

PORT EVERGLADES 2014 MASTER/VISION PLAN

APPENDIX J: ROI AND NPV CALCULATION TABLES

PRESENTED BY





RETURN ON INVESTMENT ANALYSIS

The Port Everglades master planning and vision process utilized a project decision-matrix to evaluate new and modified projects considered for inclusion in the 2014 Plan. As described in Elements 4 and 6, the matrix included six factors including the return-on-investment (ROI) analysis described in this appendix. The eight projects considered in the ROI analysis include:

- Neo-Bulk Storage Yard.
- Slip 1 & 3 Reconstruction.
- Berth 33 Reconfiguration.
- Tracor Basin Fill.
- Cruise Terminal 29 Improvements.
- Cruise Terminal 25 Improvements.
- Southport Container Yard 9a, considered jointly with the Southport Turning Notch Extension.
- Southport Container Yard 9b.

Other projects developed as part of the Master Plan, such as the Southport Gate Lane Addition on McIntosh Road, were included in the overall decision-matrix evaluation, but were omitted from the ROI assessment as they did not generate a monetary revenue stream. The projects are described in detail in Element 5.

<u>Similarities with the Economic Benefit Analysis</u>. To be consistent within the decision-matrix evaluation framework, the ROI applied the same project assumptions used in the economic benefit assessment -- was one of the metrics in the decision-matrix evaluation -- in terms of:

- Construction cost, including any temporary loss of business anticipated due to construction disruption.
- Maintenance cost.
- Construction duration and opening year.
- Volume projections (number of passengers, tons of cargo) over time.

These assumptions vary from those applied in the Port's 5-year capital improvement program (CIP) (see Element 6) and affordability analysis (see Appendix K) as additional development and programming work was undertaken once the projects were evaluated and selected to advance through to the final plan. Thus, some costs and opening years will differ in this Appendix relative to those reported in Element 6.

Differences with the Economic Benefit Analysis. Although many of the assumptions that underpin the ROI analysis are the same as the economic benefit analysis, there are also some important differences between the two analyses. The first difference is the two perspectives of the respective analyses. The ROI analysis is from the Port's own financial perspective—does the revenue generated by the project cover the costs (capital, maintenance, and operating)



incurred by the project? There can be very useful projects that do not yield a positive ROI; improvements to the Southport Gate Lane Addition are an example. This project allows the Port's cargo movements to be more fluid and helps the Port's customers, but there is no direct financial return from the project. Thus, the financial ROI is one of many considerations in selecting a candidate master plan project. By contrast, the economic benefit analysis considers the transportation and economic impacts generated by the project from the region's perspective. A project can have a large potential regional economic impact, but yield a low financial return relative to its cost to the Port.

<u>Additional Assumptions to Support the ROI Analysis</u>. Because the ROI differs from the economic benefit analysis in perspective and content, additional revenue and cost information, as well as operating assumptions were required to complete the analysis. These are detailed below.

Revenues and Costs per Passenger and Unit of Cargo. The operating revenue the Port earns on a unit basis associated with a candidate investment as well as the unit cost of its operation, were derived from the Port's existing operating experience in consultation with Port staff. The last historical point at the time of the analysis was 2013; these values were adjusted to 2014 dollars to be consistent with each project's capital costs. Cruise revenues were adjusted by 3 percent; cargo revenues were adjusted by 2 percent. Operating costs were assumed to be a percentage of operating revenues; again, based on the Port's historical experience. Operating costs for cargo were assumed to be 60 percent of operating revenues; operating costs for the cruise business line were assumed to be 57 percent of operating revenues. Table K-1 summarizes these factors.

	+- •··	
Unit	Revenue / Unit	Cost / Unit
Cruise Passenger	\$17.61	\$10.04
TEU	\$35.18	\$21.08
Revenue/Ton Petroleum	\$1.83	\$1.10
Revenue/Ton Neo-Bulk	\$13.27	\$7.96
Revenue/Ton Dry Bulk	\$2.18	\$1.31

Table K-1 REVENUES AND COSTS PER UNIT MOVED* \$2014

*The cost per unit is assumed to be 60 percent of operating revenues for cargo and 57 percent for cruise. Revenues exclude any capital recovery fees.

Discount Rates. The revenues generated and costs incurred from the candidate project will occur annually over several decades. To convert that stream of revenues and costs into today's valuation, this stream is discounted back to a net present value. This is because a dollar earned today or spent today is worth more than a dollar in the future. Today's dollar can be invested and used to generate additional benefits between now and the future date; the



discount rate thus captures the impact of waiting. For the ROI analysis, two discount rates were used: 4 percent and a higher 6 percent rate. The 4 percent rate aligns with the discount rate applied in the economic benefit analysis and these results are the ones reported in the decision-matrix evaluation results shown in the graphics presented in Element 5.

Operating and Scenario Assumptions. The assumptions concerning the operation and other factors unique to a project's implementation will influence the resulting ROI. The following provides a brief summary of these assumptions for each project.

<u>Neo-Bulk Storage Yard</u>. The analysis assumes the bulk commodity is steel. Maintenance costs are assumed to be 0.005 of the capital cost beginning in year 11. This investment cost purchases a long-lived asset whose useful life extends beyond the analysis period. An estimate of the remaining revenue that would accrue to the Port is estimated as the present value of a perpetuity to capture the value of the asset that is not consumed during the analysis period.

Slips 1 and 3 Reconstruction. This ROI analysis pivots off the economic benefit analysis. In aggregate, the economic benefit analysis estimates that over 30 years (2019 - 2048), the total existing throughput plus growth equals 585 million tons; over this time period this was discounted at 329 million tons. This value is adjusted in two ways: 1) the full total is applied over time as the working assumption is that the business would eventually leave Port Everglades if the slips were not recapitalized, and 2) the period of analysis is lengthened relative to the economic analysis. This investment cost purchases a long-lived asset whose useful life extends beyond the analysis period. The remaining revenue that would accrue to the Port is estimated as the present value of a perpetuity to capture the value of the asset that is not consumed during the analysis period. Capital costs have been adjusted for capital expenditures that would have to be incurred even if the project were not built. These include bulkhead costs of \$21.3 million in Phase 1, bulkhead costs of \$23.1 million in Phase 2, and bulkhead costs of \$28.6 million in Phase 3. Maintenance expenses are assumed to be 0.5 percent for years 1 to 20 and 1 percent for years 20 to30 of capital costs.

Berth 33 Reconfiguration. Capital costs are adjusted for expenditures that would have to be undertaken even if the project were not constructed. The unadjusted cost is \$56.4 million. Maintenance expenses are assumed to be 0.5 percent for years 1 to 20 and 1 percent for years 20 to 30 of capital costs. An additional cost is added during the construction period to account for extra costs needed to maintain operations. The avoided maintenance cost of demolished structures is also factored in for a few years to capture the operational savings of bringing the berth into a state of good repair.

<u>Tracor Basin Fill</u>. The capital cost is adjusted for expenditures that would have to be undertaken even if the project were not constructed. Maintenance expenses are assumed to be 0.5 percent for years 1 to 20 and 1 percent for years 20 to 30 of capital costs. Costs for the tug relocation and additional costs for operational disruptions during construction are also factored in. An important factor in the analysis, the Tracor Basin Fill project supports many other operational changes at the Port which also yield a financial return to the Port. Those separate



projects are not considered here because there was no clear way to isolate the contribution of the Tracor Basin project to those other projects.

<u>Cruise Terminal 29 Improvements</u>. Cruise Terminal 29 has been the least-desirable cruise terminal at the Port and the working assumptions is that, without improvements, existing business would be lost. With the improvements, this business can be accommodated and additional capacity can also be gained. The analysis considers passengers gained and retained. No growth in passengers is assumed beyond 2033.

<u>Cruise Terminal 25 Improvements</u>. The analysis assumes revenues are driven by two factors. The first is a baseline growth in passengers due to the investment. The second factor is that there is a net gain in existing volumes because a larger ship would be able to use the terminal after the improvements were made. The model for the later factor is a presumed swap of a ship such as the *Anthem of the Seas* (4,180 passenger capacity) for the *Liberty of the Seas* (3,634 passenger capacity).

<u>Southport Turning Notch Extension and Container Yard 9a</u>. The present analytical results differ from past assessments because the overall cost is higher and the volume projections are lower. Capital costs have been adjusted for grants received. This is an investment with a long life that extends beyond the analysis period. As a result, a residual value is estimated to account for the portion of the asset that is not consumed and is available to serve the Port and its customers in subsequent years.

Container Yard 9b. Projections assume that 19.9 acres are available for use at 3,300 TEUs per acre. This is an investment with a long life that extends beyond the analysis period.

The following pages provide the detailed ROI spreadsheets. Because of their size, each spreadsheet is divided into several pages for readability.



Neobulk Storage Yard (page 1)

 NET PRESENT VALUE AND RETURN ON INVES	STMENT	EXAMPLE CALCU	JLATION: Neobulk (steel)	with pr	ojected volume							-			-			10
			Assessment Period		2019	2010	2020	3021		2022		2022		2024	2025	2026	2027	2028
			Discounting Period		2016	2019	2020	2021		2022		2025		2024	2025	2020	2027	2026
			Discounting Period		4		0			•		,		10	11	12	15	14
Revenue																		
Operating Revenue						704,040	772,500	840,960		909,420		977,880		1,046,340	1,066,205	1,086,070	1,105,935	1,128,401
		2014	No adj needed															
Revenue per ton	\$	13.27	\$ 13.27															
Total Net Operating Revenue						\$ 704,040	\$ 772,500	\$ 840,960	\$	909,420	\$	977,880	\$	1,046,340	\$ 1,066,205	\$ 1,086,070	\$ 1,105,935	\$ 1,128,401
Total						\$ 704,040	\$ 772,500	\$ 840,960	\$	909,420	\$	977,880	\$	1,046,340	\$ 1,066,205	\$ 1,086,070	\$ 1,105,935	\$ 1,128,401
Discounted at 4%		0.04				\$ 578,669	\$ 610,518	\$ 639,060	\$	664,504	\$	687,045	\$	706,869	\$ 692,586	\$ 678,356	\$ 664,196	\$ 651,624
Discounted at 6%		0.06				\$ 526,100	\$ 544,582	\$ 559,286	\$	570,581	\$	578,805	\$	584,271	\$ 561,663	\$ 539,743	\$ 518,506	\$ 499,093
Cost																		
Capital				\$	7,800,000	0	0	0		0		0		0	0	0	0	0
Maintenance Cost		0.005	of capital years 11+		0	0	0	0		0		0		0	0	0	0	0
Operating cost		0.6	revenue		0	\$ 422,424	\$ 463,500	\$ 504,576	\$	545,652	\$	586,728	\$	627,804	\$ 639,723	\$ 651,642	\$ 663,561	\$ 677,041
 Total				\$	7,800,000	\$ 422,424	\$ 463,500	\$ 504,576	\$	545,652	\$	586,728	\$	627,804	\$ 639,723	\$ 651,642	\$ 663,561	\$ 677,041
Discounted at 4%		0.04		\$	6,667,473	\$ 347,202	\$ 366,311	\$ 383,436	\$	398,702	\$	412,227	\$	424,122	\$ 415,552	\$ 407,014	\$ 398,518	\$ 390,974
 Discounted at 6%		0.06		\$	6,178,331	\$ 315,660	\$ 326,749	\$ 335,572	\$	342,349	\$	347,283	\$	350,562	\$ 336,998	\$ 323,846	\$ 311,103	\$ 299,456
Residual																		
 Residual at 4%		0.04																
 Residual at 6%		0.06																
		35 year																
 Revenue at 4%	\$	18,228,298																
 Residual value at 4%	\$	1,116,950																
 Cost at 4%	\$	17,956,285																
 Ratio at 4%		1.08																
 -																		
 Revenue at 6%	5	12,742,549																
 Residual value at 6%	\$	521,354							_		_		_					
 Cost at 6%	\$	14,044,370																
 Ratio at 6%		0.94																



Neobulk Storage Yard (continued page 2)

