	dbredahl@ace-fla.com
Rick Sowers, P.E.	American Consulting Engineers of FL	813-435-2658	rsowers@ace-fla.com

The following notes reflect our understanding of the discussions and decisions made at this meeting. If you have any questions, additions or comments, please contact us at the above address. We will consider the minutes to be accurate unless written notice is received within 10 working days of the date issued.

The purpose of this meeting was to discuss the approach to stormwater management/environmental resource permitting needs for the proposed downtown viaduct improvements. Based on the discussions that we had, it also served as a follow-up update to an earlier "kick-off" exploratory meeting (held May 6, 2009 with the City's Stormwater Department for the THEA Gandy Connector PD&E Study) at which the THEA and American approached the City in regards to the stormwater management needs for the proposed Gandy Connector improvements. Given the informal nature of these early discussions on 5/6/2009, an agenda was not prepared, but the topics generally covered the following points:

[Meeting Notes for 5/6/2009 – Gandy Boulevard]

- Project limits and PD&E study scope were discussed in general.
- The begin project ties into the existing Gandy Bridge, then a new raised 2-lane/2-way bridge continues to the Selmon Expressway. The end project ties into the existing interchange with access to surface streets.
- Three surface road alternatives considering proposed roundabouts at the Westshore Boulevard and Manhattan Avenue intersections (alternatives=one location only/second location only/both locations).
- Two project sub-basins (defined during earlier SWFWMD coordination) were noted to be divided
 at the existing railroad grade. West of the railroad, only treatment of stormwater runoff from the
 new impervious areas will be required, due to the presence of the tidally influenced "Gandy
 Flume" outfall. East of the railroad, both treatment and attenuation will be required.

- Preliminary TMDL based SMF volume/area estimates were done. For the 3 alternatives west of
 the railroad, the area needed was estimated to be between 8.2 and 10.6 acres, assuming a
 single area. For the area east of the railroad, the estimated SMF area was noted to be 4.9 ac.
- Mr. Stone expressed the desire to address the treatment needs, especially for the western portion of the project, with a regional/cooperative approach with the City. Rather than having a piecemeal approach that is generally anticipated to be a right-of-way acquisition intensive solution, the THEA's desire is to provide funding to the City such that any stormwater related projects or other cooperative development activities in the same watershed could be advanced to construction. In exchange, new stormwater treatment would be provided for impervious areas that would otherwise contribute untreated runoff into Tampa Bay, which would be of adequate size to equivalently account for the proposed THEA improvements.
- It is anticipated that the FDOT/THEA existing SMF areas in the existing Selmon Expressway interchange area will be utilized to the fullest extent practical for the proposed improvements. Plans and calculations for the relatively recent modifications to these ponds will be needed to estimate the benefit of further reconfiguration.

This meeting was similar in nature to the Gandy Connector's initial 5/6/2009 meeting, yet it focused on the THEA's proposed downtown viaduct improvements, and allowed the City to report on some of their findings resulting from that previous meeting. The proposed downtown viaduct project generally consists of widening the existing structures from 2 to 3 lanes, adding bridge deck to the middle in each direction. No additional right-of-way will be acquired, and after the widening has been done, traffic would be shifted to the new lanes to allow for existing deck replacement for certain portions of the viaduct. The MOT plan benefit of allowing this phasing to occur was an important factor defining the scope of these proposed improvements. After a general introduction of the project limits by Mr. Stone, the following points were discussed:

[Meeting Notes for 7/2/2009 – Downtown Viaduct]

- Again, the THEA expressed the desire to address the environmental resource permitting needs
 with a regional/cooperative approach with the City. Rather than having a piecemeal approach
 that is generally anticipated to be a right-of-way acquisition intensive solution, the THEA's desire
 is to provide funding to the City such that any stormwater related projects or other cooperative
 development activities in the same watershed could be advanced to construction. In exchange,
 the stormwater management needs of the THEA for the proposed improvements are satisfied
 on an equivalent/compensatory basis.
- The THEA owns many downtown parcels/parking areas that do not currently provide adequate stormwater management facilities and therefore could enter into further discussions.
- The City also owns surface parking areas, as well as parking garages. The surface lots were generally described as being very old and highly compacted shell/open areas, where there are no existing treatment/attenuation systems. The idea of redeveloping/resurfacing these areas was discussed as being beneficial to the City, to improve appearance and user experience, and be an upgrade to the existing condition, to the environment/receiving surface waters, to provide current state-of-the art BMP's such as pervious pavement and re-grading, and the THEA, to provide the environmental resource permitting needs to the maximum extent possible for the subject project(s).
- It was noted that the current drainage system for the existing viaduct is generally in disrepair.
 Many of the downspout/piping systems have been modified to be different from their intended
 discharge points, which have resulted in flow patterns that are in need of improvement. Bayside
 Engineering will be addressing the existing drainage systems for this study. The addition of
 proposed BMP's will be studied as another/additional option for satisfying the stormwater
 management needs for the proposed improvements. Another option for coordination with the

