From:	Ron Jackson
To:	Julie Cozzi
Cc:	DG AssemblyMayor; Brad Ryan
Subject:	Packet information
Date:	Sunday, March 27, 2016 10:46:19 AM
Attachments:	Mandeville spreadsheet only-harborxlsx
	Summary of boat harbor economic analysis done by Bill Mandeville.docx

Hi Julie. Tresham's letter reminded me of Bill Mandeville's econ analysis of the harbor situation some time ago. I want to include it as a possible addition to Tresham's discussion topic that he plans to add. I have also provided a summary of Bill's analysis and some questions that might be referred for further exploration.

Others: This is timely, as we will likely be dealing with some of these questions and assumptions in the budgeting process to start in a few weeks.

Results of boat harbor economic analysis done by Bill Mandeville.

Approximately early 2015 (?)

This summary produced by Ron Jackson, March 2016.

Assumptions:

- 1. Harbor development would proceed incrementally from its current condition. Four stages were analyzed:
 - a. Current condition.
 - b. Wave Barrier/Dredging/Parking lot completed.
 - c. Slips/Moorage constructed.
 - d. Drive down ramp/docks constructed.
- 2. Demand for additional slips/moorage/parking would fill the increased capacity:
 - a. All slips/moorage would be occupied year round.
 - b. All parking spaces would be occupied year round. (80)

3. A sinking fund for anodes would be established. (They were assumed to not be in the project) Depreciation is not a part of the analysis. No costs were assigned to development of any of the harbor stages. ("free")

4. Operating costs would not change until items 1.c) and (d) were completed. Additional personnel costs would be needed then.

<u>Results:</u> (See attached spreadsheet and summary sheet).

- 1. Revenues would trend upward upon completion of each stage of development.
- 2. Operating costs tend upwards after items 1(c) and (d) are implemented due to additional salary costs.

3. Annual net revenue is negative until items 1 (c) and (d) are implemented. Revenue at this time would be \$54000 after 1 (c) and \$58000 after final construction.

Discussion:

Given the assumptions made, the analysis shows a positive cash flow after slips/moorage/parking are in place and fully occupied. The analysis is limited in that it does not consider any potential cost for constructing the revenue generating additions. It does not address where these might come from.

Some questions to consider:

- -Are the assumptions valid? Is full occupancy year round reasonable for parking spaces? Slips?
- -What are the costs of each stage of development within the harbor? What are the components?
- -When do we want them to be completed?
- -What are some options for funding their completion?

--Bonds?

--Savings?

--Grants?

--A mix of the above?

-What is the long range plan for future replacement of the Wave Barrier in 50 years? A sinking fund?

-What assumptions about what portion of it will we need to provide? (assuming some outside financing)

-What effect will the above answers have on other Borough priorities? On taxes rates?

Attachments:

-Ron's spreadsheet summarizing Mandeville's work by income source and phase of development. (Includes two sinking fund and bond payment "what-if" scenarios.)

Summary of harbor economic analysis by Bill Mandeville plus added depreciation and bond info.(RJ)

(Note: \$2500 income from Letnikof not included.)

			ANNUAL INCOME	SOURCES		
	Income from	Income from	Income from	Income from	Income from	Total
	Slip/moorage	Ramp fees	parking fees	fuel sales	Ice/grid/elect.	Income
Existing Harbor	\$137,600	\$14,850	\$0	\$31,212	\$19,455	\$203,117
Post WB/parking	\$140,600	\$17,679	\$71,666	\$36,720	\$20,630	\$287,295
Post Slips/Moorage	\$228,313	\$19,800	\$71,666	\$61,200	\$21,630	\$402,609
Post Dock/Ramp	\$268,988	\$19,800	\$71,666	\$64,260	\$21,630	\$446,344

		ANNUAL EXPENSES			
	Personnel	Operating	Operating Equipment		Total
	Expenses	Expenses	Expenses	Sinking Fund	Expenses
Existing Harbor	(\$120,662)	(\$110,207)	(\$45,000)	(\$65,000.00)	(\$340,869)
Post WB/parking	(\$120,662)	(\$110,207)	(\$45,000)	(\$65,000.00)	(\$340,869)
Post Slips/Moorage	(\$157,520)	(\$110,207)	(\$45,000)	(\$36,000.00)	(\$348,727)
Post Dock/Ramp	(\$196,900)	(\$110,207)	(\$45,000)	(\$36,000.00)	(\$388,107)

	"What-if" assessment				
	Net income with sinking	ng fund/bond payments			
	\$15mm	\$10mm			
Net	Sinking	Bond for	Net		
Income	Fund	Completing work	Inc/Exp		
(\$137,752)	(98,253)	(465,502)	(701,507)		
(\$53,574)	(98,253)	(465,502)	(617,329)		
\$53,882	(98,253)	(465,502)	(509,873)		
\$58,237	(98,253)	(465,502)	(505,518)		

Sinking Fund Calculations for replacement in year 50		
Amount	\$ 15,000,000	
Time	50	years
Interest rate	4.0%	
Annual Pmt	\$98,253	

