Presentation to the Des Moines City Council February 10, 2022





& BST Associates

CITY OF DES MOINES MARINA DOCK REPLACEMENTS



Project Background

- > 2020 Waggoner Study
- Reid Middleton Condition Assessment Report
- > Funding Sources
- > Draft Marina Master Plan
- > Municipal Facility Meetings & Updates
- Marina Working Group Meetings & Updates
- > Tenant Question & Answer Updates

Current Phase

- > Contracted with Moffatt and Nichol
 - > BST & Associates
- > Preliminary engineering and planning
- > Validate the Waggoner Report
- > Present a phasing plan for work for dock replacements
- > Final Design / Permitting / Construction

Economic / Financial / Design Feasibility

This Presentation Will Provide a Summary of Findings:

- > Economic Analysis
 - > Third party review and assessment of Waggoner Report findings
 - > Macro-economic trends and future layout considerations

> Financial Analysis

- > Review by phase of development 3 Phase Project Analysis
 - > Could be more, not likely less
- > Open moorage versus mix of open/covered slips
- > Design Analysis
 - > Marina basin layout
 - > Operational logistics

Puget Sound Marinas included in Analysis and Rate Comparison

- > Open Moorage:
 - > Arabella's Landing
 - > Foss Harbor Marina
 - > Hylebos Marina
 - > Marina at Browns Point
 - > Delin Docks
 - > Dock Street Marina
 - > Chinook Landing
 - > Elliott Bay Marina
 - > Shilshole Bay Marina
 - > South Park Marina
 - > Harbor Island Marina
 - > Fishermen's Terminal
 - > Salmon Bay Marina
 - > Carillon Point Marina
 - > Edmonds Marina
 - > Everett Main and North Marinas
 - > Anacortes Marina
 - > Cap Sante Marina
 - > La Conner Marina

- > Covered moorage:
 - > Marina at Browns Point
 - > Narrows Marina
 - > Tyee Marina
 - > Salmon Bay Marina
 - > Stimson Marina
 - > Edmonds Marina
 - > Everett Marina
 - > Anacortes Marina
 - > La Conner Marina

Slip Distribution Considerations

- > Des Moines serves a regional market.
- Residents of King and Pierce Counties account for approx. 97% of tenants.
- > Des Moines residents:
 - > Account for approx. 21% of all marina tenants.
 - > Account for larger share of longer slips.
- > Future layouts should reflect the demands of the regional market.
 - > Marina is a business.
 - > C/B analysis is important for successful operations.

- By the completion of Phase 3, proposed slip distribution focuses on 30 to 59 foot ranges. Takes into account:
 - Size and growth rate of the Pierce-King county markets,
 - > Des Moines share of the regional market,
 - > Distribution of existing tenants (with no overhangs),
 - Slip distribution at other large, regional marinas (Shilshole Bay Marina and Elliott Bay Marina).
- > Smaller boats:
 - > Seasonality of use reduces annual occupancy,
 - > Existing moorage rates do not cover costs,
 - May be accommodated in <u>dry stack</u> and/or 30/32 foot slips.

Alternatives Analysis and Financial Considerations

Alternatives Analysis

- > 3 Project Phases
- > 2 Layouts: Open Moorage and Mixed Moorage (Open/Covered)
 - > 2 Options related to phasing of L dock (Phase 1 or Phase 2?)

Financial Considerations

Cost estimates provided for both layouts (and both options), with three phases of development for each layout.

- > First step: Evaluate the construction schedule
 - > Estimate debt requirements for each layout and phase.
- > Second step: Prepare pro forma statements for each layout (and options), by phase
- > Forecast revenues and expenses; net revenue available for debt service, existing and proposed debt service
- > Final step: Compare the benefit/cost ratio for each layout (and option)
 - > Net present value of revenues available for debt service by option (NPV) of the stream of revenues divided by the cost of the option.
 - > Evaluate open versus mixed (open/covered) moorage.