- City's stormwater management improvements could be associated with outfall for the existing SMF located in the area of the THEA's reversible lanes viaduct ramps at Meridian Avenue.
- The City expressed interest in the redevelopment of the parking areas as an option to pursue further. To that end, it was agreed that they would determine and provide mapping of the areas they own and consider to be applicable, and to provide pervious pavement and plans design expertise for those areas' related projects. To facilitate coordination, and to uphold an identified aggressive schedule for the viaduct improvements, it was agreed to meet every 3 weeks, or as needed, to discuss the necessary details.
- Pervious pavement standards have been recently adopted by the SWFWMD and will need to be addressed in the design. American will coordinate with the City on this. Michael Miller, with the City of Tampa, will be working with this design effort.
- Once a design/drainage system concept is developed that incorporates the drainage design approach for the viaduct, it was agreed that we should then approach the SWFWMD for a preapplication meeting to discuss the "permitability" of the project in the September/October 2009 timeframe.
- Other "green" aesthetics initiatives that were brought up:
 - Concrete salvage of old silos that exist on the Port Authority property
 - Bridge deck demolition/concrete reuse
 - THEA to provide electrical power to the viaduct corridor for the City to design/install/maintain sufficient (possibly artistic) understory lighting.

The City brought up an issue for information purposes related to the Gandy Connector PD&E Study, as noted below:

[Meeting Notes for 7/2/2009 – Gandy Boulevard]

 At the existing interchange of the Selmon Expressway and W. Gandy Boulevard, the stormwater pond located in the infield area of the eastbound Gandy loop on-ramp raises significant maintenance issues for the City. Mr. Rick Carter with the City's operations department may be contacted for further information.



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MEETING MINUTES

 Meeting Date:
 August 3, 2009
 Date Issued:
 August 5, 2009

 Location:
 City of Tampa, Municipal Services Building 3rd Floor Conference Room

 Project Name:
 Downtown Viaduct Improvements PD&E Study

 Purpose:
 Stormwater Management & Drainage Req's - Approach/Partnering Discussions

 Notes by:
 Rick Sowers
 American Project #: 5099618

 Copies to:
 Attendees; Jeff Novotny, David Bredahl, American files

Attendees Charles "Chuck" Walter, P.G.	Representing City of Tampa (City)	Phone 813-274-8771	Fax or e-mail Chuck.walter@tampagov.net
Brent A. Morris, P.E.	City of Tampa, Stormwater Department	813-274-7446	brent.morris@tampagov.net
Michael T. Miller	City of Tampa, Stormwater Department	813-274-8469	michaelT.miller@tampagov.net
Dan Kelly, P.E.	HNTB (THEA GEC)	813-675-3705	dpkelly@hntb.com
Mark Easley	KCA (THEA GEC)	813-871-5331	MEasley@kisingercampo.com
Jai Ramkissoon, P.E.	American Consulting Engineers of FL (American)	813-435-2654	JRamkissoon@ace-fla.com
Rick Sowers, P.E.	American Consulting Engineers of FL	813-435-2658	rsowers@ace-fla.com

The following notes reflect our understanding of the discussions and decisions made at this meeting. If you have any questions, additions or comments, please contact us at the above address. We will consider the minutes to be accurate unless written notice is received within 10 working days of the date issued.

The purpose of this meeting was to continue discussion of the approach to stormwater management & environmental resource permitting needs for the proposed downtown viaduct improvements. Based on the discussions that we had, it also served as a follow-up to an earlier "kick-off" exploratory meeting (held July 2, 2009 with the City's Stormwater Department) at which the THEA and American approached the City in regards to the stormwater management needs for the proposed downtown Viaduct improvements. After a general introduction by Mr. Walters, the following points were discussed:

- After brief introductions, it was agreed that the project limits were generally understood.
- The initial 7/2/2009 meeting with the City was called/set-up by the THEA to primarily explore available opportunities and to brainstorm ideas. These meetings, originally thought to be at three week intervals, are intended to facilitate coordination in regards to the proposed conceptual drainage approach in the midst of an aggressive PD&E schedule.
- Moving forward and recognizing the aggressive schedule for this PD&E Study, it is highly desirable to have our preferred drainage concept with back-up evaluation documentation ready to approach the SWFWMD in a pre-application meeting and the FDOT, both to be held before Labor Day (week-end, September 7, 2009).