									-							-		-			
		Assessment Period		11		12		13		14		15	 16		17		18	1	19	1	24
		Discounting Period		2029		2030		2031		2032		2033	2034		2035	<u> </u>	2036	<u> </u>	2037	<u>, </u>	2
		Discounting Period		15		10		17		10		19	20		21	-	22	-	2.		
Revenue																					
Operating Revenue				1,150,867		1,173,347		1,195,813		1,218,279		1,240,121	1,261,950		1,283,793		1,305,635		1,316,079		
	2014	No adj needed																			
Revenue per ton	\$ 13.27	\$ 13.27																			
Total Net Operating Revenue			\$	1,150,867	\$	1,173,347	\$	1,195,813	\$	1,218,279	\$	1,240,121	\$ 1,261,950	\$	1,283,793	\$	1,305,635	\$	1,316,079	\$	
Total			\$	1,150,867	\$	1,173,347	\$	1,195,813	\$	1,218,279	\$	1,240,121	\$ 1,261,950	\$	1,283,793	\$	1,305,635	\$	1,316,079	\$	
Discounted at 4%	0.04		\$	639,036	\$	626,459	\$	613,898	\$	601,377	\$	588,614	\$ 575,938	\$	563,371	\$	550,920	\$	533,968	\$	
Discounted at 6%	0.06		\$	480,217	\$	461,884	\$	444,082	\$	426,816	\$	409,876	\$ 393,482	\$	377,635	\$	362,320	\$	344,546	\$	
																		<u> </u>		<u> </u>	
Cost																					
Capital	 			0	-	0		0	-	0		0	0		0	-	0	4	(-	
Maintenance Cost	0.005	of capital years 11+	Ş	39,000	\$	39,000	Ş	39,000	\$	39,000	Ş	39,000	\$ 39,000	\$	39,000	\$	39,000	\$	39,000	\$	
Operating cost	0.6	revenue	\$	690,520	\$	704,008	\$	717,488	Ş	730,967	Ş	744,073	\$ 757,170	Ş	770,276	\$	783,381	\$	789,647	\$	
Total			\$	729,520	\$	743,008	\$	756,488	\$	769,967	\$	783,073	\$ 796,170	\$	809,276	\$	822,381	\$	828,647	\$	
Discounted at 4%	 0.04		\$	405,077	\$	396,698	\$	388,361	\$	380,078	\$	371,680	\$ 363,362	\$	355,137	\$	347,008	\$	336,204	\$	
Discounted at 6%	0.06		\$	304,403	\$	292,482	\$	280,933	\$	269,753	\$	258,816	\$ 248,250	\$	238,053	\$	228,215	\$	216,938	\$	
Residual																		_		—	
Residual at 4%	0.04																				
Residual at 6%	0.06																				
	35 year																	-			
Revenue at 4%	\$ 18,228,298																				
Residual value at 4%	\$ 1,116,950																				
Cost at 4%	\$ 17,956,285																				
Ratio at 4%	1.08																				
Revenue at 6%	\$ 12,742,549																			\vdash	
Residual value at 6%	\$ 521,354																				
Cost at 6%	\$ 14,044,370																				
Ratio at 6%	0.94																				



Neobulk Storage Yard (continued page 3)

		Assessment Period		21	22	2	23		24	5 2	6 2	7 *	8	29	30	9	1	32	33	34	25	5
		Assessment enou	2	2039	2040	2	041	2042	2043	2044	2045	2046	2047		2048	2049	2050	52	2051	2052	2053	,
		Discounting Period		25	26	5	27	:	28 2	9 3	0 3	1 :	32	33	34	3	5	36	37	38	39)
Revenue																						
Operating Revenue			1	1,337,470	1,348,166	1	,348,166	1,348,16	5 1,348,16	1,348,166	1,348,166	1,348,16	5 1,348,1	66	1,348,166	1,348,16	5 1,348,	166	1,348,166	1,348,166	1,348,166	
	2014	No adj needed																				
Revenue per ton	\$ 13.27	\$ 13.27	1																			
Total Net Operating Revenue			\$ 1	1,337,470 \$	1,348,166	\$ 1	,348,166	\$ 1,348,16	5 \$ 1,348,16	5 \$ 1,348,166	\$ 1,348,166	\$ 1,348,16	5 \$ 1,348,1	66 \$	1,348,166	\$ 1,348,16	5 \$ 1,348,	166 \$	1,348,166 \$	1,348,166	1,348,166	
Total			S 1	1,337,470 \$	1,348,166	\$ 1	,348,166	\$ 1,348,16	5 \$ 1,348,16	5 \$ 1,348,166	\$ 1,348,166	\$ 1,348,16	5 \$ 1,348,1	66 S	1,348,166	\$ 1,348,16	5 \$ 1,348	166 \$	1,348,166 \$	1,348,166	1,348,166	
Discounted at 4%	0.04		S	501,707	486,269	S	467,566	\$ 449,58	3 \$ 432,29	L \$ 415,665	\$ 399,678	\$ 384,30	5 \$ 369,5	24 \$	355,312	\$ 341,64	5 \$ 328	506 S	315,871 \$	303,722	292,040	
Discounted at 6%	0.06		\$	311,629 \$	296,340	S	279,566	\$ 263,74	2 \$ 248,81	3 \$ 234,729	\$ 221,443	\$ 208,90	B \$ 197,0	83 \$	185,928	\$ 175,40	3 \$ 165,	475 \$	156,108 \$	147,272	138,936	
Cost																						
Capital				0	0)	0		0	0	D	D	0	0	0		0					
Maintenance Cost	0.005	of capital years 11+	\$	39,000 \$	\$ 39,000	\$	39,000	\$ 39,00	0 \$ 39,00	\$ 39,000	\$ 39,000	\$ 39,00	0 \$ 39,0	00 \$	39,000	\$ 39,00	0 \$ 39,	,000 \$	39,000 \$	39,000	39,000	
Operating cost	0.6	revenue	\$	802,482 \$	808,899	S	808,899	\$ 808,89	9 \$ 808,89	\$ 808,899	\$ 808,899	\$ 808,89	9 \$ 808,8	99 \$	808,899	\$ 808,89	9 \$ 808,	899 \$	808,899 \$	808,899	808,899	
Total			\$	841,482 \$	847,899	\$	847,899	\$ 847,89	9 \$ 847,89	\$ 847,899	\$ 847,899	\$ 847,89	9 \$ 847,8	99 \$	847,899	\$ 847,89	9 \$ 847,	899 \$	847,899 \$	847,899	847,899	
Discounted at 4%	0.04		\$	315,654 \$	305,828	\$	294,066	\$ 282,75	5 \$ 271,88	\$ 261,423	\$ 251,368	\$ 241,70	0 \$ 232,4	04 \$	223,466	\$ 214,87	1 \$ 206,	,607 \$	198,660 \$	191,019	183,672	
Discounted at 6%	0.06		\$	196,064 \$	186,377	S	175,827	\$ 165,87	5 \$ 156,48	5 \$ 147,628	\$ 139,272	\$ 131,38	B \$ 123,9	51 \$	116,935	\$ 110,31	5 \$ 104,	,072 \$	98,181 \$	92,624	87,381	
Pacidual																						¢ 5
Residual at 4%	0.04																					\$ 1
Residual at 6%	0.06																					\$
	35 year																					
Revenue at 4%	\$ 18,228,298																					
Residual value at 4%	\$ 1,116,950																					
Cost at 4%	\$ 17,956,285																					
Ratio at 4%	1.08																					
Revenue at 6%	\$ 12,742,549																					
Residual value at 6%	\$ 521,354																					
Cost at 6%	\$ 14,044,370																					
Ratio at 6%	0.94																					



Slips 1 and 3 Reconstruction (page 1)

	NET PRESENT VALUE AND RETURN ON INVEST	WENT EXAMPLE CALC	ULATION: Petroleum Slip E	xpansion with	projected vo	lume					-	-		-		-		
			Assessment Period						1		2	3 4	5	6	7	8	9	10
				2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
			Discounting Period	() 1	. 2	3	4	5		6	/ 2	; 9	10	11	12	13	14
	Revenue																	
	Petroleum (tons)								484,278	968,55	7 1,332,9	47 1,892,696	2,452,445	3,012,194	3,571,943	4,088,352	4,604,761	5,121,170
																		1.01
									1,937,114	3,874,22	B 6,664,7	9,463,481	12,262,226	15,060,970	17,859,714	20,441,759	23,023,803	23,023,803
		2012	adj 2014															
	Revenue per ton	\$ 1.73	\$ 1.83	based on v	waterborne :	statistics												
	Revenue relocated tonnage							\$	3,552,252	\$ 7,104,50	4 \$ 12,221,7	01 \$ 17,354,000	\$ 22,486,298	\$ 27,618,597	\$ 32,750,895	\$ 37,485,812	\$ 42,220,729	\$ 42,220,729
								A	0.550.050	¢ 740450			¢	¢	¢	¢	¢ 40,000,700	¢ 40,000,700
	Total							5	3,552,252	\$ 7,104,50	4 \$ 12,221,7	01 \$ 17,354,000	\$ 22,486,298	\$ 27,618,597	\$ 32,750,895	\$ 37,485,812	\$ 42,220,729	\$ 42,220,729
	Discounted at 4%	0.04	•					\$	2,919,692	\$ 5,614,79	5 5 9,287,4	88 \$ 12,680,397	\$ 15,798,575	5 18,658,134	\$ 21,2/4,35/	\$ 23,413,528	\$ 25,356,676	\$ 24,381,419
	Discounted at 6%	0.00	2					>	2,054,449	\$ 5,008,59	5 5 8,128,1	29 \$ 10,888,114	\$ 15,509,605	\$ 15,422,080	\$ 17,252,765	\$ 18,629,500	\$ 19,794,725	\$ 18,674,269
	Cost																	
	Capital (see note)						28,233,333	\$ 28,233,333 \$	28,233,333		0 \$ 6,400.0	00 (0	0	0	0	0	0
	Maintenance (see note)	0.00	5			S	141.167	\$ 282,333 \$	423,500	\$ 423.50	0 \$ 455.5	00 \$ 455.500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500
	Operating cost for relocated tonnage	0.6	5 revenue				0	0 \$	2.131.351	\$ 4.262.70	3 \$ 7.333.0	21 \$ 10.412.400	\$ 13,491,779	\$ 16.571.158	\$ 19,650,537	\$ 22,491,487	\$ 25,332,437	\$ 25,332,437
								•							,,	, -, -		
	Total					\$	28,374,500	\$ 28,515,667 \$	30,788,185	\$ 4,686,20	3 \$ 14,188,5	21 \$ 10,867,900	\$ 13,947,279	\$ 17,026,658	\$ 20,106,037	\$ 22,946,987	\$ 25,787,937	\$ 25,787,937
	Discounted at 4%	0.04	1			\$	25,224,827	\$ 24,375,311 \$	25,305,644	\$ 3,703,57	4 \$ 10,782,1	10 \$ 7,941,068	\$ 9,799,173	\$ 11,502,600	\$ 13,060,498	\$ 14,332,621	\$ 15,487,567	\$ 14,891,891
	Discounted at 6%	0.06	5			\$	23,823,777	\$ 22,587,079 \$	23,006,723	\$ 3,303,58	8 \$ 9,436,1	77 \$ 6,818,655	\$ 8,255,373	\$ 9,507,597	\$ 10,591,609	\$ 11,403,950	\$ 12,090,391	\$ 11,406,030
	Residual																	
	Residual at 4%																	
	Residual at 6%																	
	D	ć																
	Revenue at 4%	5 655,829,4/1																
	Value of revenue stream beyond analysis	\$ 105,525,506																
	Residual value at 4%	C EDD COE 949																
	Datio at 4%	5 525,005,046 C 1 / E																
	Katio at 4%	Ş 1.45																
	Revenue at 6%	\$ 427,499,705																
	Value of revenue stream beyond analysis	\$ 30.376.461																
	Residual value at 6%																	
	Cost at 6%	\$ 366,481,649																
	Ratio at 6%	1.25	5															
Note: Capital costs have bee	n adjusted for capital expenditures that would	have to be incurred	even if the project were	not built. The	ese include l	bulkhead costs	of \$21.3M in p	hase 1, bulkhead costs o	of \$23.1M in pha	ase 2, and bul	khead costs of \$	28.6M in phase 3.						
Maintenance expenses assu	med 0.5% for years 1-20 and 1% for years 20-30 o	of capital costs.																



Slips 1 and 3 Reconstruction (continued page 2)