Comparison of Slip Distribution



MN Layout 1A MN Layout 1B MN Layout 2A

MN Layout 2B

- Phasing of reconfiguration limits rebuild options
 - First phase avoids impacts to:
 - > Guest moorage
 - > K Dock
 - TraveLift pier, et al.
 - L, M, and N docks are functioning well (both occupancy and revenue)
- All alternatives reduce 20-29 foot slips compared with the existing layout.
- Differences between Waggoner report and BST and Moffatt Nichol layouts are minor.
- BST concludes that the City approach is sound, and confirms Waggoner findings:
 - > Dry stack is a successful model for smaller power boats.
 - Focus on 30-59 foot boats for the reconfiguration is reasonable.
 - > Financial analysis further evaluates the viability of the alternatives under consideration.
- There is time to re-evaluate plans for docks A through K prior to finalizing the concept in the future.

Layout 1: Open Moorage

- All open slips
- Phased construction:

Phase 1: L, M and N docks Phase 2: Future Phase 3: Future

- An Alternative:
 - Layout for just M and N docks
 - (Not Shown)



Layout 2: Mix of Open and Covered Moorage

- Mix of covered and open slips
 - Docks D thru M
 - Approx. 30% covered
- Phased construction:
 - Phase 1: L, M and N docks Phase 2: Future Phase 3: Future
- An Alternative
 - Layout for just M and N docks
 - (Not shown)



Construction Costs Current and/w Inflation

		Present \	/alue	Future Value							
Layout	Phase	2021		2025		2032		2039			
Open Moorage: 1B 1B 1B 1B 1B	1 2 3 Total	\$ \$ \$	10.5 16.2 <u>13.1</u> <u>39.9</u>	\$	11.7	\$	21.7	\$	21.1		
Mix of Open and Covered Moorage.											

mix of open and obvered moorage.									
2B	1	\$	15.5	\$	17.2				
2B	2	\$	27.2			\$	36.3		
2B	3	\$	17.1					\$	27.4
2B	Total	\$	<u>59.7</u>						

- Assumes that construction occurs in three phases
 - Phase 1 occurs in 2025
 - > Phase 2 occurs in 2032
- > Phase 3 occurs in 2039
- Construction costs are inflated at 2.7% per year

Layout 2 with 30% covered slips is \$20 Million more.

Debt Service Comparison Open/Covered Slip Layouts





- Existing debt is paid off in 2022.
- Estimated cost of new projects:
 - 1B = \$39.9 million
 - 2B = \$59.7 million
- Debt based on 30-year bonds at 3% interest.
- **Debt by phase:**
 - Phase 1
 - \$580,000/year (1B)
 - \$860,000/year (2B)
 - > Phase 1 & 2
 - Cumulative debt:
 - \$1.7 million/year (1B)
 - \$2.7 million/year (2B)
 - Phase 1, 2 & 3
 - Cumulative debt:
 - \$2.7 million/year (1B)
 - \$4.0 million/year (2B)

Open Moorage.

Assumes City issues 30-year LTGO bonds at 3% interest.

Des Moines Moorage Rates Monthly and Discounted





- The share of tenants paying monthly moorage rates declined from 100% in 2015 to 72% in 2021.
- As a result:
 - The weighted average rate is approx. 13% lower than the monthly rate for both small open and covered slips.
 - Smaller slips represent approx. 68% of all slips.
- The financial model assumes that these discounts are eliminated.

Rate Comparisons Open Rates



- Des Moines monthly rates for open slips are approx. <u>12% less</u> than the average rates of Puget Sound competitors.
- Financial model assumes existing slips use Puget Sound average rates.
- Des Moines monthly rates for open moorage are approx. <u>26% less</u> than the 90th percentile rates of Puget Sound competitors.
- Financial model assumes new slips use Puget Sound 90th percentile rates.

If 2021 rates were not available, they were estimated by interpolating from proximate rates.

Rate Comparisons Covered Rates



- Des Moines monthly rates for covered moorage are approx. <u>12% le</u>ss than the average rates of Puget Sound competitors.
 - Financial model assumes existing slips use Puget Sound average rates.
- Des Moines monthly rates for covered moorage are approx<u>. 23% less</u> than the 90th percentile rates of Puget Sound competitors.
- Financial model assumes new slips use Puget Sound 90th percentile rates.
- The break-even rates for new covered moorage are approx. <u>39% above</u> <u>current monthly rates</u>.