- The existing conditions evaluation is underway by Bayside Engineering. American will follow-up with them in regards to their efforts, due dates, and fitting in with this schedule.
- The budget question was not discussed; it was agreed that issue will be a part of the pending evaluation and discussion could wait until later.
- The option of pervious pavement construction in areas of existing parking areas (both compacted dirt/shell and paved) was discussed and the City has done some early research of existing areas (at this point) located under/within the footprint of the existing expressway alignment. Mike Miller presented plans of previous resurfacing projects (hence existing paved areas), a graphic that indicated general locations with the various ownerships, as well as the parcel information verifying it's ownership/lease agreement. It was agreed that the primary consideration would be for parcels owned/with appropriate agreements in place by the City or the THEA. Given the presence of existing agreements being in place with Hillsborough County and the Hillsborough County School Board, those parcels should stay on the map, for further consideration. As a third/less desirable option, could consider parcels available with willing sellers, if needed. It was requested that the City provide the graphic and parcel information to American and the THEA.
- For pervious pavement design option, the City provided an overview of a typical section for discussion. Rapid infiltration is a positive attribute as well as improved service life and less intensive maintenance needs, given improved construction methods. The City will provide cost estimated guidance. The % coverage question will be discussed again later as this option is further evaluated. Given the parcel area, the pervious pavement area can be considered to be a significant percentage of the parcel area (+90% given border widths, landscaping needs, and uptake volume).
- The THEA indicated that the initiation of coordination with the FDOT State Materials Lab will be necessary in the near future, preferably before Labor Day (9/7/2009) of this year. Also, potential contamination issues will need to be addressed through the FDOT.
- Storm Drain system capacity will need to be addressed, as potential head from the proposed scupper drain system will need to be considered.
- For permitting purposes, it was discussed that there would be a need for a Joint Agreement of those sharing
 interests and responsibilities in this approach. The City noted their desire for having appropriate drainage
 easements developed and acquired.
- Contamination issues were briefly discussed and it was noted that East of Union Station was "green" and should not have a problem, while the western portion may have issues.
- Regarding aesthetics, the City brought up the idea/possibility of coloring the porous pavement (green). This would both be more attractive and could be used as an identifying trait for maintenance.
- The City will verify that the parcels identified for further evaluation do not currently benefit from any kind of stormwater treatment system.
- The City will extend the data review coverage to date to include the longer project length, as discussed, providing a shape file to American.
- The City will provide base cost-estimate data for this type of pervious pavement construction.
- The SWFWMD pre-application meeting date of August 24-25 was discussed as being desirable. The follow-up FDOT coordination could then happen prior to Labor Day (September 7, 2009)

Next meeting is currently scheduled for August 17, 2009 with details to follow.



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MEETING MINUTES

 Meeting Date:
 August 17, 2009
 Date Issued:
 August 26, 2009

 Location:
 City of Tampa, Municipal Services Building 6th Floor Conference Room

 Project Name:
 Downtown Viaduct Improvements PD&E Study

 Purpose:
 Stormwater Management & Drainage Req's - Approach/Partnering Discussions

 Notes by:
 Rick Sowers
 American Project #: 5099618

 Copies to:
 Attendees: Jeff Novotny, David Bredahl, American files Mark Easley KCA (THEA GEC, MEasley@kisingercampo.com)

Attendees Charles "Chuck" Walter, P.G.	Representing City of Tampa (City)	<u>Phone</u> 813-274-8771	Fax or e-mail Chuck.walter@tampagov.net
Brent A. Morris, P.E.	City of Tampa, Stormwater Department	813-274-7446	brent.morris@tampagov.net
Michael T. Miller	City of Tampa, Stormwater Department	813-274-8469	michaelT.miller@tampagov.net
Dan Kelly, P.E.	HNTB (THEA GEC)	813-675-3705	dpkelly@hntb.com
Jai Ramkissoon, P.E.	American Consulting Engineers of FL (American)	813-435-2654	JRamkissoon@ace-fla.com
Rick Sowers, P.E.	American Consulting Engineers of FL	813-435-2658	rsowers@ace-fla.com

The following notes reflect our understanding of the discussions and decisions made at this meeting. If you have any questions, additions or comments, please contact us at the above address. We will consider the minutes to be accurate unless written notice is received within 10 working days of the date issued.

The purpose of this meeting was to continue discussion of the approach to stormwater management & environmental resource permitting needs for the proposed downtown viaduct improvements. It also served as a follow-up to the earlier (first) drainage coordination meeting (held August 3, 2009) at which the THEA and American requested existing parking area information and "shape files" that delineated those areas for further evaluation. The City provided those files on 8/14/2009 to American and this meeting facilitated discussion of the use of this information in formulating the stormwater management needs for the proposed downtown Viaduct improvements. After passing around the sign-in sheet and confirming the attendees contact information, the following points were discussed:

- [Update: 8/26/2009: Moving forward through the schedule for this PD&E Study, the SWFWMD coordination meeting was rescheduled to Thursday 9/3/2009 (from 8/27/2009 due to a change of attendees by the WMD). This slight delay will push the initiation of the FDOT coordination into early September. Given the need to initiate the FDOT coordination and to have resolution of the conceptual drainage in the Sept/Oct timeframe, this is OK given the original target date being an "early" milestone date.]
- The draft existing drainage conditions report was submitted to American for review on 8/14/2009. Review comments will be provided by American, and a final draft will be turned around by Bayside.