			Accessment Period	7		•	10	11	10	10	1.4	10	10	17	10	10	20
			Assessment Period	2025	2026	2027	2028	2020	2020	2021	2022	2022	2024	2025	2026	2027	20
			Discounting Period	2025	2020	2027	2020	2025	2030	2031	2032	2033	2034	2035	2030	2037	2038
			Discounting renou		12	15	14	15	10	17	10	15	20	21		25	24
	Revenue																
	Petroleum (tons)			3,571,943	4,088,352	4,604,761	5,121,170	5,637,578	6,153,987	6,863,046	7,572,105	8,281,163	8,867,239	9,453,314	10,039,389	10,625,465	11,211,540
							1.01										
				17,859,714	20,441,759	23,023,803	23,023,803	23,313,443	23,606,726	23,903,699	24,204,407	24,508,898	24,817,220	25,129,421	25,445,549	25,765,654	26,089,786
		2012	adj 2014														
	Revenue per ton \$	5 1.73	\$ 1.83			-											-
	Revenue relocated tonnage			\$ 32,750,895	\$ 37,485,812	\$ 42,220,729	\$ 42,220,729	\$ 42,751,866	\$ 43,289,684	\$ 43,834,269	\$ 44,385,704	\$ 44,944,076	\$ 45,509,472	\$ 46,081,981 \$	46,661,693	\$ 47,248,697	\$ 47,843,086
	Total			\$ 32 750 895	\$ 37,485,812	\$ 42 220 729	\$ 42 220 729	\$ 42,751,866	\$ 43 289 684	\$ 43,834,260	\$ 44 385 704	\$ 44 944 076	\$ 45 509 472	\$ 46.081.081	46 661 603	\$ 47.248.697	\$ 47,843,086
	Discounted at 4%	0.04		\$ 21 274 357	\$ 23,413,528	\$ 25 356 676	\$ 24 381 410	\$ 23,738,500	\$ 23 112 716	\$ 22,503,341	\$ 21 910 032	\$ 21 332 365	\$ 20,769,929	\$ 20 222 322	10 680 153	\$ 10 170 041	\$ 18 664 615
	Discounted at 6%	0.04		\$ 17 252 763	\$ 18 629 300	\$ 19 794 725	\$ 18 674 269	\$ 17,838,860	\$ 17.040.823	\$ 16 278 488	\$ 15 550 256	\$ 14,854,602	\$ 14 190 069	\$ 13 555 264	12 948 858	\$ 12 369 579	\$ 11,816,216
	biscounted at one	0.00		\$ 17,252,705	\$ 10,025,500	\$ 15,754,725	\$ 10,074,205	¢ 17,000,000	\$ 17,040,025	\$ 10,270,400	\$ 15,550,250	0 14,004,002	0 14,150,005	0 10,000,204 0	12,540,050	\$ 12,505,575	0 11,010,210
	Cost																
	Capital (see note)			0	0	0	0	\$ 38,900,000	\$ 38,900,000	0	0	0			0	0	0
	Maintenance (see note)	0.005		\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500	\$ 455,500 \$	455,500	\$ 455,500	\$ 455,500
	Operating cost for relocated tonnage	0.6	revenue	\$ 19,650,537	\$ 22,491,487	\$ 25,332,437	\$ 25,332,437	\$ 25,651,120	\$ 25,973,811	\$ 26,300,561	\$ 26,631,422	\$ 26,966,446	\$ 27,305,683	\$ 27,649,189 \$	27,997,016	\$ 28,349,218	\$ 28,705,851
	Total			\$ 20,106,037	\$ 22,946,987	\$ 25,787,937	\$ 25,787,937	\$ 65,006,620	\$ 65,329,311	\$ 26,756,061	\$ 27,086,922	\$ 27,421,946	\$ 27,761,183	\$ 28,104,689 \$	28,452,516	\$ 28,804,718	\$ 29,161,351
	Discounted at 4%	0.04		\$ 13,060,498	\$ 14,332,621	\$ 15,487,567	\$ 14,891,891	\$ 36,095,868	\$ 34,879,853	\$ 13,735,846	\$ 13,370,867	\$ 13,015,619	\$ 12,669,842	\$ 12,333,282 \$	12,005,692	\$ 11,686,833	\$ 11,376,469
	Discounted at 6%	0.06		\$ 10,591,609	\$ 11,403,950	\$ 12,090,391	\$ 11,406,030	\$ 27,124,991	\$ 25,716,640	\$ 9,936,249	\$ 9,489,735	\$ 9,063,310	\$ 8,656,068	\$ 8,267,146 \$	7,895,718	\$ 7,540,996	\$ 7,202,228
	Desident																
	Residual																
	Residual at 4%																
	Residual at 0%																
	Revenue at 4% \$	655,829,471															
	Value of revenue stream beyond analysis \$	105,325,306															
	Residual value at 4%																
	Cost at 4% \$	523,605,848															
	Ratio at 4% \$	5 1.45															
	Revenue at 6% \$	427,499,705															
	Value of revenue stream beyond analysis \$	30,376,461															
	Residual value at 6%																
	Cost at 6% \$	366,481,649															
	Ratio at 6%	1.25															
and the first state		and the first state of the	test	a hudha 🐨 👘	al cala da sera			U.S	lia abas 🙃 👘	liber 1							
ote: Capital costs have	been adjusted for capital expenditures that would h	have to be incurred e	even if the project were n	ot built. These in	iciude bulkhea	d costs of \$21.3	M in phase 1, bul	ikhead costs of \$23.1M	i in phase 2, and	i buikhead costs	ot \$28.6M in pha	ase 3.					



Slips 1 and 3 Reconstruction (continued page 3)

		Assessment Period	21	22	23	24	25	26	27	28	29	
			2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
		Discounting Period	25	26	27	28	29	30	31	32	33	
Revenue												1
Petroleum (tons)			11 797 615	12 383 691	12 969 766	13 555 841	14 141 917	14 727 992	15 314 067	15 900 143	16 486 218	17 072 29
renorean (consy			11,757,015	12,000,001	12,505,700	10,000,041	14,141,517	14,121,332	15,514,007	15,500,145	10,400,210	11,012,25
	2012	- 4: 2014	26,417,996	26,750,334	27,086,853	27,427,606	27,772,645	28,122,025	28,475,800	28,834,026	29,196,758	29,564,05
Devenue acetae	2012	adj 2014										
Revenue per ton	\$ 1.75	\$ 1.85	¢ 40.444.050	¢ 40.054.000	¢ 40.671.402	¢ 50,005,051	¢ 50,000,000	¢ 54 560 777	¢ 53.010.505	¢ 50.075.404	¢ 52 540 607	¢
Revenue relocated tonnage			\$ 48,444,952	\$ 49,054,389	\$ 49,671,493	\$ 50,296,361	\$ 50,929,089	\$ 51,569,777	\$ 52,218,525	\$ 52,875,434	\$ 53,540,607	\$ 54,214,147
Total			\$ 48,444,952	\$ 49,054,389	\$ 49,671,493	\$ 50,296,361	\$ 50,929,089	\$ 51,569,777	\$ 52,218,525	\$ 52,875,434	\$ 53,540,607	\$ 54,214,147
Discounted at 4%	0.04		\$ 18,172,515	\$ 17,693,390	\$ 17,226,897	\$ 16,772,703	\$ 16,330,484	\$ 15,899,925	\$ 15,480,717	\$ 15,072,562	\$ 14,675,168	\$ 14,288,252
Discounted at 6%	0.06		\$ 11,287,607	\$ 10,782,647	\$ 10,300,276	\$ 9,839,484	\$ 9,399,307	\$ 8,978,821	\$ 8,577,145	\$ 8,193,440	\$ 7,826,899	\$ 7,476,756
Cost												
Capital (see note)			0	0	0	0	0	0	0	0	0	
Maintenance (see note)	0.005		\$ 911.000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000	\$ 911,000
Operating cost for relocated tonnage	0.6	revenue	\$ 29,066,971	\$ 29,432,633	\$ 29,802,896	\$ 30,177,816	\$ 30,557,453	\$ 30,941,866	\$ 31,331,115	\$ 31,725,260	\$ 32,124,364	\$ 32,528,488
Total			\$ 29,977,971	\$ 30,343,633	\$ 30,713,896	\$ 31,088,816	\$ 31,468,453	\$ 31,852,866	\$ 32,242,115	\$ 32,636,260	\$ 33,035,364	\$ 33,439,488
Discounted at 4%	0.04		\$ 11,245,241	\$ 10,944,622	\$ 10,652,088	\$ 10,367,420	\$ 10,090,404	\$ 9,820,833	\$ 9,558,506	\$ 9,303,225	\$ 9,054,801	\$ 8,813,047
Discounted at 6%	0.06		\$ 6,984,826	\$ 6,669,835	\$ 6,369,078	\$ 6,081,910	\$ 5,807,715	\$ 5,545,907	\$ 5,295,923	\$ 5,057,230	\$ 4,829,315	\$ 4,611,691
Residual												
Residual at 4%												
Residual at 6%												
Revenue at 4%	\$ 655,829,471											
Value of revenue stream beyond analysis	\$ 105,325,306											
Residual value at 4%												
Cost at 4%	\$ 523,605,848											
Ratio at 4%	\$ 1.45											
Revenue at 6%	\$ 427,499,705											
Value of revenue stream beyond analysis	\$ 30,376,461											
Residual value at 6%												
Cost at 6%	\$ 366.481.649											
Ratio at 6%	1.25											
	d have ta had a set of the set			de build - 1		-		444 (a. a. b. a				
en adjusted for capital expenditures that would	a nave to be incurred	even if the project were no	ot built. These inclu	de buikhead co	sts of \$21.3M in	phase 1, bulkh	ead costs of \$23	.1M in phase 2,	and bulkhead	osts of \$28.6M i	n phase 3.	



Slips 1 and 3 Reconstruction (continued page 4)

NET PRESENT VALUE AND RETURN ON INVES	TMENT EXAMPLE CALCU	JLATION: Petroleum Slip Ex	pansion with p	rojected volume									
		Assessment Period		31 32	33	34	35	36	37	38	39	40	i
			2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	
		Discounting Period		35 36	i 37	38	39	40) 41	42	2 43	44	,
Revenue													
Petroleum (tons)			17,072,2	93 17,072,293	17,072,293	17,072,293	17,072,293	17,072,293	17,072,293	17,072,293	17,072,293	17,072,293	
			29,935,9	59 30,312,563	30,693,895	31,080,024	31,471,011	31,866,916	32,267,802	32,673,731	33,084,767	33,500,973	
	2012	adj 2014											
Revenue per ton	\$ 1.73	\$ 1.83											
Revenue relocated tonnage			\$ 54,896,1	51 \$ 55,586,755	\$ 56,286,036	\$ 56,994,115	\$ 57,711,101	\$ 58,437,106	\$ 59,172,245	\$ 59,916,632	\$ 60,670,383	\$ 61,433,617	
			.		A	A	A 57 744 494	A 50 107 105	A	<i></i>	<i>t co c c c c c c c c c c</i>	A	
Total			\$ 54,896,1	51 \$ 55,586,755	\$ 56,286,036	\$ 56,994,115	\$ 57,711,101	\$ 58,437,106	\$ 59,172,245	\$ 59,916,632	\$ 60,670,383	\$ 61,433,617	
Discounted at 4%	0.04	•	\$ 13,911,5	37 \$ 13,544,754	\$ 13,187,641	\$ 12,839,944	\$ 12,501,414	\$ 12,1/1,809	\$ 11,850,895	\$ 11,538,441	\$ 11,234,226	\$ 10,938,031	
Discounted at 6%	0.06		\$ 7,142,2	// \$ 6,822,/61	\$ 6,517,539	\$ 6,225,972	\$ 5,947,447	\$ 5,681,383	\$ 5,427,222	\$ 5,184,430	\$ 4,952,501	\$ 4,730,946	
Cast													
Cost				0									i
Maintenance (see note)	0.005		\$ 911.0	0 4 911 000	¢ 011.000	¢ 011.000	¢ 911.000	¢ 911.000	¢ 011.000	¢ 011.000	¢ 011.000	¢ 011.000	
Operating cost for relocated toppage	0.005	revenue	\$ 32 037 6	0 5 911,000	\$ 33 771 622	\$ 34 106 460	\$ 34 626 660	\$ 35,062,264	\$ 35 503 347	\$ 35 0/0 070	\$ 36,402,230	\$ 36 860 170	
operating cost for relocated tormage	0.0	revenue	\$ 52,557,0	57 \$ 55,552,655	5 55,771,022	\$ 54,150,405	5 54,020,000	5 55,002,204	5 55,565,547	\$ 55,545,575	\$ 50,402,250	\$ 50,000,170	
Total			\$ 33,848,6	97 \$ 34 263 053	\$ 34,682,622	\$ 35 107 469	\$ 35,537,660	\$ 35,973,264	\$ 36 414 347	\$ 36,860,979	\$ 37 313 230	\$ 37 771 170	
Discounted at 4%	0.04		\$ 8577.7	R3 S 8 348 834	\$ 8126029	\$ 7,909,201	\$ 7,698,190	\$ 7,492,837	\$ 7,292,990	\$ 7,098,501	\$ 6,909,224	\$ 6725.019	
Discounted at 6%	0.06		\$ 4403.8	92 \$ 4,205,474	\$ 4,016,011	\$ 3,835,100	\$ 3,662,352	\$ 3,497,399	\$ 3,339,889	\$ 3,189,485	\$ 3,045,865	\$ 2,908,723	
			¢ .,,.	• .,,	• .,•=•,•==	• -,,	• •,•••=,••==	• •,•••,••••	¢ 0,000,000	• •,200,100	¢ 0,012,002	\$ 2,000,020	
Residual													
Residual at 4%													
Residual at 6%													
Revenue at 4%	\$ 655,829,471												
Value of revenue stream beyond analysis	\$ 105,325,306												
Residual value at 4%													
Cost at 4%	\$ 523,605,848												
Ratio at 4%	\$ 1.45												
Revenue at 6%	\$ 427,499,705												
Value of revenue stream beyond analysis	\$ 30,376,461												
Residual value at 6%													
Cost at 6%	\$ 366,481,649												
Ratio at 6%	1.25												



Berth 33 Reconfiguration (page 1)

