

MEMORANDUM

To: Tony Gammon, Acting Deputy Director
City of Alexandria, Department of Project Implementation

From: Kevin Van Hise, Project Manager
Kimley-Horn and Associates, Inc.

Date: April 15, 2015

Subject: Windmill Hill Bulkhead Improvements –Community Meeting #2 – Analysis
Held April 13, 2015 at 6:30 PM at Lee Center (Exhibit Hall), City of Alexandria

Overview

Community Meeting #2 was the second in a series of public meetings to review the options available for the bulkhead replacement at Windmill Hill Park. Meeting #1 focused on a review of the concept plan approved by City Council in 2003 as well as potential shoreline treatment approaches and strategies that have evolved since the approval of the 2003 plan.

The focus of Community Meeting #2 was the presentation of three (3) conceptual plans that are based on feedback provided by the public during Meeting #1, information received during conversations with the Army Corps of Engineers (ACOE), the National Oceanic and Atmospheric Administration (NOAA), a wave and wind study of the basin and an engineering analysis of the 2003 Concept Plan conducted by Coastal Systems International, Inc.

The three (3) proposed concepts were;

- 1) **Modernized 2003 Plan**
- 2) **Hybrid Bulkhead/Living Shoreline Plan**
- 3) **Living Shoreline Plan**

Additional design elements were also presented as alternatives that may be incorporated if funding is sufficient. These elements consisted of a pier, a boardwalk, and a combination of both pier and boardwalk.

Approximately thirty (35) people attended Community Meeting #2. The meeting was organized around a welcome presentation given by City Staff and consultants, an overview of Meeting #1, presentation of the three (3) new concepts, preference polling using keypad devices during the presentation, and a question and answer session. The three (3) proposed concepts were depicted on illustrative display boards that meeting attendees could review while the consultant staff answered

questions. Participants had the opportunity to interact with the team through the polling devices and by asking questions during the presentation. The results of the keypad polling are attached to this memo.

With the exception of the consultant team and City staff, all of the attendees were City of Alexandria residents, the majority of whom indicated that they lived adjacent to the project area.

Of the three proposed concepts, the Living Shoreline Plan received the greatest amount of support. The group was divided with respect to the incorporation of the pier and boardwalks.

Question and Answer Summary

Brief notes were kept from the question and answer portion of the meeting. Principle themes that emerged during the session included:

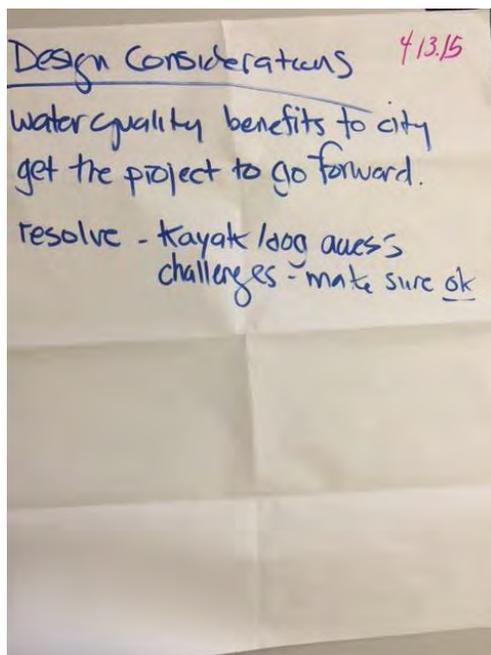
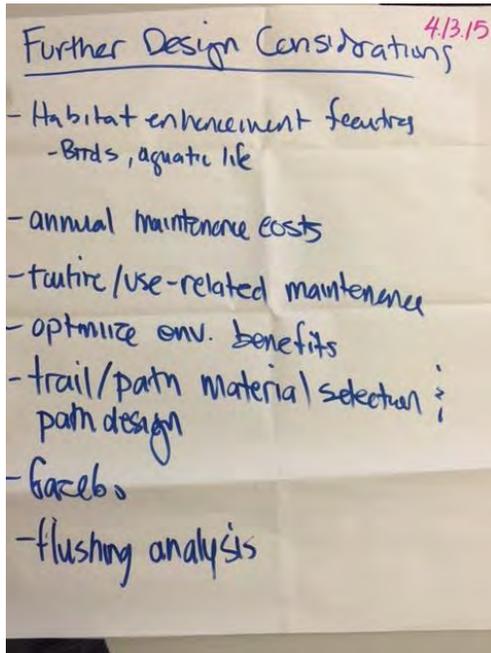
- **Concern for project implementation-** *Participants expressed a strong desire for the project to move toward construction as quickly as possible*
- **Additional design components-** *There was varied interest in additional pedestrian components such as pier and boardwalk opportunities. Concern was expressed about increased debris accumulation in the structure of a boardwalk or pier, cost, construction type, and maintenance. There was some interest in a pier, but little interest in a boardwalk or pier and boardwalk combination. City staff explained these details would be considered in the upcoming design phase.*
- **Debris management-** *Participants were concerned about the current basin condition and interested in studying the proposed designs ability to create proper flushing that would reduce trapped debris (logs, trash, etc.) in the basin*
- **Water access-** *Comments were made regarding the desire to offer people access through the living shoreline while maintaining safety at waters' edge*
- **Water fowl-** *There was interest expressed in providing water fowl and migratory bird habitat and perches*
- **Gazebo-** *There was discussion about the existing gazebo, Jack Browand explained there is no plan to change or remove the existing gazebo as it is not part of this project.*
- **Existing trees-** *There was concern regarding the removal of trees adjacent to the bulkhead and storm water outfall because of the habitat that it provides for wildlife. The trees in the vicinity of the project will be preserved if possible but the proposed improvements may require that some or all will be removed. New tree planting will be part of the living shoreline and storm outfall improvements.*
- **Proposed pathways-** *There was discussion about the material selection for the proposed pathways. Permeable pavements were discussed.*
- **Next steps-** *Jack Browand, RP&CA, explained that **the** Living Shoreline concept would be presented to the Park and Rec Commission and the Waterfront Commission before being presented to the City Council. City Council will have to approve the Living Shoreline concept because it varies from the concept that the City Council approved in 2003.*

Keypad (Electronic) Polling

The raw data collected by the polling devices is attached to this memo. The following is a summary of the responses from meeting participants who elected to use the provided keypad polling devices:

- **Question 1: Where do you live?** All live in the City of Alexandria
- **Question 2: How long have you lived at your current residence?** Most have considerable tenure as residents (generally more than 10 years) of Alexandria
- **Question 3: How close do you live to Windmill Hill Park?** All live within 5 blocks of Windmill Hill Park
- **Question 4: Did you attend the Windmill Hill Bulkhead Improvement Project, Community Meeting 1 in February?** The majority (2/3) did not attend Meeting #1.
- **Question 5: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Modernized 2003 plan.** Low interest was expressed in the Modernized 2003 Plan
- **Question 6: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Hybrid/Living Shoreline plan.** Moderate interest was expressed for the Hybrid/Living Shoreline plan.
- **Question 7: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Living Shoreline plan.** A high interest was expressed for the Living Shoreline plan.
- **Question 8: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Pier.** Some interest. Mixed results, with half expressing low interest
- **Question 9: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Boardwalk.** Some interest. Mixed results, with half expressing low interest
- **Question 10: On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Pier and Boardwalk.** The combination of the Pier and Boardwalk combination was not supported
- **Question 11: Which among the below do you feel the most strongly for? (in reference to Pier and Boardwalk components). *(This question was re-pollled after brief conversations about potential flow and debris relationships.)** Varied interest was expressed resulting in an a split of opinion in favor of either a pier component or none at all
- **Question 12: Which among the below do you feel the least strongly for? (in reference to Pier and Boardwalk components).** The Pier and Boardwalk combination option was not supported as an additional component to the project