- As noted above, the existing parking areas were discussed from a graphic representation of the shape files provided by the City. American will further evaluate the option of construction of porous pavement for these areas in concept and prioritize them with respect to ownership, location, current use, and controlling entity. It was noted that in many instances, the parcel size is not consistent with the actual parking area. These areas will be quantified based on field verification and considered in the evaluation.
- The locations will be either "under" the existing viaduct or adjacent/outside the viaduct's right-of-way footprint. For a parcel or parking area to be considered under the viaduct, the surface area must be able to accept stormwater runoff directly from the proposed bridges via storm drain/downspout.
- The ownership and controlling interests of the parking areas will be evaluated and ranked by American and the THEA. The current list shows THEA, City, Hillsborough County (HC), HC School Board, and two private ownership companies as the property owners and controllers. The highest consideration will be for the parcels under THEA and City ownership and control. Others will be considered, if needed, with acquisition of privately owned parcels being the least desirable.
- The City will provide their notes with respect to their findings in regards to a field review of the existing parking under the viaduct. This review will include verification that the parcels identified for further evaluation do not currently benefit from any kind of stormwater treatment system. [Provided to American on 8/19/2009.]
- The question of asphalt versus concrete porous pavement surface is open at this point.
- FDOT coordination will be initiated after the SWFWMD coordination (pre-application) meeting.
- The question of the York Street vault (Port area development currently under design) was discussed as to whether or not American should be considering available storage. The City indicated that any extra storage capacity would be utilized for other interests, and that it should not be considered.
- The cost data for porous pavement, according to the City, is available for the materials, yet the construction costs are proving to be difficult to find. Further discussion will be needed to determine the applicable basis for this option's cost estimates.
- As discussed previously, the next meeting will be the SWFWMD coordination meeting.
- In regards to FDOT coordination, it was again noted that a meeting with the FDOT State Materials Lab will be necessary in early September. Also, potential contamination issues will need to be addressed through the FDOT.

THIS FORM IS INTENDED TO FACILITATE AND GUIDE THE DIALOGUE DURING A PRE-APPLICATION MEETING BY PROVIDING A PARTIAL "PROMPT LIST" OF DISCUSSION SUBJECTS. IT IS NOT A LIST OF REQUIREMENTS FOR SUBMITTAL BY THE APPLICANT.



SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT RESOURCE REGULATION DIVISION PRE-APPLICATION MEETING NOTES

FILE NUMBER:

Date: Time: 9/3/09 11:00

Project Name:

Downtown Crosstown Viaduct

Attendees:

David Kramer, Lynn Miller, Rick Sowers (American Consulting), Chuck Walter (COT),

Dan Kelly (HNTB)

County: Total Land Acreage: Hillsborough

Sec/Twp/Rge:

18/29/19

: ROW

Project Acreage:

 $30\pm$

Prior On-Site/Off-Site Permit Activity:

Crosstown Connector, Crosstown reversible lane project.

Project Overview:

- Addition of additional traffic lanes on the Crosstown Expressway in between Downtown and 22nd Street.
- Lanes will be added to the existing pre-permitting lower deck mostly to the inside and the decks are elevated.
- Treatment is being provided underneath the existing decks in existing parking lots to be reconstructed using pervious pavement or asphalt.

Environmental Discussion: (Wetlands On-Site, Wetlands on Adjacent Properties, Delineation, T&E species, Easements, Drawdown Issues, Setbacks, Justification, Elimination/Reduction, Permanent/Temporary Impacts, Secondary and Cumulative Impacts, Mitigation Options, SHWL, Upland Habitats, Site Visit, etc.)

N/A

Site Information Discussion: (SHW Levels, Floodplain, Tailwater Conditions, Adjacent Off-Site Contributing Sources, Receiving Waterbody, etc.)

- Old Tampa Bay and possibly McKay Bay Drainage basin.
- Both are impaired.

Water Quantity Discussions: (Basin Description, Storm Event, Pre/Post Volume, Pre/Post Discharge, etc.)

- Majority of the proposed improvements are located above existing impervious.
- Demonstrate that discharges from proposed project area will not cause an adverse impact for a 25-year, 24-hour storm event.
- Demonstrate that site will not impede the conveyance of contributing off-site flows.

Water Quality Discussions: (Type of Treatment, Technical Characteristics, Non-presumptive Alternatives, etc.)

- Majority of the proposed improvements are located above existing impervious.
- Some of the new lanes will actually be completely shadowed by the reversible lanes which actually receive
 water quality treatment would not need to treat areas not generating runoff (not exposed to rainfall and will
 be subject to street sweeping BMP's)
- Provide water quality treatment consistent with that required for widening existing public highway projects –
 Section 5.8 of the B.O.R.
- In addition, since the project discharges to an impaired water body, must provide a net environmental improvement.
- Applicant must demonstrate a net improvement for the parameters of concern by performing a pre/post
 pollutant loading analysis based on existing land use and the proposed land use.
- Will allow compensatory treatment for currently untreated runoff must have an equal or greater area and equivalent pollutant load.
- Providing treatment in parking areas underneath the roadway decks. Will need to provide treatment for contributing parking area runoff and all DCIA associated with contributing existing highway lanes.

Sovereign Lands Discussion: (Determining Location, Correct Form of Authorization, Content of Application, Assessment of Fees, Coordination with FDEP)

N/A

Operation and Maintenance/Legal Information: (Ownership or Perpetual Control, O&M Entity, O&M Instructions, Homeowner Association Documents, Coastal Zone requirements, etc.)