NET PRESENT VALUE AND RETURN ON INVES	STMENT EXAMPLE CALCU	ULATION: Berth 33 with	h projected volu	me										1			2	4	5	-	6		7			10
		Assessment Period	2014	2015	2016	2017	2018	2019	2020	20	21	202	2	2023	2024	2025	2026	4	2027	,	2028		2029	2030	2031	2032
		Discounting Period	0	1	. 2	3	4	4	5 6	6	7		8	9	10	1	1	12	13	3	14	-	15	16	17	18
Volume																										
Tourie																										
Volume from additional TEU terminal three	oughput													38,016	61,776	80,784	95	,040	95,040		95,040		95,040	95,040	95,040	95,040
Volume from additional 2.3 acres of yard	@3300 TEU/acre													7,590	7,590	7,590) 7	,590	7,590		7,590		7,590	7,590	7,590	7,590
	2013	adi 2014																								
Revenue per TEU	\$ 34.16	\$ 35.18																								
													:	\$ 1,604,638	\$ 2,440,629	\$ 3,109,422	\$ 3,611	,016 \$	3,611,016	S :	3,611,016	\$	3,611,016	3,611,016	\$ 3,611,016	\$ 3,611,016
Total														\$ 1,604,638	\$ 2,440,629	\$ 3,109,422	\$ 3,611	.016 \$	3,611,016	S :	3,611,016	s	3,611,016	3,611,016	\$ 3,611,016	\$ 3,611,016
Discounted at 4%	0.04	l l												\$ 1,132,287	\$ 1,656,749	\$ 2,030,534	\$ 2,268	,483 \$	2,182,283	\$ 3	2,099,358	\$	2,019,584	1,942,842	\$ 1,869,016	\$ 1,797,995
Discounted at 6%	0.06	i												\$ 949,783	\$ 1,362,834	\$ 1,638,004	\$ 1,794	,564 \$	1,692,985	\$ 3	1,597,156	\$	1,506,751	1,421,463	\$ 1,341,003	\$ 1,265,097
Cost																										
Capital										\$ 19	300.000	\$ 19	300 000		s -	s -	s	- 5		s		s	- 1	ş -	s -	s -
Maintenance	0.005	0.01									,,	•,	,,	\$ 167 500	\$ 167 500	\$ 167.500	1 \$ 167	500 \$	167 500	Š	167 500	s	167 500	\$ 167 500	\$ 167 500	\$ 167 500
Operating cost for TEUs	0.6	revenue												\$ 962 783	\$ 1464 377	\$ 1,865,653	\$ 2,166	610 \$	2 166 610	S :	2 166 610	s	2 166 610	\$ 2 166 610	\$ 2 166 610	\$ 2 166 610
Cost of maintaining operations during co	nstruction									s	89,000 \$	s	89,000		\$ 2,101,011	• 2,000,000	,	, •	2,200,020		-,,	-	2,200,020	2,200,020	· _,,	\$ 2,200,020
Avoided maintenance cost for demolishe	d structures									5 ((502,500)	\$ ((502,500)	\$ (502,500)	\$ (502,500)	\$ (402,000) \$ (321	,600) \$	(257,280)) \$	(205,824)	\$	(164,659)	j (131,727	\$ (105,382)	\$ (84,306)
Total										\$ 18,	,886,500	\$ 18,	,886,500	\$ 627,783	\$ 1,129,377	\$ 1,631,153	\$ 2,012	,510 \$	2,076,830	S i	2,128,286	S	2,169,450	2,202,382	\$ 2,228,728	\$ 2,249,804
Discounted at 4%	0.04	•								\$ 14	,400,581	\$ 13, 0 14	,853,373	\$ 442,985	\$ 766,645	\$ 1,065,185	\$ 1,264	,282 \$	5 1,255,112	\$:	1,237,334	\$	1,213,339	1,184,952	\$ 1,153,561	\$ 1,120,221
Discounted at 6%	0.06									\$ 12,	,560,601	\$ 11,	,849,624	\$ 3/1,584	\$ 630,638	\$ 859,271	\$ 1,000	,156 \$	973,699	5	941,343	5	905,236	866,960	\$ 827,670	\$ 788,205
Residual																										
Residual at 4%																										
Residual at 6%																										
Revenue at 4%	\$ 43,543,017																									
Value of revenue stream beyond analysis	s \$ 6.363.557																									
Residual value at 4%	\$ 8,492,262																									
Cost at 4%	\$ 55,282,733																									
Ratio at 4%	1.06	i																								
Revenue at 6%	\$ 29,080,204																									
Value of revenue stream beyond analysis	5 \$ 2,020,242																									
Residual value at 6%	\$ 3,965,061																									
Cost at 6%	\$ 42,195,584																									
Ratio at 6%	0.83	5																								
Notes: Capital cost adjusted for expendite	ures that would have t	to be undertaken eve	n if the project	were not const	tructed.																					
Unadjusted cost is \$56.4M																										
Maintenance expenses assumed 0.5% for	years 1-20 and 1% for	years 20-30 of capita	l costs.																							



Berth 33 Reconfiguration (continued page 2)

		Assessment Period		11		12		13		14		15		16		17		18		19		
				2033		2034		2035		2036		2037		2038		2039		2040	20	41		
		Discounting Period		19		20		21		22		23		24		25		26		27		
Volume																						
Volume																						
Volume from additional TEU terminal thro	ughput			95.040		95.040		95.040		95.040		95.040		95.040		95.040		95.040		95.040		
Volume from additional 2.3 acres of vard @	03300 TEU/acre			7,590		7,590		7,590		7,590		7,590		7,590		7,590		7,590		7.590		
,				.,		.,		.,		.,===		.,		.,		.,		.,		.,		
	2013	adj 2014																				
Revenue per TEU	\$ 34.1	6 \$ 35.18																				
			\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$ 3,6	11,016	\$	
Total			s	3,611,016	s	3,611,016	s	3,611,016	s	3,611,016	s	3,611,016	s	3,611,016	s	3,611,016	s	3,611,016	\$ 3.6	11.016	s	
Discounted at 4%	0.0)4	Š	1,729,673	ŝ	1.663.947	Š	1,600,719	ŝ	1,539,893	š	1.481.379	Š	1,425,088	ŝ	1,370,936	ŝ	1.318.841	\$ 1.2	68,727	ŝ	
Discounted at 6%	0.)6	š	1,193,488	š	1,125,932	š	1.062.200	Š	1,002,075	š	945.354	š	891,843	ŝ	841.362	Š	793,738	\$ 7	48,809	š	
			Ť	1,155,160	Ť	1,123,552	ľ	1,002,200	Ť	1,002,075	Ť	515,551	Ŭ.	051,015	Ť	012,002	Ŭ	135,155	· ·	10,000	Ť	
Cast																						
Canital			c	_	c	_	c	_	c	-	c		¢	-	c		¢	-	c	_	¢	
Maintenance	0.0	0.01	s c	167 500	ç	167 500	c	167 500	ç	167 500	ç	167 500	c	167 500	¢	167 500	¢	167 500	у с 1	67 500	ç	
Operating cost for TELLs	0.0	5 revenue	c 2	2 166 610	¢	2 166 610	¢	2 166 610	¢	2 165 610	¢	2 166 610	¢	2 166 610	¢	2 165 610	¢	2 166 610	\$ 21	66 610	¢	
Cost of maintaining operations during con	struction	.u revenue	2	2,100,010	2	2,100,010	2	2,100,010	2	2,100,010	\$	2,100,010	2	2,100,010	\$	2,100,010	\$	2,100,010	\$ 2,1	00,010	\$	
Avoided maintenance cost for demolished	structures																					
Tatal			•	3 224 110	¢	3 224 110	c	3 224 110	¢	3 224 110	•	3 224 110	¢	3 224 110	•	3 224 110	•	3 224 110	6 32	24 110	•	
Discounted at 4%	0.	M	о с	2,334,110	ç	2,334,110	э с	1 024 692	ç	2,334,110	о с	2,334,110	¢	2,554,110	s c	2,334,110	¢	2,334,110	\$ 2,3 ¢ 0	20.097	\$ ¢	
Discounted at 6%	0.)4)6	с с	771 /5/	ç	1,073,332	с с	696 501	¢	535,305	¢	611.064	¢	576 475	¢	5/3 8//	¢	513.061	\$ 0 \$ 1	20,007	¢	
Discounted at 0%	0.		\$	771,434	\$	121,180	3	080,351	3	047,727	\$	011,004	\$	570,475	3	343,044	3	515,001	5 4	04,020	\$	
Pasidual																						
Residual at /%							-		-													
Residual at 4%																						
Residual at 0%							-															
Devenue at 49/	¢ 40.540.04	2																				
Neveriue at 470	\$ 45,545,01 \$ 6,262,55	7							-													
Pesidual value at 4%	 0,000,00 0,000,00 0,000,00 	2							-													
Cost at /%		2							-													
Datio at 4%	ې 55,262,75 ۱	5							-													
Natio di 470	1.																					
Revenue at 6%	\$ 29,080,20	4																				
Value of revenue stream beyond analysis	\$ 2,020,24	2							-													
Residual value at 6%	\$ 3,965,06	1																				
Cost at 6%	\$ 42,195,58	4							-													
Ratio at 6%	0.3	33																				
Notes: Capital cost adjusted for expenditu	res that would have	to be undertaken eve	n if th	ne project v	vere	not constru	ucte	d.														
Unadjusted cost is \$56.4M																						



Berth 33 Reconfiguration (continued page 3)

			Assessment Period		21		22		23		24		25		26		27		28		29		30)	
					2043		2044		2045		2046		2047		2048		2049		2050		2051		2052		2
			Discounting Period		29		30		31		32		33		34		35	<u> </u>	36		37		38	<u> </u>	
Volume								-										-						-	
Volume from additional TEU terminal thro	ughput				95,040		95,040		95,040		95,040		95,040		95,040		95,040	_	95,040		95,040		95,040		
Volume from additional 2.3 acres of yard (93300 TE	U/acre			7,590		7,590	-	7,590		7,590		7,590		7,590		7,590	-	7,590		7,590		7,590		
		2013	adj 2014					-										-						+-	
Revenue per TEU	\$	34.16	\$ 35.18																						
				\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	\$	3,611,016	-	
Total				c	2 611 016	¢	3 611 016	¢	3 611 016	c	3 611 016	c	3 611 016	c	2 611 016	c	2 611 016	¢	2 611 016	¢	3 611 016	¢	3 611 016	+	
Discounted at 4%		0.04		s	1,174,138	s	1,129,522	s	1.086.601	s	1.045.311	s	1,005,590	s	967.379	s	930,619	s s	3,011,010 895,257	s	861,238	s	828 512	-	
Discounted at 6%		0.04		ŝ	666.437	s	628,714	ŝ	593.127	ŝ	559,554	s	527.881	ŝ	498.001	ŝ	469.812	ŝ	443.219	ŝ	418.131	ŝ	394.463		
		0.00		Ĭ	000,101	Ĭ	020,721	Ĺ	555,127	Ť		Ĭ	527,001	Ĭ	150,001	Ť	100,012	Ĺ	110,220	Č	110,101	Ĭ	001,100		
Cost								<u> </u>										-						+	
Capital				\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-		
Maintenance		0.005	0.01	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000	\$	335,000		
Operating cost for TEUs		0.6	revenue	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610	\$	2,166,610		
Cost of maintaining operations during con	struction	1 I																							
Avoided maintenance cost for demolished	structur	es																							
Total				\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610	\$	2,501,610		
Discounted at 4%		0.04		\$	813,409	\$	782,501	\$	752,766	\$	724,162	\$	696,645	\$	670,173	\$	644,707	\$	620,209	\$	596,641	\$	573,969		
Discounted at 6%		0.06		\$	461,689	\$	435,556	\$	410,901	\$	387,643	\$	365,701	\$	345,001	\$	325,472	\$	307,049	\$	289,669	\$	273,273	-	
																								\$	38,
Residual																		_						\$	8,
Residual at 4%																		<u> </u>						\$	3,
Residual at 6%																									
Revenue at 4%	s	43,543.017						<u> </u>										<u> </u>						+	
Value of revenue stream beyond analysis	\$	6,363,557																						1	
Residual value at 4%	\$	8,492,262																							
Cost at 4%	\$	55,282,733																							
Ratio at 4%		1.06																							
Revenue at 6%	\$	29,080,204																						1	
Value of revenue stream beyond analysis	\$	2,020,242																						-	
Residual value at 6%	\$	3,965,061						<u> </u>										<u> </u>						+-	
Cost at 6%	\$	42,195,584						<u> </u>										<u> </u>						-	
Ratio at 6%		0.83																-						+	
Notes: Capital cost adjusted for expenditu	res that	would have t	o be undertaken ever	n if t	the project v	vere	not constru	cted	l															F	
Unadjusted cost is \$56.4M																									



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Berth Tracor Basin Fill (page 1)