If 2021 rates were not available, they were estimated by interpolating from proximate rates.

Benefit/Cost Ratios Phase 1, 2 & 3 (combined)



For Phases 1, 2 and 3 (combined), the estimated construction cost is higher than the NPV of net revenues for option 2B and options 1B at 5%.

- Open slip layout option 1B meet or exceed the breakeven point at 3% and 4% interest rates and are below breakeven at 5%.
- Mixed slip option 2B:
 - Does not exceed the break-even point under any interest rate.

Benefit/Cost Ratios Phase 1 and 2 (combined)



For Phase 1 and 2 (combined), construction cost is lower than the NPV of net revenues for open layout options but not for all mixed layout options.

- Open slip layout option 1B exceeds DSC at all interest rates.
- Mixed slip option 2B: Meets or exceeds breakeven at 3% and 4% interest rates but not at 5%.

Benefit/Cost Ratios Phase 1



- For Phase 1, the NPV of net revenue is significantly higher than the Phase 1 cost estimates for all alternatives.
 - NPV of revenues is defined as total marina revenues less operating and maintenance costs for the period 2022 to 2045 and discounted at interest rates ranging from 3% to 5%.
 - Construction costs were estimated by Moffatt-Nichol
- The benefit/cost ratio (B/C) compares the NPV of the net revenue available for debt service with the associated cost of the project.
 - All layout options for Phase 1 are significantly above 1, which is breakeven (NPV of net revenues equals costs).

Benefit/Cost Covered vs Open Slips



- Open slips produce better financial performance than covered slips:
 - Cost per slip (across all three phases)
 - Open approx. \$77,000
 - > Covered approx. \$218,000
 - Benefit/Cost
 - > Open slips meet or exceed the break-even point with 3% and 4%, but not 5%.
 - Covered slips do not meet the break-even point with any of the interest rates.

Findings - Financial

> Phase 1:

- > All Layouts meet financial requirements (B/C ratio equal to or greater than 1)
- > Phase 1 and 2:
 - > All open slip Layouts meet financial requirements
 - Mixed slip Layouts meet financial requirements if interest rates are 3% or 4% but not 5%. However...
- > Phase 1, 2 and 3:
 - Open slip Layouts meet financial requirements if interest rates are 3% or 4% but not 5%
 - Mixed slip Layouts do not meet financial requirements under any interest rate

> Phase 1

- > Layout 1B (L, M, and N docks)
- > Maximizes the number of slips replaced in Phase 1
- > Meets market and financial requirements
- Phase 2 and 3 are costly and require additional infrastructure and capital:
 - > Seawall reconstruction (and utilities)
 - > Adaptive Purpose Building (with drystack)
- > City could consider other options:
 - > Various forms of Privatization
 - > Allocation of City revenues for Marina construction
 - Grants, among other funding sources
 - > Only addresses capitol (and not likely)
 - Does not address structural operating issue with moorage rates

Conclusions

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- > Covered moorage untenable.
 - > Would require additional capital from the City (\$20 million)
 - > Above an beyond the \$12 million infused for the bulkhead.
 - > Would also require Marina moorage rates to be subsidized.
- > Staff and Consultants are moving forward with final design and permitting on L, M, and N dock
 - > Open moorage (Layout 1B).
- > As a reminder we are only looking to move forward with Phase 1 only.
 - > Phases 2 and 3 are future at least 10 years out.
 - > Additional feasibility assessment needed for future phases.
 - > Existing covered moorage in these areas would remain in place.

What Comes next....

- > Finalize Economic and Financial Reports.
 - > Finalize Marina Master Plan (Staff).
- > Continue Phase 1 Design (L, M, & N docks).
- > Get feedback on design options.
- > Develop a Staging Plan.
- > Permitting.
 - > Phase 1 (in context of the entire Marina)
- > Bidding Approximately this time next year.
- > Construction Delivery Timeline (2-3 years)
- > Issue bonds Fall/Winter 2022.
- > Environmental Mitigation



THANK YOU