- Provide proof of ownership in the form of a deed or contract for sale.
- Provide all shared use agreements/operation and maintenance agreements/cross drainage agreements.
- Provide appropriate O&M instructions will need detailed instructions for maintenance and frequency of maintenance for the pervious pavement treatment areas.

Application Type and Fee Required:

General Construction ERP - \$2912.00 – Sections A, C and E of ERP Application.

Other: (Future Pre-Application Meetings, Fast Track, Submittal Date, Construction Start Date, Required District Permits – WUP, WOD, Well Construction, etc.)

Potential contamination issues with construction in heavily industrialized/urban areas.

Disclaimer: The District ERP pre-application meeting process is a service made available to the public to assist interested parties in preparing for submittal of a permit application. Information shared at pre-application meetings is superseded by the actual permit application submittal. District permit decisions are based upon information submitted during the application process and Rules in effect at the time the application is complete.



APPENDIX E

FDEP's Water Body Impairment Back-up Information



Tampa Bay Group 1 Basin - Southwest District - Verified List (Cycle 2 Revised and Readopted May 2009) Hydrologic Unit: Tampa Bay

OGC Case Number	Planning Unit	WBID	Waterbody Segment	Waterbody Type	Waterbody Class ¹	1998 303(d) Parameters of Concern	Parameters Assessed Using the Impaired Waters Rule (IWR)	Concentration Causing Impairment ²	Priority for TMDL Development ³	Comment (#Exceedances/# Samples) pp=Planning Period vp=Verified Period ⁴
09-2381	Coastal Hillsborough Bay Tributary	1579A	BELLOWS LAKE	LAKE	3F		Nutrients (TSI)	Median TN = 2.0 & TP = 0.09 mg/l	Medium	pp = Insufficient data; vp = Verified impaired. Annual average TSI values exceeded 60 TSI units in 2006, and the exceedance value was 68. Nitrogen and phosphorus are the limiting nutrients based on a median TN/TP ratio of 24.6 (21 values). Verified period median TN = 2.0 mg/l (21 values), median TP = 0.09 mg/l (21 values), and BOD median = 5.4 mg/l (23 values).
09-2382	Coastal Hillsborough Bay Tributary	1584A	YBOR CITY DRAIN	ESTUARY	ЗМ		Dissolved Oxygen	< 4.0 mg/L	Medium	pp = 20 / 36; vp = 27 / 44. Verified impaired. Nutrients (total nitrogen and total phosphorus) were identified as the causative pollutants based on chl-a data/nutrient impairment. Verified period median TN = 1.46 mg/L (22 values), median TP = 0.33 mg/L (22 values), median BOD = 1.8 mg/L (24 values).
09-2382	Coastal Hillsborough Bay Tributary	1584A	YBOR CITY DRAIN	ESTUARY	3M		Fecal Coliform	> 400 colonies/100 ml	Low	pp = No data; vp = 15 / 21. Verified impaired
09-2384	Coastal Hillsborough Bay Tributary	1584B	MCKAY BAY	ESTUARY	3М	Dissolved Oxygen	Dissolved Oxygen	< 4.0 mg/L	Low	pp = 254 / 888; vp = 243 / 1023. Verified impaired. Nutrients (total phosphorus) were identified as the causative pollutant based on chl-a data/nutrient impairment. Verified period median TN = 0.66 mg/L (199 values), median TP = 0.23 mg/L (212 values), median BOD = 1.9 mg/L (91 values). EPA proposed TMDL drafted by State DEP in September, 2004. Additional analytical and modeling work needed prior to TMDL completion.
09-2385	Coastal Hillsborough Bay Tributary	1584B	MCKAY BAY	ESTUARY	ЗМ	Nutrients	Nutrients (Chlorophyll- a)	Median TN = 0.66 mg/l		pp = Planning list; vp = Verified impaired. Annual average Chla values exceeded 15 ug/l in 2000 and 2003, and exceedance values were 183.4 and 20.02 ug/L, respectively. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 2.9 mg/l (199 values). Verified period median TN = 0.66 mg/l (199 values), median TP = 0.23 mg/l (212 values), and BOD median = 1.9 mg/l (91 values). EPA proposed TMDL drafted by State DEP in September, 2004.
09-2386	Coastal Hillsborough Bay Tributary	1584C	EAST BAY	ESTUARY	3M		Dissolved Oxygen	< 4.0 mg/L	Medium	pp = 302 / 925; vp = 107 / 354. Verified impaired. Nutrients (total phosphorus) were identified as the causative pollutant based on chl-a data/nutrient impairment. Verified period median TN = 0.69 mg/L (89 values), median TP = 0.2 mg/L (91 values), median BOD = 1.0 mg/L (29 values).
09-2387	Coastal Hillsborough Bay Tributary	1605D	DELANEY CREEK TIDAL	ESTUARY	ЗМ		Dissolved Oxygen	< 4.0 mg/L	Medium	pp = 73 / 126; vp = 65 / 111. Verified impaired. Nutrients (total nitrogen and total phosphorus) were identified as the causative pollutants based on chl-a data, nutrient impairment. Verified period median TN = 3.89 mg/L (101 values), median TP = 0.32 mg/L (105 values), median BOD = 1.75 mg/L (104 values).