		Assessment Period								1	2	2	3	4		5	6	7	5	1	9
			2014	2015	2016	2017	2018	2019		2020	2021	2022	-	2023	2024	-	2025	2026	2027	2028	Ť
		Discounting Period	0	1	2	3	4	5	5	6	7	1 8	8	9		10	11	12	13	1	.4
Mahara																					_
Volume									_	20 726	22.740	25 707		20.052		40	45.067	47.000	50.000	52.444	-
Revenue passengers										29,736	32,748	35,787		38,855	41,5	46	45,067	47,838	50,630	53,444	+
TEUS										1,980	3,960	5,940		7,920	9,9	00	11,880	13,860	15,840	17,820	+
	2013	adj 2014																			+
Revenue per passenger	\$ 17.26	\$ 17.78																			
Revenue per TEU	\$ 34.16	\$ 35.18																			
Revenue from passengers									\$	528,641	\$ 582,189	\$ 636,215	\$	690,721	\$ 745,7	14 \$	\$ 801,197	\$ 850,449	\$ 900,087	\$ 950,114	4
Revenue from TEUs									\$	69,666	\$ 139,332	\$ 208,998	\$	278,664	\$ 348,3	30 \$	\$ 417,995	\$ 487,661	\$ 557,327	\$ 626,993	3
																					+
Total									\$	598,307	\$ 721,521	\$ 845,212	\$	969,385	\$ 1,094,0	43 \$	5 1,219,192	\$ 1,338,110	\$ 1,457,414	\$ 1,577,107	1
Discounted at 4%	0.04								\$	472,851	\$ 548,297	\$ 617,588	\$	681,077	\$ 739,0	97 \$	5 791,964	\$ 835,779	\$ 875,285	\$ 910,740	ו
Discounted at 6%	0.06								\$	421,783	\$ 479,853	\$ 530,297	\$	573,777	\$ 610,9	08 \$	642,255	\$ 665,000	\$ 683,293	\$ 697,556	j
																					+
Cost																					_
Capital (net new)							\$13,000,000	\$13,000,000		0	0) (0	0		0	0	0	()	0
Tug Relocation							\$ 1,250,000	\$ 1,250,000													
Operational penalty during construction							\$ 242,000	\$ 242,000													
Maintenance	0.005								\$	130,000	\$ 130,000	\$ 130,000	\$	130,000	\$ 130,0	00 \$	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	J
Operating cost for TEUs	0.6	revenue					s -	\$ -	\$	41,800	\$ 83,599	\$ 125,399	\$	167,198	\$ 208,9	98 \$	\$ 250,797	\$ 292,597	\$ 334,396	\$ 376,196	i
Operating cost for passengers	0.57	revenue					\$ -	\$ -	\$	301,325	\$ 331,848	\$ 362,642	\$	393,711	\$ 425,0	57 \$	456,682	\$ 484,756	\$ 513,049	\$ 541,565	i
Total							\$14,492,000	\$14,492,000	\$	473,125	\$ 545,447	\$ 618,041	\$	690,909	\$ 764,0	55 \$	\$ 837,479	\$ 907,352	\$ 977,446	\$ 1,047,761	L
Discounted at 4%	0.04						\$12,387,822	\$11,911,368	\$	373,918	\$ 414,495	\$ 451,596	\$	485,424	\$ 516,3	.68 \$	\$ 544,011	\$ 566,730	\$ 587,029	\$ 605,056	i
Discounted at 6%	0.06						\$11,479,021	\$10,829,265	\$	333,534	\$ 362,753	\$ 387,767	\$	408,948	\$ 426,0	44 \$	\$ 441,174	\$ 450,926	\$ 458,265	\$ 463,426	j
																					+
Residual	\$ 17,600,000																				T
Residual at 4%	\$ 4,288,570																				T
Residual at 6%	\$ 2,160,238																				1
																					+
Revenue at 4%	\$ 21,476,313																				1
Value of revenue stream beyond analysis																					
Residual value at 4%	\$ 4,288,570																				
Cost at 4%	\$ 39,013,730																				
Ratio at 4%	0.66																				+
Revenue at 6%	\$ 14,917,742																				+
Value of revenue stream beyond analysis																					
Residual value at 6%	\$ 2,160,238																				T
Cost at 6%	\$ 32,529,253																				T
Ratio at 6%	0.53																				1
Notes: Capital cost adjusted for expenditu	res that would h	nave to be undertake	n even if t	the project v	vere not c	onstructe	d.														+
Unadjusted cost is \$56.4M													-								+
Maintanana avananana any mad 0 EW for		N 6 20 20 -6 -																			+



Tracor Basin Fill (continued page 2)

		Assessment Period	11	12	13	14	15	16	17	18	1
			2030	2031	2032	2033	2034	2035	2036	2037	
		Discounting Period	16	17	18	19	20	21	22	23	-
Volume											
Revenue passengers			59,138	61,631	64,140	66,667	66,667	66,667	66,667	66,667	
TEUs			19,800	19,800	19,800	19,800	19,800	19,800	19,800	19,800	
	2012	- // 2014									
	2013	adj 2014									
Revenue per passenger	\$ 17.20	5 17.78 ¢ 25.19									
Revenue frem passangers	\$ 54.10	5 55.16	¢ 1.051.240	¢ 1.005.660	¢ 1 140 272	¢ 1 105 107	¢ 1 10E 107	¢ 1 105 107	¢ 1 105 107	¢ 1 10E 107	¢ 1
Revenue from TELLs			\$ 1,051,549	\$ 1,095,000	\$ 1,140,272	\$ 1,105,107	\$ 1,105,107	\$ 1,165,167	\$ 1,165,167	\$ 1,165,167	\$ 1 ¢
Revenue from reos			\$ 090,039	\$ 090,059	\$ 090,039	\$ 090,039	\$ 090,039	\$ 090,039	\$ 090,039	\$ 090,039	\$
Total			\$ 1,748,008	\$ 1,792,319	\$ 1,836,931	\$ 1,881,846	\$ 1,881,846	\$ 1,881,846	\$ 1,881,846	\$ 1,881,846	\$ 1
Discounted at 4%	0.0	4	\$ 933,276	\$ 920,129	\$ 906,761	\$ 893,204	\$ 858,850	\$ 825,817	\$ 794,055	\$ 763,514	\$
Discounted at 6%	0.0	6	\$ 688,097	\$ 665,604	\$ 643,557	\$ 621,974	\$ 586,768	\$ 553,555	\$ 522,222	\$ 492,662	\$
Cost											
Capital (net new)			0	0	0	0	0	U	0	0	1
Tug Relocation											
Operational penalty during construction		-		.							-
Maintenance	0.00	5	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$ 130,000	\$
Operating cost for IEUs	0.	b revenue	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$
Operating cost for passengers	0.5	/ revenue	\$ 599,269	\$ 624,526	\$ 649,955	\$ 6/5,556	\$ 6/5,556	\$ 6/5,556	\$ 6/5,556	\$ 6/5,556	5
			\$ 1,147,264	\$ 1,172,522	\$ 1,197,951	\$ 1,223,552	\$ 1,223,552	\$ 1,223,552	\$ 1,223,552	\$ 1,223,552	51
Discounted at 4%	0.0	4 c	\$ 612,534	\$ 601,941	\$ 591,342	\$ 580,750	\$ 558,413	\$ 536,936	\$ 516,284	\$ 496,427	>
Discounted at 6%	0.0	b	\$ 451,616	\$ 435,433	\$ 419,695	\$ 404,400	\$ 381,509	\$ 359,914	\$ 339,542	\$ 320,323	5
Residual	\$ 17,600,000	 									
Residual at 4%	\$ 4,288,570										
Residual at 6%	\$ 2,160,238										
Devenue et 400	¢ 04.476.044										
Network of revenue stream hever discrimination	\$ 21,476,313										
value of revenue scream beyond analysis Residual value at 4%	¢ 4 300 570										
Cost at 4%	\$ 4,200,370										
Ratio at 4%	0.6	5									-
	2.0										
Revenue at 6%	\$ 14,917,742										
Value of revenue stream beyond analysis											
Residual value at 6%	\$ 2,160,238										
Cost at 6%	\$ 32,529,253	-									
Ratio at 6%	0.5	3									
Notes: Capital cost adjusted for expenditu	res that would	have to be undertake	en even if the	project were n	ot constructed	l.					—
Unadjusted cost IS \$56.4M											





Tracor Basin Fill (continued page 3)

		Assessment Period	2	1 22	23	24	25	26	27	28	29	30)
			2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	
		Discounting Period	20	5 27	28	29	30	31	32	33	34	35	5
Volume													-
Pevenue passengers			66 667	66 667	66 667	66 667	66 667	66 667	66 667	66 667	65 667	66 667	-
TELLe			19 800	19 800	10,007	10,007	10,007	10,007	19 800	10,007	19 800	10,007	+-
			19,000	19,000	15,000	19,000	15,000	15,000	19,000	15,000	15,000	19,000	+
	2013	adj 2014											
Revenue per passenger	\$ 17.26	\$ 17.78											
Revenue per TEU	\$ 34.16	\$ 35.18											
Revenue from passengers			\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	\$ 1,185,187	
Revenue from TEUs			\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	\$ 696,659	
Total			\$ 1,881,846	\$ 1,881,846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	\$ 1,881.846	
Discounted at 4%	0.04		\$ 678,761	\$ 652,655	\$ 627,553	\$ 603,416	\$ 580,208	\$ 557,892	\$ 536,435	\$ 515,803	\$ 495,964	\$ 476,889	
Discounted at 6%	0.06		\$ 413,649	\$ 390,234	\$ 368,146	\$ 347,307	\$ 327,648	\$ 309,102	\$ 291,606	\$ 275,100	\$ 259,528	\$ 244,838	
Cost													-
Capital (net new)) 0	0	0	0	0	0	0	0		1
Tug Relocation						Ū					Ŭ		-
Operational penalty during construction	n l												-
Maintenance	0.005		\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	\$ 260,000	-
Operating cost for TEUs	0.005	revenue	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	\$ 417,995	-
Operating cost for passengers	0.57	revenue	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	\$ 675 556	-
Total	0.21		\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	\$ 1.353.552	-
Discounted at 4%	0.04		\$ 488.212	\$ 469,434	\$ 451.379	\$ 434.018	\$ 417.325	\$ 401.274	\$ 385.841	\$ 371.001	\$ 356,731	\$ 343.011	-
Discounted at 6%	0.06		\$ 297,524	\$ 280.683	\$ 264,796	\$ 249,807	\$ 235,667	\$ 222.327	\$ 209.743	\$ 197.871	\$ 186.670	\$ 176.104	-
											-		
Residual	\$ 17,600,000												\$
Residual at 4%	\$ 4,288,570												\$
Residual at 6%	\$ 2,160,238												\$
Revenue at 4%	\$ 21,476,313												-
Value of revenue stream beyond analy	sis												
Residual value at 4%	\$ 4,288,570												
Cost at 4%	\$ 39,013,730												
Ratio at 4%	0.66												
Revenue at 6%	\$ 14,917,742												
Posidual value at 5%	C 0.100.000												-
Cost at 6%	\$ 2,100,238												-
Ratio at 6%	\$ 52,529,253 0.53												
Notes: Capital cost adjusted for expend	ditures that would h	ave to be undertake	n even if the	project were n	ot constructed	1.							
Unadjusted cost is \$56.4M				-									1



Cruise Terminal 25 Improvements (page 1)

N	IET PRESENT VALUE AND RETURN ON INVESTMENT EXAMP	LE CALCULATION: La	arger ship													
			Assessment Designed													
			Assessment Period				1	. 2	3	4	5	6	i 7	8	9	10
				2014	2015	2016	2017	2028	2039	2050	2061	2072	2083	2094	2105	2116
			Discounting Period	0	1	2	3	; 4	5	6	7	8	9	10	11	12
Ve	/olume															
O	perating Revenue Base Scenario						38,527	48,951	86,184	96,833	105,761	114,769	123,858	133,027	142,279	150,491
N	let gain with swapping in larger shipAnthem of the Se	eas 4180 for Liberty	of the Seas 3634 vo	ume chai	nge)		36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583
		0							-	-	-	-	-	-	-	-
		2013	adj 2014													
Re	evenue per passenger	\$ 17.26	\$ 17.61													
То	otal Operating Revenues for Larger Ship Scenario						\$ 1,322,324	\$ 1,505,837	\$ 2,161,330	\$ 2,348,807	\$ 2,505,997	\$ 2,664,589	\$ 2,824,593	\$ 2,986,024	\$ 3,148,893	\$ 3,293,472
То	otal						\$ 1,322,324	\$ 1,505,837	\$ 2,161,330	\$ 2,348,807	\$ 2,505,997	\$ 2,664,589	\$ 2,824,593	\$ 2,986,024	\$ 3,148,893	\$ 3,293,472
Di	iscounted at 4%	0.04					\$ 1,175,541	\$ 1,287,196	\$ 1,776,455	\$ 1,856,296	\$ 1,904,352	\$ 1,946,989	\$ 1,984,522	\$ 2,017,251	\$ 2,045,461	\$ 2,057,093
Di	iscounted at 6%	0.06					\$ 1,110,249	\$ 1,192,764	\$ 1,615,071	\$ 1,655,816	\$ 1,666,631	\$ 1,671,796	\$ 1,671,872	\$ 1,667,380	\$ 1,658,798	\$ 1,636,755
Co	ost															
Ca	apital			0	\$ 13,150,000	\$ 13,150,000	0	0 0	0 0	0	0	0	0 0	0 0	0	0
M	laintenance terminal	0.005		0	0	0	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500
0	perating Cost for Larger Ship	0.57	revenue	0	5 -	5 -	\$ 753,725	\$ 858,327	\$ 1,231,958	\$ 1,338,820	\$ 1,428,419	\$ 1,518,816	\$ 1,610,018	\$ 1,702,034	\$ 1,794,869	\$ 1,877,279
10	otal				\$ 13,150,000	\$ 13,150,000	\$ 885,225	\$ 989,827	\$ 1,363,458	\$ 1,470,320	\$ 1,559,919	\$ 1,650,316	\$ 1,741,518	\$ 1,833,534	\$ 1,926,369	\$ 2,008,779
Di	Discounted at 4%	0.04			\$ 12,644,231	\$ 12,157,914	\$ 786,962	\$ 846,109	\$ 1,120,663	\$ 1,162,015	\$ 1,185,410	\$ 1,205,869	\$ 1,223,568	\$ 1,238,670	\$ 1,251,333	\$ 1,254,678
D	Discounted at 6%	0.06			\$ 12,405,660	\$ 11,703,453	\$ 743,252	\$ 784,036	\$ 1,018,855	\$ 1,036,518	\$ 1,037,435	\$ 1,035,428	\$ 1,030,802	\$ 1,023,836	\$ 1,014,787	\$ 998,302
D																
Re	esidual															
Re	esidual at 4%															
R	esidual at 6%															
Pr	evenue at 4%	\$ 61 267 371														
V	alue of revenue stream beyond analysis period															
Re	esidual value at 4%	\$ 592 501														
	ost at 4%	\$ 64 226 383														
R	atio at 4%	0.96														
		0.50														
Re	evenue at 6%	\$ 45.141.679														
Va	alue of revenue stream beyond analysis period															
Re	esidual value at 6%	\$ 287,298														
Co	ost at 6%	\$ 53,049,028														
Ra	atio at 6%	0.86														



Cruise Terminal 25 Improvements (continued page 2)