Bond Calculations to finish harbor.						
Amount \$	10,000,000					
Time	50					
Interest rate	4.0%					
Annual Int. Pmt.	\$400,000					
Annual Pri. Pmt	\$65,502					
Total annual pmt	\$465,502					

	EXISTING LOS LOS - PHASE 1			LOS - PHASE 2				LOS - PHASE 3												
BOAT HARBOR REVENUES	EXISTING LOS	ITE	M	Р	PER YR	ITE	ITEM PER YR		ITEM		PER YR		TEM	PER YR		ITEM		ſ	PER YR	
Transient Moorage Lightering Docks)				\$	32,100			\$	32,100			\$	76,800			\$	103,800			
Fishing Season	850 lf * \$5/ft * 6 months	\$	25,500			n	o change			\$	48,000			\$	64,200					
Non-Fishing Season	220 lf * \$5 / ft * 6 months	\$	6,600			n	o change			\$	28,800			\$	39,600					
Annual Slip Rental				\$	80,000			\$	80,000			\$	108,728			\$	108,728			
25 ft slips (18 slips)	24 ft boats x 36# x \$ 504/yr	\$	18,144			n	o change				no change				no change					
33 ft slips (14 slips)	32 ft boats x 28# x\$672/yr	\$	18,816			n	o change				no change				no change					
40 ft slips (18 slips)	38 ft boats x 36# x \$798/yr	\$	28,728			n	o change			\$	57,456				no change					
No Permanent Stalls	477 ft * \$5 / ft * 6 months	\$	14,312			n	o change				no change				no change					
Electrical Service				\$	2,175			\$	3,350			\$	4,350			\$	4,350			
30 amp service daily service	180 days x \$10/day	\$	1,800			\$	2,600			\$	3,600				no change					
annual service fee	25 boats x \$15 / yr	\$	375			\$	750			\$	750				no change					
<u>Grid Fees</u>				\$	2,880			\$	2,880			\$	2,880			\$	2,880			
average fishing boat = 32 ft * 1 per day * 180 days		\$	2,880			n	o change				no change				no change					
Boat Launch Ramp Fees				\$	14,850			\$	17,679			\$	19,800			\$	19,800			
Annual Sticker (@ 60% total boats)	210 annual stickers x \$60/yr	\$	12,600			\$	15,000			\$	16,500				no change					
Daily Sticker (@ 40% total boats)	150 daily stickers x \$15/day	\$	2,250			\$	2,679			\$	3,300				no change					
Letnikof Moorage Fees	no change			\$	2,500			\$	2,500			\$	2,500			\$	2,500			
Ice Sales				\$	14,400			\$	14,400			\$	14,400			\$	14,400			
@ 1 ton per day X 180 days	180 tons x \$80/Ton	\$	14,400			n	o change				no change				no change					
<u>Miscelleous</u>				\$	25,500			\$	28,500			\$	42,785			\$	56,460			
Moorage Boats	50 boats x \$50 / boat	\$	2,500			\$	6,500			\$	12,235			\$	25,910					
Boat Slip Boats	100 boats x \$50/boat	\$	5,000			n	o change			\$	6,800				no change					
Boat Ramp Boats	360 boats x \$50/boat	\$	18,000			\$	22,000			\$	23,750				no change					
Parking Fees								\$	71,666			\$	71,666			\$	71,666			
12 ft x 50 ft lots x 35 lots	\$120 per month x 12 months					\$	50,400				no change				no change					
10 ft x 40 ft lots x 8 lots	\$80 per month x 12 months					\$	7,680				no change				no change					
9 ft x 17 ft lots x 37 lots	\$30.60 per month x 12 months					\$	13,586				no change				no change					
Fuel Sales	(86700 Gallons sold annually)			\$	31,212			\$	36,720			\$	61,200			\$	64,260			
Revenue (@ 170 gallons / boat)	510 boats x 170 gal x \$4/gal	\$	346,800			\$	408,000			\$	680,000			\$	714,000					
Less Expenditures (@ 170 gallongs / boat)	510 boats x 170 gal x \$3.64/gal	\$ (315,588)			\$ (371,280)			\$	(618,800)			\$	(649,740)	1				
	TOTAL: REVENUE			\$	205,617			\$	289,795			\$	405,109			\$	448,844			

Net Income (Prior to Depreciation)		\$ (135,252)	\$ (51,074)	\$ 56,382
subtotal: Expenditures		\$ 340,869	\$ 340,869	\$ 348,727
Depreciation				
Sinking fund, ; anodes.		\$ 65,000	\$ 65,000	\$ 36,000
Equipment	plug number	\$ 45,000	\$ 45,000	\$ 45,000
Operating Costs	????????	\$ 110,207	\$ 110,207	\$ 110,207
Personnel Costs	1.50 FTE X \$78,760 / FTE	\$ 120,662	\$ 120,662	\$ 157,520

\$	388,107
\$	36,000
\$	45,000
\$	110,207
\$	196,900