Tampa Bay Group 1 Basin - Southwest District - Verified List (Cycle 2 Revised and Readopted May 2009) Hydrologic Unit: Tampa Bay

OGC Case Number	Planning Unit	WBID	Waterbody Segment	Waterbody Type	Waterbody Class ¹	1998 303(d) Parameters of Concern	Parameters Assessed Using the Impaired Waters Rule (IWR)	Concentration Causing Impairment ²	Priority for TMDL Development ³	Comment (#Exceedances/# Samples) pp=Planning Period vp=Verified Period ⁴
09-2510	Old Tampa Bay	1558J	COURTNEY CAMPBELL BEACH	ESTUARY	2		Fecal Coliform	> 400 colonies/100 ml	Low	pp = 63 / 160; vp = 111 / 283. Verified impaired.
09-2511	Old Tampa Bay	8047D	COURTNEY CAMPBELL CAUSEWAY	BEACH	3M		Bacteria (Beach Advisories)	Beach advisories > 21 days/yr	High	Beach advisories posted for a total of 4 days in 2002, 81 days in 2003, and 10 days in 2006.
09-2512	Tampa Bay Planning Units	8999	ТАМРА ВАҮ	ESTUARY	ЗМ		Mercury (based on fish consumption advisory)	Exceeds DoH Threshold (>0.3 mg/kg)	High*	Data collected within the last 7.5 years indicate the following WBIDs are verified impaired. Confirmed recent data (2002, 2003 and 2004) for coastal and associated estuary fish advisories for king mackerel (n=87) and bull shark (n=28). Average Hg levels were 0.67 mg/kg in king mackerel and 1.85 mg/kg in bull shark which exceeded the threshold of 0.3 mg/kg of mercury. This includes the following WBIDs: 1599, 1609, 1615, 1632, 1637, 1648, 1664, 1676, 1691, 1536E, 1584A, 1584B, 1584C, 1605D, 1628A, 1666A, 1797A, 1797B, 1683, 1687, 1693, 1700, 1708, 1709, 1726, 1733, 1756, 1778, 1661A, 1661C, 1661F, 1661G, 1709B, 1709D, 1709E, 1731B, 1513, 1530, 1546, 1557, 1559, 1563, 1566, 1569, 1572, 1575, 1581, 1585, 1593, 1600, 1601, 1603, 1604, 1606, 1607, 1612, 1620, 1625, 1654, 1656, 1507A, 1570A, 1627B, 1558D, 1558E, 8049, 1558A, 1558N, 1558B, 1558BZ, 1558C, 1558F, 1558G, 1558H, 1558I, 1558IA

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The Tampa Bay Basin Cycle 2 Verified List is based primarily on IWR Run 31 with additional data from Run 32.

^{1 -} Potable water supplies, 2 - Shellfish propagation or harvesting, 3F - Recreation, propagation, and maintenance of a healthily, well-balanced population of fish and wildlife in fresh water, 3M - Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife in marine waters

The nutrient concentrations represent the 75th percentiles of data from the Verified Period. The target nutrient concentration used in the subsequent TMDL will be determined during the TMDL process.

^{*} A statewide TMDL for mercury, that will address this waterbody, is scheduled to be completed in 2012.

Where a parameter was 1998 303(d) listed, the priority for TMDL development is the year provided and is assigned based on the consent decree schedule. Where a parameter was only identified as impaired under the IWR, a priority of "medium" was assigned. Exceptions are waters where the impairment poses a threat to potable water or human health, which have been assigned a "high" priority, and fecal coliform impairments, which have been assigned a "low" priority. All other listings as of this cycle are prioritized based on the following: it is the Department's intent that listings with a "High" priority be addressed within the next 5 years, listings with a "Medium" priority be addressed within 5-10 years as resources allow, and listings with a "Low" priority be addressed within the next 10 years.

Planning Period (PP) January 1, 1995—December 31, 2004; Verified Period (VP) January 1, 2000—June 30, 2007.

Tampa Bay Tributaries Group 2 Basin - Cycle 2 - Southwest District - FINAL Verified List Hydrologic Units: Alafia River, Hillsborough River, Little Manatee River, and Manatee River