Further Design Considerations



Session Name: New Session 4-13-2015 7-57 PM

Date Created: 4/13/2015 6:26:40 PM

Active Participants: 26 of 26

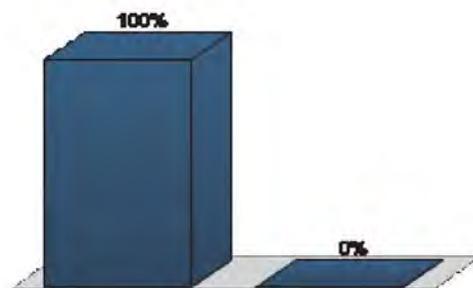
Average Score: 0.00%

Questions: 13

Results by Question

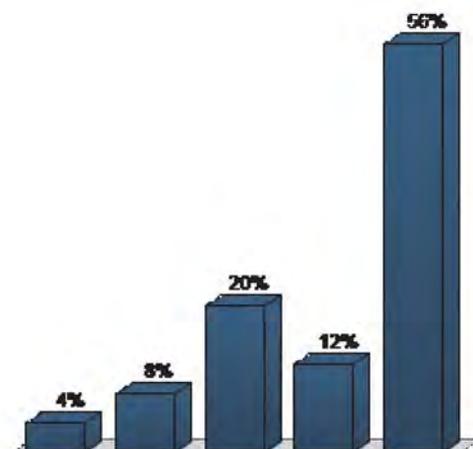
1. 1. Where do you live?(select one) (Multiple Choice)

| Responses | | |
|-----------------------|-------------|-----------|
| | Percent | Count |
| In Alexandria | 100% | 26 |
| Outside of Alexandria | 0% | 0 |
| Totals | 100% | 26 |



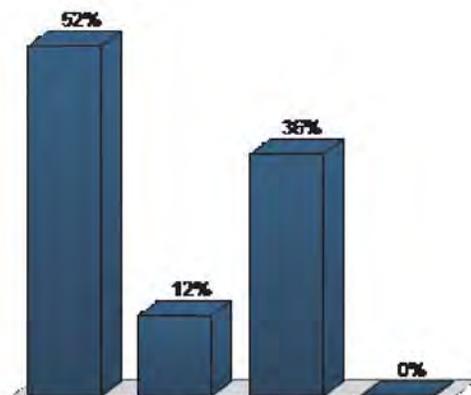
2. 2. How long have you lived at your current residence?(select one) (Multiple Choice)

| Responses | | |
|-------------------|-------------|-----------|
| | Percent | Count |
| Less than a year | 4% | 1 |
| One to two years | 8% | 2 |
| Two to five years | 20% | 5 |
| Five to ten years | 12% | 3 |
| Ten or more years | 56% | 14 |
| Totals | 100% | 25 |



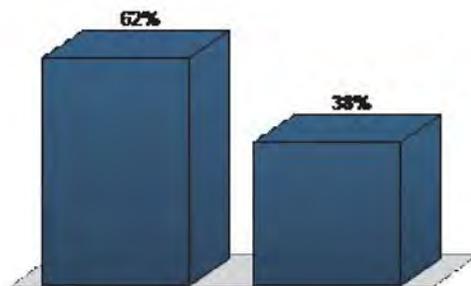
3. 3. How close do you live to Windmill Hill Park?(select one) (Multiple Choice)

| | Responses | |
|--|-------------|-----------|
| | Percent | Count |
| Adjacent to one of the edges of the park | 52% | 13 |
| A block or two away | 12% | 3 |
| Several (around 3 to 5) blocks away | 36% | 9 |
| Outside of the City of Alexandria | 0% | 0 |
| Totals | 100% | 25 |