NET PRESENT VALUE AND RETURN ON INVESTMENT EXAMPLE	CALCULATION: La	arger ship										
		Assessment Period	11	12	13	14	15	16	17	18	19	20
			2127	2138	2149	2160	2171	2182	2193	2204	2215	2226
		Discounting Period	13	14	15	16	17	18	19	20	21	22
Volume			450 750	467.400	475 546	400.000	404.070	400.046	205 205	205 205	205 205	205 205
Operating Revenue Base Scenario	4400 6 111		158,768	167,109	1/5,516	183,989	191,378	198,816	206,305	206,305	206,305	206,305
Net gain with swapping in larger shipAnthem of the Sea	s 4180 for Liberty	of the Seas 3634 vol	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583
	2012		-			-	-	-	-	-	-	-
D	2015	adj 2014										
Revenue per passenger	\$ 17.20	\$ 17.01										
Total Operating Revenues for Larger Ship Scenario			\$ 3,439,185	\$ 3,586,041	\$ 3,734,048	\$ 3,883,216	\$ 4,013,291	\$ 4,144,250	\$ 4 276 096	\$ 4 276 096	\$ 4 276 096	\$ 4,276,096
			• •,•••,•••	• •,•••,••	\$ 2,121,212	• •,•••,==•	• .,,	• .,,	• .,2 0,000	• .,,	• .,2. 0,000	• .,_, .,
Total			\$ 3,439,185	\$ 3,586,041	\$ 3,734,048	\$ 3,883,216	\$ 4,013,291	\$ 4,144,250	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096
Discounted at 4%	0.04		\$ 2,065,486	\$ 2,070,849	\$ 2,073,384	\$ 2,073,281	\$ 2,060,316	\$ 2,045,718	\$ 2,029,617	\$ 1,951,554	\$ 1,876,495	\$ 1,804,322
Discounted at 6%	0.06		\$ 1,612,424	\$ 1,586,109	\$ 1,558,088	\$ 1,528,613	\$ 1,490,394	\$ 1,451,912	\$ 1,413,305	\$ 1,333,307	\$ 1,257,837	\$ 1,186,638
Cost												
Capital			0	0	0	0	0	0	0	i O	0	0
Maintenance terminal	0.005		\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500
Operating Cost for Larger Ship	0.57	revenue	\$ 1,960,336	\$ 2,044,043	\$ 2,128,407	\$ 2,213,433	\$ 2,287,576	\$ 2,362,222	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375
Total			\$ 2,091,836	\$ 2,175,543	\$ 2,259,907	\$ 2,344,933	\$ 2,419,076	\$ 2,493,722	\$ 2,568,875	\$ 2,568,875	\$ 2,568,875	\$ 2,568,875
Discounted at 4%	0.04		\$ 1,256,302	\$ 1,256,322	\$ 1,254,846	\$ 1,251,979	\$ 1,241,889	\$ 1,230,971	\$ 1,219,297	\$ 1,172,401	\$ 1,127,309	\$ 1,083,951
Discounted at 6%	0.06		\$ 980,734	\$ 962,245	\$ 942,980	\$ 923,074	\$ 898,359	\$ 873,660	\$ 849,047	\$ 800,987	\$ 755,648	\$ 712,876
Residual												
Residual at 4%												
Residual at 6%												
Revenue at 4%	\$ 61,267,371											
Value of revenue stream beyond analysis period												
Residual value at 4%	\$ 592,501											
Cost at 4%	\$ 64,226,383											
Ratio at 4%	0.96											
Revenue at 6%	\$ 45,141,679											
Value of revenue stream beyond analysis period												
Residual value at 6%	\$ 287,298											
Cost at 6%	\$ 53,049,028											
Ratio at 6%	0.86											



Cruise Terminal 25 Improvements (continued page 3)

NET PRESENT VALUE AND RETURN ON INVESTMENT EXAMP	LE CALCULATION: L	arger ship																
		Assessment Period	21	22	23	24	25	26	27	28	29	30	31	. 32	33	34	35	
			2237	2248	2259	2270	2281	2292	2303	2314	2325	2336	2054	2048	2049	2050	2051	2052
		Discounting Period	23	24	25	26	27	28	29	30	31	32		34	35	36	37	38
Volume																		
Operating Revenue Base Scenario			206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	206,305	
Net gain with swapping in larger shipAnthem of the Se	eas 4180 for Libert	y of the Seas 3634 vo	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	36,583	
	C)	-	-	-	-	-	-	-	-	-	-						
	2013	adj 2014																
Revenue per passenger	\$ 17.26	\$ 17.61																
Total Operating Revenues for Larger Ship Scenario			\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	
Total			\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	\$ 4,276,096	
Discounted at 4%	0.04	ļ.	\$ 1,734,925	\$ 1,668,197	\$ 1,604,036	\$ 1,542,342	\$ 1,483,021	\$ 1,425,982	\$ 1,371,136	\$ 1,318,400	\$ 1,267,693	\$ 1,218,935	\$ 4,276,096	\$ 1,126,974	\$ 1,083,629	\$ 1,041,951	\$ 1,001,876	
Discounted at 6%	0.06	i	\$ 1,119,470	\$ 1,056,104	\$ 996,325	\$ 939,929	\$ 886,725	\$ 836,533	\$ 789,182	\$ 744,512	\$ 702,369	\$ 662,613	\$ 4,276,096	\$ 589,723	\$ 556,342	\$ 524,851	\$ 495,143	
Cost																		
Capital			0	0														
Maintenance terminal	0.005	i	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	
Operating Cost for Larger Ship	0.57	revenue	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	\$ 2,437,375	
Total			\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	\$ 2,963,375	
Discounted at 4%	0.04	ŧ.	\$ 1,202,319	\$ 1,156,076	\$ 1,111,612	\$ 1,068,857	\$ 1,027,747	\$ 988,219	\$ 950,210	\$ 913,664	\$ 878,523	\$ 844,734	\$ 2,963,375	\$ 781,004	\$ 750,965	\$ 722,082	\$ 694,309	
Discounted at 6%	0.06	i	\$ 775,803	\$ 731,890	\$ 690,462	\$ 651,380	\$ 614,509	\$ 579,725	\$ 546,911	\$ 515,954	\$ 486,749	\$ 459,197	\$ 2,963,375	\$ 408,684	\$ 385,551	\$ 363,727	\$ 343,139	
Residual																		\$ 2,630,000
Residual at 4%																		\$ 592,501
Residual at 6%																		\$ 287,298
Revenue at 4%	\$ 61,267,371																	
Value of revenue stream beyond analysis period																	[]	
Residual value at 4%	\$ 592,501																[]	
Cost at 4%	\$ 64,226,383																[]	
Ratio at 4%	0.96	5															[]	
																	[]	
Revenue at 6%	\$ 45,141,679																[]	
Value of revenue stream beyond analysis period																	[]	
Residual value at 6%	\$ 287,298																	
Cost at 6%	\$ 53,049,028																[]	
Ratio at 6%	0.86	5																



Cruise Terminal 29 Improvements (page 1)

NET PRESENT VALUE AND RETURN ON INVESTMENT EXAMI	PLE CALCULATION: C	T29													
		Assessment Period				1	2	3	4	5	6	7	/ 8	9	10
						2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
		Discounting Period	0	1	2	2 3	4	5	6	i 7	8	9	10	11	. 12
Volume															
Revenue passengers gained						8,464	12,764	17,111	21,504	25,187	28,904	32,653	36,436	40,253	43,641
Revenue passengers retained						186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383
	2013	adj 2014													
Revenue per passenger	\$ 17.26	\$ 17.61													
Revenue per TEU	\$ 34.16	\$ 35.18													
Revenue from passengers						\$ 3,430,320	\$ 3,506,028	\$ 3,582,549	\$ 3,659,892	\$ 3,724,741	\$ 3,790,167	\$ 3,856,177	\$ 3,922,774	\$ 3,989,966	\$ 4,049,611
							0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total						\$ 3,430,320	\$ 3,506,028	\$ 3,582,549	\$ 3,659,892	\$ 3,724,741	\$ 3,790,167	\$ 3,856,177	\$ 3,922,774	\$ 3,989,966	\$ 4,049,611
Discounted at 4%	0.04					3,049,542	2,996,967	2,944,594	2,892,466	2,830,497	2,769,438	2,709,299	2,650,086	2,591,806	2,529,375
Discounted at 6%	0.06					2,880,163	2,777,103	2,677,089	2,580,080	2,477,165	2,377,998	2,282,465	2,190,457	2,101,864	2,012,533
Cost															
Capital				\$ 13,150,000	\$ 13,150,000			0	0 0	0 0	0	0	0 0	0	0
Maintenance terminal	0.005			0	C	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500
Operating cost for passengers	0.57	revenue		s -	s -	\$ 1,955,282	\$ 1,998,436	\$ 2 042 053	\$ 2 086 139	\$ 2 123 102	\$ 2 160 395	\$ 2 198 021	\$ 2,235,981	\$ 2 274 280	\$ 2,308,278
Total	0.21			\$ 13,150,000	\$ 13,150,000	\$ 2,086,782	\$ 2,129,936	\$ 2,173,553	\$ 2,217,639	\$ 2,254,602	\$ 2,291,895	\$ 2,329,521	\$ 2,367,481	\$ 2,405,780	\$ 2,439,778
Discounted at 4%	0.04			\$ 12,644,231	\$ 12,157,914	\$ 1.855.142	\$ 1.820.678	\$ 1.786.502	\$ 1.752.632	\$ 1.713.312	\$ 1.674.665	\$ 1.636.690	\$ 1.599.386	\$ 1.562.749	\$ 1.523.878
Discounted at 6%	0.06			\$ 12,405,660	\$ 11,703,453	\$ 1.752.103	\$ 1,687,109	\$ 1.624.205	\$ 1,563,348	\$ 1,499,439	\$ 1,437,963	\$ 1.378.840	\$ 1.321.989	\$ 1,267,335	\$ 1,212,495
						•		• • • • • • • • •	•	• • • • • • • • • • • • • • • • • • • •					
Residual															
Residual at 4%															
Residual at 6%															
nesidan aros															
Revenue at 4%	70 768 690														
Value of revenue stream beyond analysis period															
Residual value at 4%	\$ 592 501														
Cost at 4%	69 100 249														
Ratio at 4%	\$ 1.03														
	Ç 1.00														
Revenue at 6%	52,154,965														
Value of revenue stream beyond analysis period															
Residual value at 6%	\$ 287,298														
Cost at 6%	\$ 56,494,216														
Ratio at 6%	0.93														



Cruise Terminal 29 Improvements (continued page 2)

		Assessment Period	11	12	13	14	15	16	17	18	19	/
			2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
		Discounting Period	13	14	15	16	17	18	19	20	21	
Volume												
Revenue passengers gained			47,055	50,496	53,965	57,460	60,508	63,577	66,667	66,667	66,667	66
Revenue passengers retained			186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186
	2013	adj 2014										-
Revenue per passenger	\$ 17.26	\$ 17.61										
Revenue per TEU	\$ 34.16	\$ 35.18										
Revenue from passengers			\$ 4,109,725	\$ 4,170,310	\$ 4,231,370	\$ 4,292,908	\$ 4,346,571	\$ 4,400,597	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454
			s .	s .	s .	s -	s .	s -	s -	s .	s -	s
Total			\$ 4,109,725	\$ 4,170,310	\$ 4,231,370	\$ 4,292,908	\$ 4,346,571	\$ 4,400,597	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4.45
Discounted at 4%	0.04		2,468,194	2,408,250	2,349,529	2,292,019	2,231,413	2,172,258	2,114,527	2,033,199	1,954,999	1.87
Discounted at 6%	0.06		1,926,799	1.844.532	1.765.603	1.689.887	1.614.162	1.541.722	1,472,432	1.389.087	1.310.459	1.23
			_,,	_,,		_,,	_,,					
Cost												
Capital			0	0	0	0 0	0	0	0	0	0	1
Maintenance terminal	0.005		\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131,500	\$ 131
Operating cost for passengers	0.57	revenue	\$ 2,342,543	\$ 2,377,077	\$ 2,411,881	\$ 2,446,958	\$ 2,477,545	\$ 2,508,340	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,53
Total			\$ 2,474,043	\$ 2,508,577	\$ 2,543,381	\$ 2,578,458	\$ 2,609,045	\$ 2,639,840	\$ 2,670,844	\$ 2,670,844	\$ 2,670,844	\$ 2,67
Discounted at 4%	0.04		\$ 1,485,846	\$ 1,448,640	\$ 1,412,249	\$ 1,376,660	\$ 1,339,414	\$ 1,303,099	\$ 1,267,696	\$ 1,218,938	\$ 1,172,056	\$ 1,12
Discounted at 6%	0.06		\$ 1,159,928	\$ 1,109,546	\$ 1,061,264	\$ 1,015,000	\$ 968,907	\$ 924,852	\$ 882,749	\$ 832,782	\$ 785,643	\$ 74
Residual												
Residual at 4%												
Residual at 6%												
Devenue at 49/	70.760.600											
Kevenue at 4%	/0,/68,690											-
value of revenue stream beyond analysis period												-
Residual Value at 4%	\$ 592,501											
COST at 4%	69,100,249 \$ 1.02											
Notio of 7/0	Ş 1.03											
Revenue at 6%	52,154,965											
Value of revenue stream beyond analysis period												
Residual value at 6%	\$ 287,298											
Cost at 6%	\$ 56,494,216											
Ratio at 6%	0.93											



Cruise Terminal 29 Improvements (continuted page 3)