OGC Case Number	Planning Unit	WBID	Water Segment Name	Waterbody Type	Waterbody Class ¹	1998 303(d) Parameters of Concern	Parameters Assessed Using the Impaired Surface Waters Rule (IWR)	Dissolved Oxygen / Biology Pollutant of Concern	DO / Nutrient / Biology - TN, TP, BOD Median Values (mg/L) ²	Concentration of Criterion or Threshold Not Met	Previous EPA Integrated Report Category † - <u>Cycle 1</u> Assessment ⁴	Current EPA Integrated Report Category †- Cycle 2 Assessment ⁵	Current Integrated Category - Final Assessment [†]	Current Assessment Status	Priority for TMDL Development ⁵	Verified Period (# of Exceedances/ # of Samples) ⁶	Comments
09-2299	Hillsborough River	1443A	HILLSBORO UGH RIVER	STREAM	3F	Nutrients	Nutrients (Chlorophyll)		Median TN = 1.4 (n = 97), Median TP = 0.09 (n = 115), Median BOD = 1.1 (n = 49)	≤ 20 µg/L	Зс	5	5	Impaired	High	2002 (3.75), 2005	Annual chlorophyll-a average did not exceed 20 ug/L in 2002 (3.75) and 2005 (1.03 ug/L). Biological information is insufficient to assess aquatic life use support. Listed as impaired based on dissolved oxygen and nutrient (total nitrogen) impairment. Nitrogen is the limiting nutrient based on TN/TP ration of 5.7 (n = 82). Two stations have been included in the assessment of this WBID that were previously assigned to WBID 1443E, station 112WRD 02301990 and station 112WRD 02301990 and station 112WRD 02302010. These stations show elevated total nitrogen values in the verified period. The stations will be re-assigned to WBID 1443A in a later IWR Run, but the data has been used to verify the dissolved oxygen and nutrient impairment.
09-2300	Hillsborough River		HILLSBORO UGH RIVER	STREAM	1	Dissolved Oxygen		Total Phosphorus	Median TN = 1.29 (n = 75), Median TP = 0.2 (n = 90), BOD Median = 1.4 (n = 45).	≥ 5.0 mg/L	4c	5	5	Impaired	High		EPA proposed a TMDL in September, 2004.

Tampa Bay Tributaries Group 2 Basin - Cycle 2 - Southwest District - FINAL Verified List Hydrologic Units: Alafia River, Hillsborough River, Little Manatee River, and Manatee River

OGC Case Number	Planning Unit	WBID	Water Segment Name	Waterbody Type	Waterbody Class ¹	1998 303(d) Parameters of Concern	Parameters Assessed Using the Impaired Surface Waters Rule (IWR)	Dissolved Oxygen / Biology Pollutant of Concern	DO / Nutrient / Biology - TN, TP, BOD Median Values (mg/L) ²	Concentration of Criterion or Threshold Not Met	Previous EPA Integrated Report Category † -Cycle 1 Assessment ⁴	Current EPA Integrated Report Category † - Cycle 2 Assessment ⁵	Current Integrated Category - Final Assessment [†]	Current Assessment Status	Priority for TMDL Development ⁵	Verified Period (# of Exceedances/ # of Samples) ⁶	Comments
09-2360	Manatee River	1926	CEDAR CREEK	STREAM	1	Nutrients	Nutrients (Chlorophyll)		Median TN = 1.22 (n = 76), Median TP = 0.16 (n = 76), BOD Median = 2.0 (n = 81).	≤ 20 µg/L	2	5	5	Impaired	High	(7.0), 2004 (13.44), 2005 (6.1), 2006	Delisted from the 1998 303(d) list in Cycle 1, relisted in Cycle 2. Nitrogen is the limiting nutrient based on a median TN/TP ratio of 7.7 (71 values). Complete nutrient TMDL with dissolved oxygen TMDL. Significant urban land use in watershed (greater than 60%). Nutrient (chl-a) impairment based on dissolved oxygen impairment and causative pollutant of total phosphorus.

¹ Florida's waterbody classifications are defined as:

- 1 Potable water supplies
- 2 Shellfish propagation or harvesting
- 3F Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife in fresh water
- 3M Recreation, propagation, and maintenance of a healthy, well-balanced population of fish and wildlife in marine water
- 4 Agricultural water supplies
- 5 Navigation, utility, and industrial use
- n is equal to the number of samples. When samples are collected at the same location less than 4 days apart, the median of those results represents a single sample for the purpose of determining n.
- [†] EPA's Integrated Report Category:
 - 5 Water quality standards are not attained and a TMDL is required.
- ³ The Cycle 1 assessment was done in 2003 and included data from that Verified Period (January 1, 1996 through June 30, 2003).
- ⁴ The Cycle 2 assessment is the current assessment and includes data from the Verified Period (January 1, 2001 through June 30, 2008).
- Where a parameter was 1998 303(d) listed, if the priority shown on the 1998 303(d) list was low, for the second cycle assessment, the priority has been changed to high, to expedite meeting the consent decree schedule. Where a parameter was only identified as impaired under the IWR, a priority of "medium" was assigned. Exceptions are waters where the impairment poses a threat to potable water or human health, which have been assigned a "high" priority, and fecal coliform impairments, which have been assigned a "low" priority. All other listings as of this cycle are prioritized based on the following: it is the Department's intent that listings with a "High" priority be addressed within the next 5 years, listings with a "Medium" priority be addressed within 5-10 years as resources allow, and listings with a "Low" priority be addressed within the next 10 years.

⁶ **VP** - Verified Period (January 1, 2001 through June 30, 2008)

^ Beach advisories are based on FL Dept of Health Enterococcus (>103 CFU/100mL) or fecal coliform (>399 CFU/100mL) criteria.

Beach advisory data is based on "2008 Beach Advisories" file created 05/07/2008 by FDEP.

Fish advisory data is based on "2008 Fish Advisories" file created 07/10/2008 by FDEP.