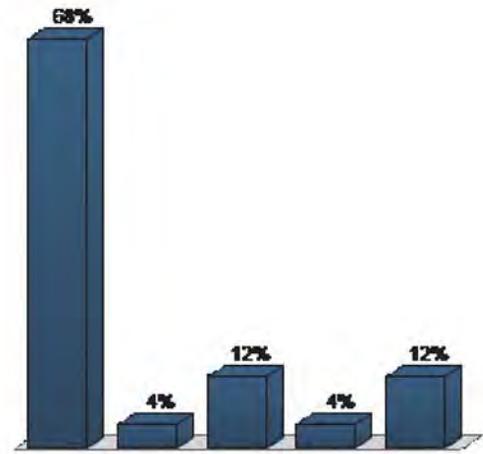
4. 4. Did you attend the Windmill Hill Bulkhead Improvement Project, Community Meeting 1 in February? (Multiple Choice)

| | Responses | |
|---------------|-------------|-----------|
| | Percent | Count |
| No | 61.54% | 16 |
| Yes | 38.46% | 10 |
| Totals | 100% | 26 |



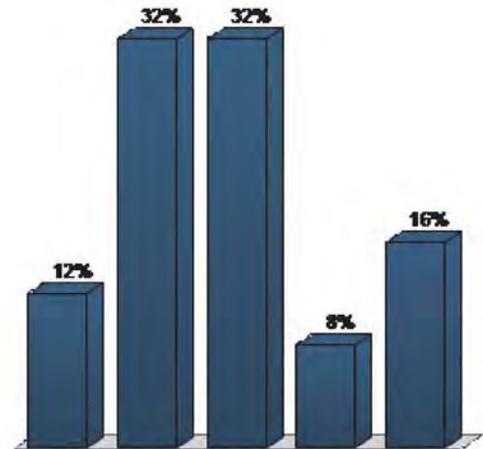
5. 5. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Modernized 2003 plan. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 68% | 17 |
| 2 | 4% | 1 |
| 3 | 12% | 3 |
| 4 | 4% | 1 |
| 5 | 12% | 3 |
| Totals | 100% | 25 |



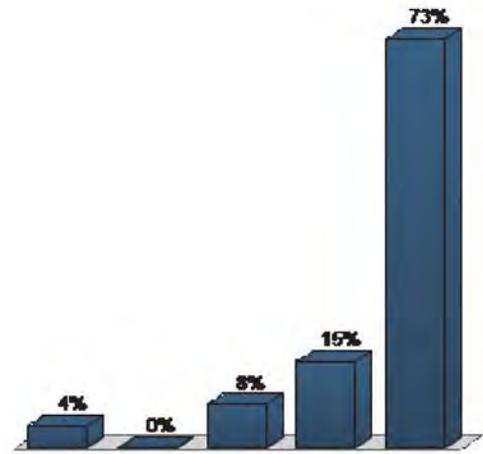
6. 6. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Hybrid/Living Shoreline plan. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 12% | 3 |
| 2 | 32% | 8 |
| 3 | 32% | 8 |
| 4 | 8% | 2 |
| 5 | 16% | 4 |
| Totals | 100% | 25 |



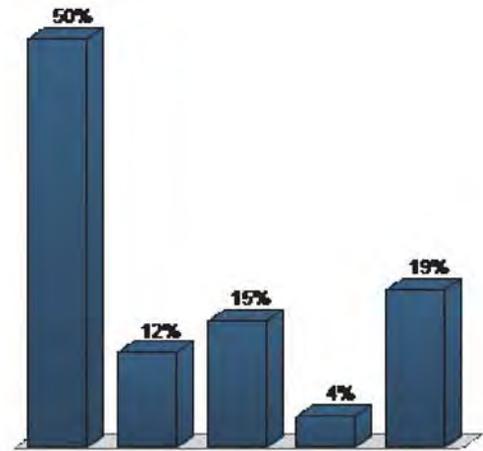
7. 7. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Living Shoreline plan. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 3.85% | 1 |
| 2 | 0% | 0 |
| 3 | 7.69% | 2 |
| 4 | 15.38% | 4 |
| 5 | 73.08% | 19 |
| Totals | 100% | 26 |