NET PRESENT VALUE AND RETURN ON INVESTMENT EXAM	PLE CALCULATION: CT	F29															
		21	. 22	2 23	24	25	5 26	27	28	29	30	31	32	33	34	35	
		2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2046	2048	2049	2050	2051	2052
		23	24	4 25	26	27	28	29	30	31	. 32	33	34	35	36	37	38
Volume																	
Revenue passengers gained		66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	66,667	
Revenue passengers retained		186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	186,383	
	2013																
 Revenue per passenger	\$ 17.26																
 Revenue per TEU	\$ 34.16																
 Revenue from passengers		\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	
		\$ -	\$ -	s -	s -	s -	\$ -	\$ -	s -	s -	\$ -	\$ -	s -	\$ -	S -	s -	
 Total		\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	\$ 4,454,990	
 Discounted at 4%	0.04	1,807,507	1,737,987	1,671,142	1,606,867	1,545,064	1,485,639	1,428,499	1,373,557	1,320,727	1,269,930	1,221,087	1,174,122	1,128,963	1,085,542	1,043,790	
 Discounted at 6%	0.06	1,166,304	1,100,287	1,038,007	979,251	923,822	871,530	822,198	775,659	731,754	690,334	651,258	614,394	579,617	546,809	515,857	
 Cost																	
 Capital		0	(0													
 Maintenance terminal	0.005	\$ 131,500	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	\$ 526,000	
 Operating cost for passengers	0.57	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	\$ 2,539,344	
 Total		\$ 2,670,844	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	\$ 3,065,344	
 Discounted at 4%	0.04	\$ 1,083,632	\$ 1,195,857	\$ 1,149,862	\$ 1,105,637	\$ 1,063,112	\$ 1,022,223	\$ 982,907	\$ 945,103	\$ 908,753	\$ 873,801	\$ 840,193	\$ 807,878	\$ 776,806	\$ 746,929	\$ 718,201	
Discounted at 6%	0.06	\$ 699,220	\$ 757,074	\$ 714,221	\$ 673,793	\$ 635,654	\$ 599,674	\$ 565,730	\$ 533,707	\$ 503,498	\$ 474,998	\$ 448,111	\$ 422,746	\$ 398,817	\$ 376,243	\$ 354,946	
 																	¢
 Residual																	\$ 2,630,000
 Residual at 4%																	\$ 592,501
Residual at 6%																	\$ 287,298
 Devenue at /%	70 769 600																
 Value of revenue stream beyond analysis period	70,708,090																
 Pacidual value at 4%	¢ 502 501																
 Cost at /%	5 352,301																
 Patio at 4%	¢ 1.02																
	\$ 1.05																
 Revenue at 6%	52 154 045																
 Value of revenue stream beyond analysis period	52,134,505																
 Residual value at 6%	\$ 287.208																
 Cost at 6%	\$ 56 404 216																
 Ratio at 6%	0 02																
Hasto as 070	0.95					I	1		I							1	



Turning Notch Extension and Container Yard 9a (page 1)

			a Notch and Conta	inor Vard 0A																			
NET PRESENT VALUE AND RETORN ON INVES		Assessment Perior	g Notch and Conta	iller falu SA	_	1		,	3		4		5		6		7		8		٩		10
		Assessment renot	2014	2015		2016	2017	-	2018	2	2019		2020		2021		2022		2023		2024		2025
		Discounting Period	1 (0	1	2		3	4		5		6		7		8		9		10		11
Volumes																							
TEUs9A							158,198		316,395		474,593		577,421		644,655		659,190		786,242		790,988		790,988
Dry bulk							0)	0)	0		-		600,000		1,200,000		1,800,000		2,400,000		3,000,000
	2013	adj 2014																					
Revenue per ton of dry bulk	\$ 2.	06 \$ 2.18	1																				
Revenue per TEU	\$ 34.	16 \$ 35.18	3		_	-	-		-		-		-		-		-		-		-		-
Revenue from dry bulk					_		\$ -	\$	-	\$	-	\$	-	\$	1,308,888	\$	2,617,776	\$	3,926,664	\$	5,235,552	\$	6,544,440
Revenue from TEUs							\$ 5,566,151	\$	11,132,302	\$ 16	6,698,453	\$ 2	20,316,451	\$	22,682,065	\$	23,193,468	\$	27,663,770	\$	27,830,755	\$	27,830,755
-																							
Total					Ş	-	\$ 5,566,151	Ş	11,132,302	\$ 16	6,698,453	\$ 2	20,316,451	S	23,990,953	Ş	25,811,244	Ş	31,590,434	Ş	33,066,307	Ş	34,375,195
Discounted at 4%	0	.04			\$	-	\$ 4,948,288	Ş	9,515,938	\$ 13	3,724,911	\$ 1	16,056,386	Ş	18,231,153	Ş	18,860,023	Ş	22,195,020	Ş	22,338,412	Ş	22,329,471
Discounted at 6%	0	.06			Ş	-	\$ 4,673,448	Ş	8,817,826	\$ 12	2,478,055	\$ 1	14,322,296	Ş	15,955,354	Ş	16,194,294	Ş	18,698,329	Ş	18,464,053	Ş	18,108,424
					_			-															
Cash																							
Cost Conital adjusted for grants			¢ 20.071.200	¢ 10.195.900	, c	46 862 000	¢ 53 580 000	c	55 590 000	C 61	1 590 000	c		e		¢		¢		¢		¢	
Capital, adjusted for grants			\$ 20,971,200	\$ 10,185,800) >	40,802,000	\$ 52,580,000	э с	35,580,000	\$ 01	1,580,000	\$	-	2	-	\$	-	\$	-	Ş	-	\$	-
Maintenance	0	05 of capital years 11		¢ .	c		¢ .	ç	464,000	c	-	c		c		c	-	c	_	c		c	
Operating cost	0.0	60 revenue		5 - C	¢		5 2 211 860	ç	- 	с о	0 025 570	о с 1	12 000 200	¢	14 274 617	э с	15 257 600	э с	19 706 209	ç	10 674 452	o c	20 452 241
operating cost		.uo revenue	Ş -	J	2	-	\$ 3,311,800	3	0,023,720	\$	5,533,575	\$ 1	12,000,200	3	14,274,017	3	13,337,090	\$	10,790,308	2	19,074,452	2	20,433,241
Total			\$ 20.971.200	\$ 10,185,800	s	46,862,000	\$ 55,891,860	s	62,687,720	\$ 71	1.515.579	\$ 1	12.088.288	s	14,274,617	s	15,357,690	s	18,796,308	s	19.674.452	s	20,453,241
Discounted at 4%	0	.04	\$ 20,971,200	\$ 9,794,038	s s	43.326.553	\$ 49,687,660	ŝ	53,585,725	\$ 58	8,780,593	s	9,553,550	s	10.847.536	s	11.221.714	s	13,206,037	ŝ	13,291,355	s	13,286,035
Discounted at 6%	0	.06	\$ 20,971,200	\$ 9,609,245	i S	41.707.013	\$ 46,927,883	ŝ	49.654.545	\$ 53	3.440.601	ŝ	8.521.766	s	9,493,436	ŝ	9.635.605	ŝ	11,125,506	ŝ	10,986,111	ŝ	10.774.512
					•										-,,		-,,						
Residual																							
Residual at 4%	0	.04																					
Residual at 6%	C	.06																					
Revenue at 4%	\$ 488,656,2	22																					
Residual value at 4%	\$ 41,795,3	90																					
Cost at 4%	\$ 499,049,6	54																					
Ratio at 4%	1.	06 revenue over costs	;																				
Revenue at 6%	\$ 354,979,2	70																					
Residual value at 6%	\$ 20,655,9	38																					
Cost at 6%	\$ 413,915,2	91																					
Ratio at 6%	0	.91																					
								_															
Capital costs adjusted for grants																							



Turning Notch Extension and Container Yard 9a (continued page 2)

		Assessment Period		11		12		13		14		15		16		17		18		19		20		
				2026		2027		2028		2029		2030		2031		2032		2033		2034		2035		
		Discounting Period		12		13		14		15		16		17		18		19		20		21		
Volumes																			<u> </u>					
TEUs9A				790,988		790,988	\$	790,988	\$	790,988	\$	790,988	\$	790,988	\$	790,988	\$	790,988	\$	790,988	\$	790,988	\$	
Dry bulk				3,000,000		3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	3,000,000	\$	_
	2013	adj 2014																						
Revenue per ton of dry bulk	\$ 2.06	\$ 2.18																						
Revenue per TEU	\$ 34.16	\$ 35.18		-		-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	
Revenue from dry bulk			\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$	6,544,440	\$)
Revenue from TEUs			\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	27,830,755	\$	
Total			\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	34,375,195	\$	
Discounted at 4%	0.04	ł	\$	21,470,645	\$	20,644,851	\$	19,850,818	\$	19,087,325	\$	18,353,197	\$	17,647,305	\$	16,968,563	\$	16,315,926	\$	15,688,390	\$	15,084,990	\$	
Discounted at 6%	0.06	j	\$	17,083,419	\$	16,116,433	\$	15,204,182	\$	14,343,568	\$	13,531,668	\$	12,765,724	\$	12,043,136	\$	11,361,449	\$	10,718,348	\$	10,111,649	\$	_
Cast																								
Cost Copital adjusted for grapts			¢		¢		¢		¢		e		e		e		¢		¢		¢		¢	
Capital, adjusted for grants			\$	-	Ş	-	Ş	-	\$	-	\$	-	Ş	-	Ş	-	Ş	-	\$		Ş	-	\$	
Maintenance	0.005	of capital years 11+	۲c	1 228 705	¢	1 228 705	¢	1 228 705	¢	1 229 705	c	1 228 705	c	1 229 705	c	1 228 705	¢	1 228 705	c	1 229 705	¢	1 228 705	¢	
Operating cost	0.60	revenue	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	20,453,241	\$	
Total			¢	21 602 026	¢	21 602 026	¢	21 602 026	¢	21 602 026	c	21 602 026	¢	21 602 026	¢	21 602 026	¢	21 602 026	¢	21 602 026	¢	21 602 026	¢	
Discounted at 4%	0.04	1	ç	12 5/9 792	ç	12 027 675	ç	12 526 610	ç	12 044 817	ç	11 591 555	ç	11 126 111	ç	21,092,030	¢	10 205 060	ç	0 800 062	ہ	0 510 104	ç	_
Discounted at 6%	0.04	5	\$	10,780,277	\$	10,170,073	\$	9,594,408	\$	9,051,329	\$	8,538,989	\$	8,055,650	\$	7,599,670	\$	7,169,500	\$	6,763,679	\$	6,380,830	\$)
Residual																			-					
Residual at 4%	0.04	ł																						
Residual at 6%	0.06	5																						
Revenue at 4%	\$ 488 656 222																							
Residual value at 4%	\$ 41 795 390																							
Cost at 4%	\$ 499 049 654																		-					
Ratio at 4%	1.06	revenue over costs																						
Revenue at 6%	\$ 354,979,270																		_					
Residual value at 6%	\$ 20,655,938																							
Cost at 6%	\$ 413,915,291																							
Ratio at 6%	0.91																							



Turning Notch Extension and Container Yard 9a (continued page 3)