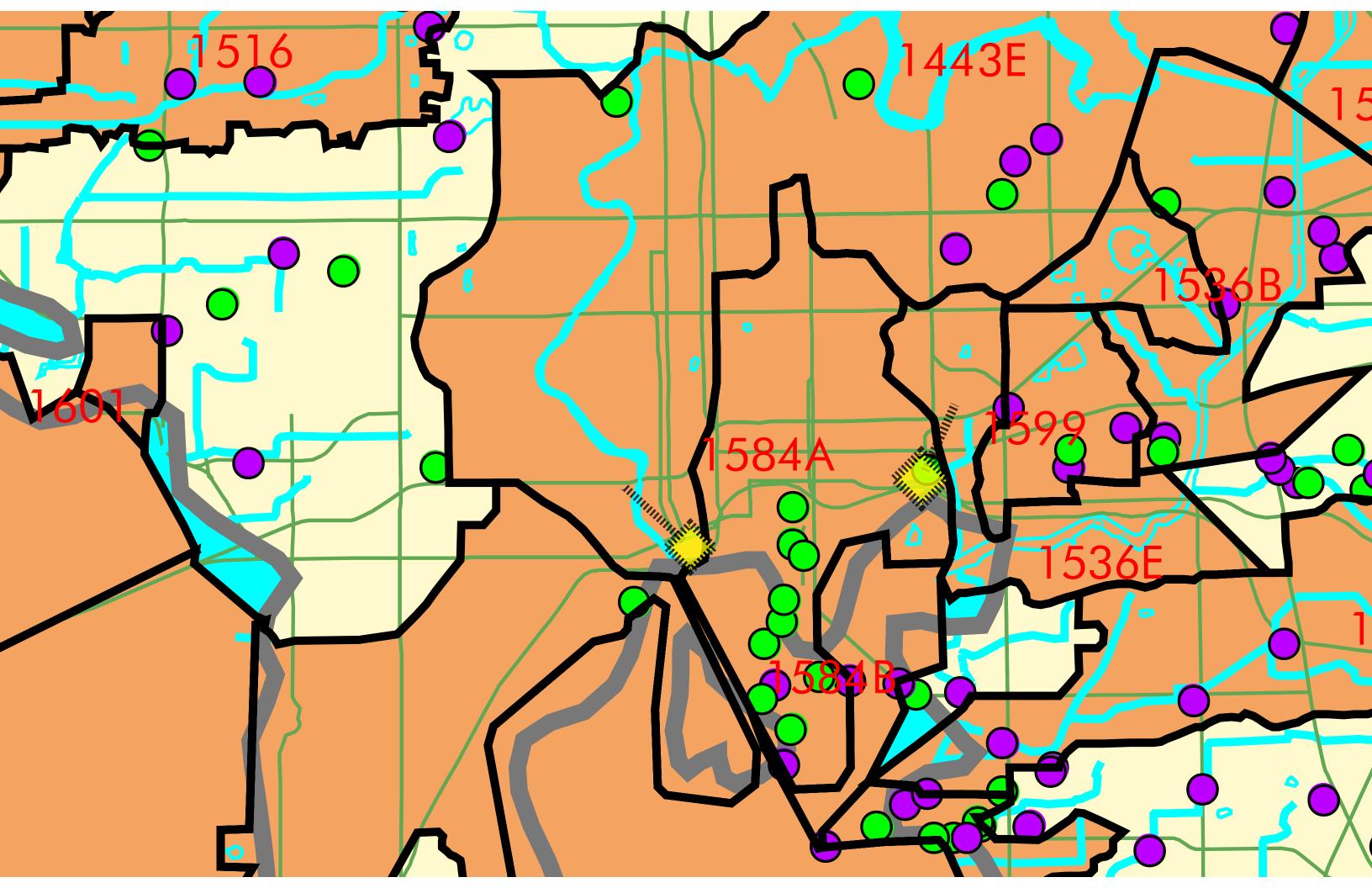
N/A = Not Applicable

^{*}A statewide TMDL for mercury, that will address this waterbody, is scheduled to be completed in 2012.

Tampa Bay Tributaries Group 2 Basin - Cycle 2 - Southwest District - FINAL Verified List Hydrologic Units: Alafia River, Hillsborough River, Little Manatee River, and Manatee River

OGC Case Number		WBID	Water Segment Name	Waterbody Type	Waterbody Class ¹	1998 303(0)	Parameters Assessed Using the Impaired Surface Waters Rule (IWR)	/ Biology	DO / Nutrient / Biology - TN, TP, BOD Median Values (mg/L) ²	Concentration of Criterion or	Previous EPA Integrated Report Category [†] - <u>Cycle 1</u> Assessment ⁴	Current EPA Integrated Report Category † - Cycle 2 Assessment ⁵	Current Integrated Category - Final Assessment [†]	Accocomont	Priority for TMDL	Verified Period (# of Exceedances/ # of Samples) ⁶	Comments
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The Tampa Bay Tributaries Cycle 2 Verified List is based on IWR Run 35_2.



APPENDIX F

Preliminary Conceptual Design Plans*

* Separately Bound Volume



APPENDIX G Straight-Line Diagram