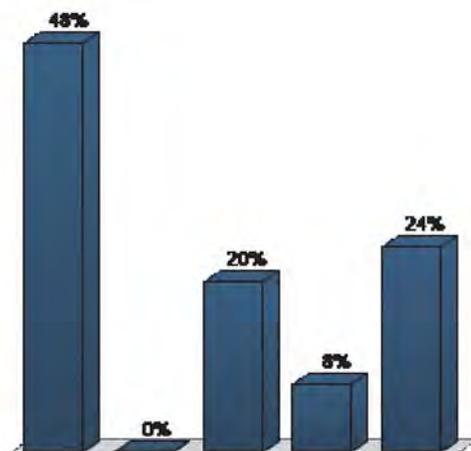
8. 8. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Pier. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 50% | 13 |
| 2 | 11.54% | 3 |
| 3 | 15.38% | 4 |
| 4 | 3.85% | 1 |
| 5 | 19.23% | 5 |
| Totals | 100% | 26 |



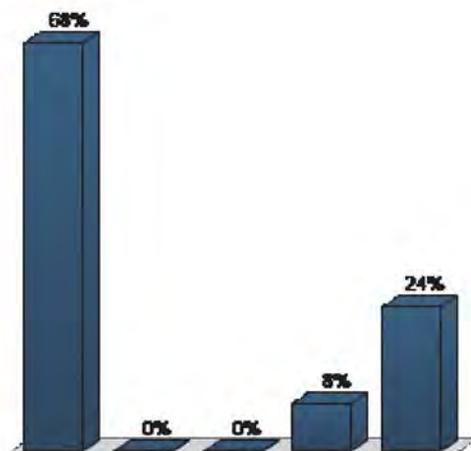
9. 9. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Boardwalk. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 48% | 12 |
| 2 | 0% | 0 |
| 3 | 20% | 5 |
| 4 | 8% | 2 |
| 5 | 24% | 6 |
| Totals | 100% | 25 |



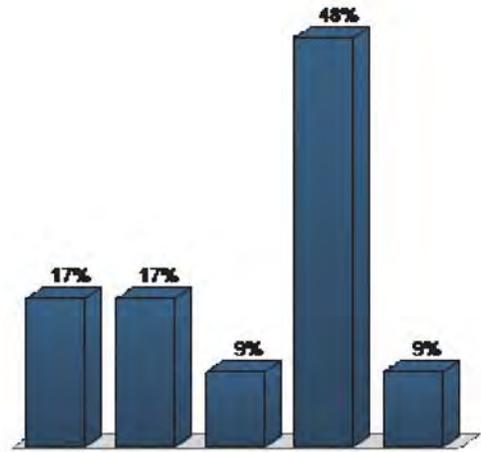
10. 10. On a scale of 1 to 5 (1=low, 5=high), rate your interest in the Pier and Boardwalk. (Multiple Choice)

| Responses | | |
|---------------|-------------|-----------|
| | Percent | Count |
| 1 | 68% | 17 |
| 2 | 0% | 0 |
| 3 | 0% | 0 |
| 4 | 8% | 2 |
| 5 | 24% | 6 |
| Totals | 100% | 25 |



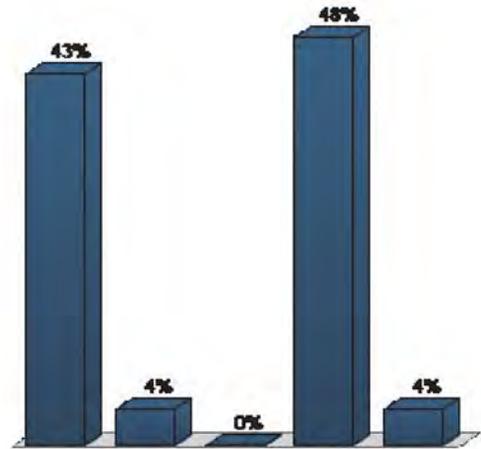
11. 11. Which among the below do you feel the most strongly for?(select one) (Multiple Choice)

| Responses | | |
|-----------------------|-------------|-----------|
| | Percent | Count |
| Pier | 17.39% | 4 |
| Boardwalk | 17.39% | 4 |
| Pier + Boardwalk | 8.7% | 2 |
| None – Don't Like Any | 47.83% | 11 |
| None – Neutral on All | 8.7% | 2 |
| Totals | 100% | 23 |