																			-				
		Assessment Period	21	22	2	23	24	2	5	26	27	28	29	3	0	31		32	33	34	35	5	1
		Discounting Deried	2036	2037	2038	24	2039	2040	2041	27	2042	2043	2044	2045	1	22		22	24	25	26	2046	ł
		Discounting Period	22	2.	,	24	25	2	0	21	20	23	50	3	1	52		33	34			57	
Volumes																							
TEUs9A			\$ 790,988	\$ 790,988	\$ 790	,988 \$	790,988	\$ 790,988	\$ 790,9	88 \$	790,988	\$ 790,988	\$ 790,988	\$ 790,988	\$ 7	790,988	\$ 790,	988 \$	790,988	\$ 790,988	\$ 790,988		
Dry bulk			\$ 3,000,000	\$ 3,000,000	\$ 3,000	,000 \$	3,000,000	\$ 3,000,000	\$ 3,000,0	00 \$	3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,000,000	\$ 3,0	000,000	\$ 3,000,	000 \$	3,000,000	\$ 3,000,000	\$ 3,000,000		
	2013	⇒di 2014																					
Revenue per ton of dry bulk	\$ 2.06	\$ 2.18																					
Revenue per TEU	\$ 34.16	\$ 35.18	s -	s -	S	- S	-	s -	\$.	S	-	s -	\$ -	s -	s	-	\$	- s		s -	s -		
Revenue from dry bulk			\$ 6.544.440	\$ 6,544,440	\$ 6.544	.440 \$	6.544.440	\$ 6,544,440	\$ 6,544,4	40 \$	6.544.440	\$ 6.544.440	\$ 6,544,440	\$ 6,544,440	\$ 6.5	544.440	\$ 6,544	440 S	6,544,440	\$ 6.544.440	\$ 6,544,440		
Revenue from TEUs			\$ 27,830,755	\$ 27,830,755	\$ 27,830	,755 \$	27,830,755	\$ 27,830,755	\$ 27,830,7	55 \$	27,830,755	\$ 27,830,755	\$ 27,830,755	\$ 27,830,755	\$ 27,8	830,755	\$ 27,830	755 \$	27,830,755	\$ 27,830,755	\$ 27,830,755		
Total			\$ 34,375,195	\$ 34,375,195	\$ 34,375	,195 \$	34,375,195	\$ 34,375,19	\$ 34,375,1	95 \$	34,375,195	\$ 34,375,195	\$ 34,375,195	\$ 34,375,195	\$ 34,3	375,195	\$ 34,375,	195 \$	34,375,195	\$ 34,375,195	\$ 34,375,195		
Discounted at 4%	0.04		\$ 14,504,799	\$ 13,946,922	\$ 13,410	,502 \$	12,894,713	\$ 12,398,763	\$ 11,921,8	87 \$	11,463,353	\$ 11,022,455	\$ 10,598,514	\$ 10,190,879	\$ 9,7	798,922	\$ 9,422	041 \$	9,059,654	\$ 8,711,206	\$ 8,376,160		
Discounted at 6%	0.06		\$ 9,539,292	\$ 8,999,332	\$ 8,489	,936 \$	8,009,373	\$ 7,556,013	\$ 7,128,3	14 \$	6,724,824	\$ 6,344,174	\$ 5,985,070	\$ 5,646,292	\$ 5,3	326,691	\$ 5,025,	180 \$	4,740,736	\$ 4,472,392	\$ 4,219,238		
Cost																							
Conital adjusted for grants			e	e	e	e .		e	c	c		e	e	e	e		e			e	e		
Capital, adjusted for grants			s -	s -	\$	- 5	-	ə -	\$.	2	-	ş -	s -	s -	\$	-	\$	- 3	, -	s -	5 -		
Operational penalty during construction	0.005	of capital years 11.	¢ 1 229 705	¢ 1 229 705	¢ 1.220	705 ¢	1 229 705	¢ 1 229 70	¢ 1 220 7	ns ¢	1 229 705	¢ 1 229 705	¢ 1 229 705	¢ 1 229 705	¢ 13	220 705	¢ 1.120	705 0	1 229 705	¢ 1 229 705	¢ 1 329 705		
Operating cost	0.005		\$ 20,452,241	\$ 20,453,241	\$ 20,453	241 \$	20 453 241	\$ 20,453,24	\$ 20,453.2	41 ¢	20 453 241	\$ 20,452,241	\$ 20,453,241	\$ 20,453,241	\$ 20.4	453 241	\$ 20,453	795 Ş	20 453 241	\$ 20,452,241	\$ 20,453,241		
operating cost	0.00	revenue	\$ 20,455,241	5 20,455,241	\$ 20,455	,241 3	20,433,241	5 20,433,24	5 20,455,2	41 3	20,433,241	\$ 20,433,241	5 20,455,241	\$ 20,433,243	\$ 20,4	455,241	5 20,433,	241 3	20,433,241	\$ 20,455,241	\$ 20,433,241		
Total			\$ 21,692,036	\$ 21,692,036	\$ 21,692	,036 \$	21,692,036	\$ 21,692,03	\$ 21,692,0	36 \$	21,692,036	\$ 21,692,036	\$ 21,692,036	\$ 21,692,036	\$ 21,6	692,036	\$ 21,692	036 \$	21,692,036	\$ 21,692,036	\$ 21,692,036		
Discounted at 4%	0.04		\$ 9,153,071	\$ 8,801,030	\$ 8,462	,529 \$	8,137,047	\$ 7,824,084	\$ 7,523,1	57 \$	7,233,805	\$ 6,955,582	\$ 6,688,060	\$ 6,430,827	\$ 6,1	183,487	\$ 5,945,	661 \$	5,716,981	\$ 5,497,097	\$ 5,285,671		
Discounted at 6%	0.06		\$ 6,019,650	\$ 5,678,916	\$ 5,357	,468 \$	5,054,215	\$ 4,768,127	\$ 4,498,2	33 \$	4,243,616	\$ 4,003,411	\$ 3,776,803	\$ 3,563,022	\$ 3,3	361,341	\$ 3,171	077 \$	2,991,582	\$ 2,822,247	\$ 2,662,497		
Residual																						\$ 178 386 480	
Residual at 4%	0.04																					\$ 41,795,390	
Residual at 6%	0.06																					\$ 20,655,938	
Revenue at 4%	\$ 488,656,222																						
Residual value at 4%	\$ 41,795,390																						
Cost at 4%	\$ 499,049,654																						
Ratio at 4%	1.06	revenue over costs																					
Revenue at 6%	\$ 354,979,270																						
Residual value at 6%	\$ 20,655,938																						
Cost at 6%	\$ 413,915,291																						
Ratio at 6%	0.91																						



Container Yard 9b (page 1)

NET PRESENT VALUE AND RETURN ON INVESTMENT	EXAMPLE CALC	ULATION: Just Container	r Yard 9B																
		Assessment Period					1		2		3	4		5	6	7	8	9	10
			2014		2015		2016		2017		2018	2019		2020	2021	2022	2023	2024	2025
		Discounting Period		0	1	L	2		3		4	5		6	7	8	9	10	11
Revenue																			
															1.25				
TEUs from 9B							6,567		13,134		19,701	26,268		32,835	39,402	45,969	52,536	59,103	65,670
	2013	adj 2014																	
Revenue per TEU	\$ 34.16	\$ 35.18				\$	231,059	\$	462,117	\$	693,176	\$ 924,234	\$	1,155,293	\$ 1,386,351	\$ 1,617,410	\$ 1,848,469	\$ 2,079,527	\$ 2,310,586
Total						\$	231,059	\$	462,117	\$	693,176	\$ 924,234	\$	1,155,293	\$ 1,386,351	\$ 1,617,410	\$ 1,848,469	\$ 2,079,527	\$ 2,310,586
Discounted at 4%	0.04	1				\$	213,627	\$	410,820	\$	592,530	\$ 759,653	\$	913,045	\$ 1,053,513	\$ 1,181,826	\$ 1,298,710	\$ 1,404,854	\$ 1,500,912
Discounted at 6%	0.06	i				\$	205,641	\$	388,002	\$	549,060	\$ 690,642	\$	814,436	\$ 922,003	\$ 1,014,783	\$ 1,094,106	\$ 1,161,197	\$ 1,217,188
Cost																			
Capital				\$	9,700,000	\$	-	\$	-	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance	0.005	5	s -	\$	-	\$	-	\$	-	\$	-	\$ -			\$ -	\$ -	\$ -	\$ -	\$ -
Operating cost	0.6	i revenue	s -	\$	-	\$	138,635	\$	277,270	\$	415,905	\$ 554,541	\$	693,176	\$ 831,811	\$ 970,446	\$ 1,109,081	\$ 1,247,716	\$ 1,386,351
	0.6	i revenue																	
Total				\$	9,700,000	\$	138,635	\$	277,270	\$	415,905	\$ 554,541	\$	693,176	\$ 831,811	\$ 970,446	\$ 1,109,081	\$ 1,247,716	\$ 1,386,351
Discounted at 4%	0.04	ł		\$	9,326,923	\$	128,176	\$	246,492	\$	355,518	\$ 455,792	\$	547,827	\$ 632,108	\$ 709,095	\$ 779,226	\$ 842,912	\$ 900,547
Discounted at 6%	0.06	i		\$	9,150,943	\$	123,385	s	232,801	\$	329,436	\$ 414,385	\$	488,662	\$ 553,202	\$ 608,870	\$ 656,463	\$ 696,718	\$ 730,313
										-			-						
Residual																			
Residual at 4%	0.04	ł																	
Residual at 6%	0.06	i																	
Revenue at 4%	\$ 29,727,380																		
Residual value at 4%						-													
Value of revenue stream beyond analysis period	\$ 6,490,511																		
Cost at 4%	\$ 27,591,510																		
Ratio at 4%	\$ 1.31																		
Revenue at 6%	\$ 22.018.106																		
Residual value at 6%																			
Value of revenue stream beyond analysis period	\$ 2,397,873																		
Cost at 6%	22,654,854	revenue over costs				-													
Ratio at 6%	1.08																		
	2.00																		



Container Yard 9b (continued page 2)

NET PRESENT VALUE AND RETURN ON INVESTMENT	EXAMPLE CALCU	JLATION: Just Container	r Yard 9	ЭB																		
		Assessment Period		11		12		13		14		15		16		17		18		19		20
			1	2026	- 2	2027		2028		2029		2030		2031		2032		2033		2034		2035
		Discounting Period		12		13		14		15		16		17		18		19		20		21
Revenue																						
TEUs from 9B				65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670
	2013	adj 2014													-							
Revenue per TEU	\$ 34.16	\$ 35.18	\$ 2	,310,586	\$ 2	,310,586	\$	2,310,586	Ş	2,310,586	\$	2,310,586	\$	2,310,586	Ş	2,310,586	\$ 2	2,310,586	Ş	2,310,586	Ş	2,310,586
Total			< 2	310 586	< 2	310 586	¢	2 310 586	c	2 310 586	¢	2 310 586	¢	2 310 586	¢	2 310 586	< 1	310 586	¢	2 310 586	c	2 310 586
Discounted at 4%	0.04		\$ 1	443 185	S 1	387 678	ç	1 334 306	¢	1 282 986	¢	1 233 641	¢	1 186 193	¢	1 140 570	S 1	1 096 702	¢	1 054 521	¢	1 013 963
Discounted at 6%	0.04		\$ 1	148 290	\$ 1	083 293	¢	1,004,000	¢	964 127	¢	909 554	¢	858.069	¢	800.400	د د د	763 679	¢	720 452	ç	679 671
	0.00		Ŭ 1	,140,250	÷ 1	,000,200	Ť	1,021,574	Ŭ	504,127	Ť	505,554	Ť	050,005	Ť	000,400	Ť	105,015	Ť	120,452	Ť	010,011
Cost																						
Capital			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	s	-
Maintenance	0.005		\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500
Operating cost	0.6	revenue	\$ 1	,386,351	\$ 1	,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$ 1	1,386,351	\$	1,386,351	\$	1,386,351
	0.6	revenue																				
Total			\$ 1	,434,851	\$ 1	,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$ 1	1,434,851	\$	1,434,851	\$	1,434,851
Discounted at 4%	0.04		\$	896,204	\$	861,735	\$	828,591	\$	796,722	\$	766,079	\$	736,614	\$	708,283	\$	681,041	\$	654,847	\$	629,661
Discounted at 6%	0.06		\$	713,077	\$	672,714	\$	634,636	\$	598,713	\$	564,824	\$	532,853	\$	502,691	\$	474,237	\$	447,393	\$	422,069
Residual																						
Residual at 4%	0.04																					
Residual at 6%	0.06								-													
									-													
Revenue at 4%	\$ 29 727 380																					
Residual value at 4%																						
Value of revenue stream beyond analysis period	\$ 6,490,511																					
Cost at 4%	\$ 27,591,510																					
Ratio at 4%	\$ 1.31																					
Revenue at 6%	\$ 22,018,106																					
Residual value at 6%																						
Value of revenue stream beyond analysis period	\$ 2,397,873																					
Cost at 6%	22,654,854	revenue over costs																				
Ratio at 6%	1.08																					



Container Yard 9b (continued page 3)

NET PRESENT VALUE AND RETURN ON INVESTMENT	EXAMPLE CALC	JLATION: Just Container	r Yaro	1 9B																			
		Assessment Period	_	21		22	_	23		24		25		26		27	_	28		29	_	30	31
				2036		2037		2038		2039		2040		2041		2042		2043		2044		2045	2046
		Discounting Period		22	-	23	_	24		25		26		27		28		29		30		31	
Revenue							F																
TEUs from 9B				65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670		65,670	-
	2013	adi 2014					-																
Revenue per TEU	\$ 34.16	\$ 35.18	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	\$	2,310,586	
Total			s	2.310.586	s	2.310.586	s	2.310.586	s	2.310.586	s	2.310.586	s	2.310.586	s	2.310.586	s	2.310.586	\$	2.310.586	\$	2.310.586	
Discounted at 4%	0.04		s	974.964	ŝ	937.466	ŝ	901.409	ŝ	866.740	ŝ	833,403	ŝ	801.349	ŝ	770.528	ŝ	740.893	ŝ	712.397	ŝ	684,997	
Discounted at 6%	0.06		s	641,199	\$	604,905	\$	570,665	\$	538,363	\$	507,890	\$	479,141	\$	452,020	\$	426,434	\$	402,296	\$	379,525	
Cost																							
Capital			\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	
Maintenance	0.005		\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	\$	48,500	
Operating cost	0.6	revenue	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	\$	1,386,351	
	0.6	revenue																					
Total			\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	\$	1,434,851	
Discounted at 4%	0.04		\$	605,443	\$	582,157	\$	559,766	\$	538,237	\$	517,535	\$	497,630	\$	478,491	\$	460,087	\$	442,392	\$	425,376	
Discounted at 6%	0.06		\$	398,179	\$	375,640	\$	354,378	\$	334,318	\$	315,395	\$	297,542	\$	280,700	\$	264,812	\$	249,822	\$	235,681	
Residual																							\$ 3,880,000
Residual at 4%	0.04																						\$ 1,150,266
Residual at 6%	0.06						-										-						\$ 637,309
Revenue at 4%	\$ 29,727,380						-										_						
Residual value at 4%																							
Value of revenue stream beyond analysis period	\$ 6,490,511																						
Cost at 4%	\$ 27,591,510																						
Ratio at 4%	\$ 1.31						_																
Revenue at 6%	\$ 22,018,106																						
Residual value at 6%																							
Value of revenue stream beyond analysis period	\$ 2,397,873																						
Cost at 6%	22,654,854	revenue over costs																					
Ratio at 6%	1.08																						