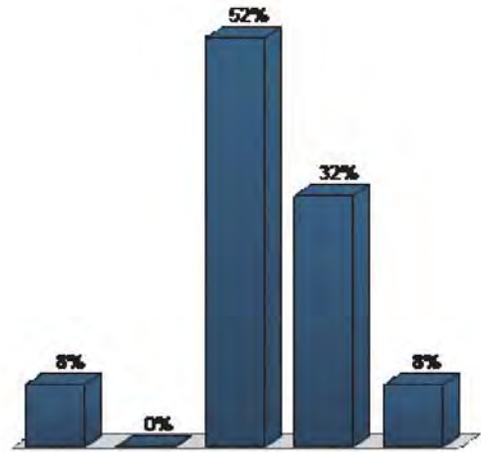
12. 11. Which among the below do you feel the most strongly for?(select one) (Multiple Choice)

| Responses | | |
|-----------------------|-------------|-----------|
| | Percent | Count |
| Pier | 43.48% | 10 |
| Boardwalk | 4.35% | 1 |
| Pier + Boardwalk | 0% | 0 |
| None – Don't Like Any | 47.83% | 11 |
| None – Neutral on All | 4.35% | 1 |
| Totals | 100% | 23 |



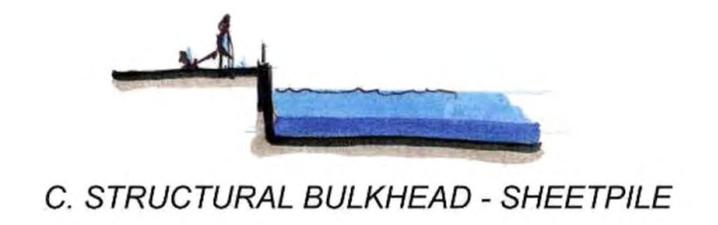
13. 12. Which among the below do you feel least strongly for?(select one) (Multiple Choice)

| Responses | | |
|-----------------------|-------------|-----------|
| | Percent | Count |
| Pier | 8% | 2 |
| Boardwalk | 0% | 0 |
| Pier + Boardwalk | 52% | 13 |
| None – Don't Like Any | 32% | 8 |
| None – Neutral on All | 8% | 2 |
| Totals | 100% | 25 |





MODERNIZED 2003 PLAN





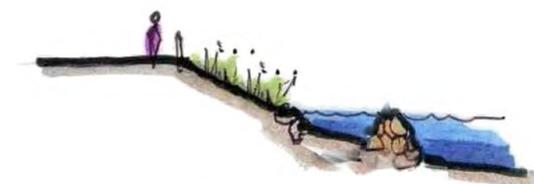
HYBRID/LIVING SHORELINE PLAN



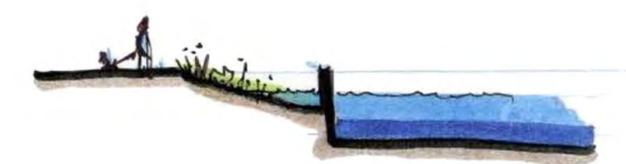
P O T O M A C R I V E R



A. LIVING SHORELINE - SMALL STONE SILL



B. LIVING SHORELINE - LARGE STONE SILL



C. HYBRID BULKHEAD



LIVING SHORELINE PLAN



P O T O M A C R I V E R



A. LIVING SHORELINE - SMALL STONE SILL



B. LIVING SHORELINE - LARGE STONE SILL

Design Options: Pier



Design Options: Boardwalk



Design Options: Pier and Boardwalk

