Subject	Meeting Minutes - Citizen Advisory Group (CAG) Meeting #10		
Meeting Date	June 27, 2017		
Scheduled Time	6:00 pm – 7:00 pm ET		
Location	Port Authority Conference Room, 90 Moonachie Avenue, Teterboro, NJ 07608		
Attendees	Attendee list available; for internal use only		

- The PowerPoint slide presentation utilized at the meeting is attached to the meeting minutes (see **Attachment 1**).
- A CAG meeting packet was provided to all attendees and is also attached to the meeting minutes (see Attachment 2).
- Linda Fisher, New Jersey Department of Environmental Protection (NJDEP) Rebuild by Design Meadowlands (RBDM) Project Team Manager, started the meeting and provided a brief overview of the meeting agenda, and introduced Chris Benosky.
- Chris Benosky, AECOM's RBDM Program Manager, provided an overview of the meeting agenda and the Meadowlands Challenge. The Meadowlands Challenge is two-fold. It includes the need to address flooding of the Project Area from two different sources: (1) storm surge (tidal) flooding from the Hackensack River due to low elevations throughout the Project Area; and (2) interior flooding from rainfall events due to undersized and underperforming interior drainages and infrastructure in the Project Area. The Proposed Project is examining three Build Alternatives to address the Meadowlands Challenge: Alternative 1 would protect against storm surge flooding (i.e., Challenge #1); Alternative 2 would protect against stormwater flooding (i.e., Challenges #1 and #2).
- Garrett Avery, AECOM's RBDM Project Manager, provided an overview of Alternative 1, which
 was last discussed during CAG Meeting #8. The RBDM Project Team is looking at ways to reduce
 construction costs, minimize disturbance to ecological systems, and enhance public park space,
 while providing a complete line of protection to protect the maximum amount of the Project
 Area.
- During the initial concept development phase of Alternative 1, eleven (11) alignment tie-in options were identified, which were presented at CAG Meeting #6. During the second phase of the concept development process, these concepts were reduced to 7 alignment tie-in options, and presented during CAG Meeting #8. The reduction was accomplished through a robust concept screening process that considered a variety of factors. Further screening of these 7 alignment tie-in options resulted in the identification of three final options.

July 10, 2017

- As a result of the concept screening process, the following Alternative 1 concepts were identified to carry forward into the Feasibility Study: Northeast Option #3, Southeast Option #2, and Berry's Creek Option #1. Northeast Option #3 provides approximately 1,500 linear feet more flood protection and allows the alignment to tie into the Riverwalk in the City of Hackensack. Southeast Option #2 extends along the south side of Commerce Boulevard. This option provides cost efficiencies and avoids impacts to the Kane Mitigation Bank berm. Berry's Creek Option #1 includes the development of a surge barrier. Berry's Creek Options #2 and #3 were screened out due to land acquisition costs and potentially significant environmental impacts.
- Lulu Loquidis, AECOM's RBDM Landscape Designer, provided an overview of Alternative 2, which was last discussed at CAG Meeting #7. Under Alternative 2, the RBDM Project Team is looking at ways to convey stormwater away from flood-prone areas within the Project Area by deepening and regrading existing channels, improving water quality and enhancing habitat through native plantings and natural channel design, and enhancing public parks and other municipal lands through the creation of new parks, open spaces, and recreational areas.
- During the Alternative 2 concept development process, the RBDM Project Team analyzed the 7 initial Alternative 2 concepts presented at CAG Meeting #7 further, and examined the benefits associated with the specific components of each concept. Through this process, the Team identified several components from the original 7 concepts that are currently under consideration for inclusion in Alternative 2. These components include new park space, green infrastructure along roadways, channel improvements, and new pump stations from the original Main Street, DePeyster Creek, Losen Slote, Carol Place, and East Riser concepts.
- Mr. Avery provided an overview of the considerations that went into building the Hybrid Alternative (Alternative 3), which included the results of hydraulic modeling, the Proposed Project timeline, and environmental impacts. The Team is developing the Hybrid Alternative from components previously assessed and screened under Alternatives 1 and 2. For Alternative 3, the Team is evaluating each component in conjunction with the Proposed Project timeline, which requires the Proposed Project to be complete by September 2022. Components that cannot be carried forward in the Build Plan due to timeline constraints could become elements of a Future Plan, and implemented by others over time as new funding sources become available.
- The NJDEP Project Team is in the process of examining how different combinations of Alternative 1 and 2 components could work together as a larger system. The Team presented two examples of how these systems could work together hydrologically, while also meeting the goals of the Proposed Project.

- During the initial Alternative 3 concept development process, the Team determined that some
 components are fixed, while others are flexible. For example, the Alternative 1 alignment is
 fixed as it functions as one complete system, while the Alternative 2 stormwater strategies are
 flexible. This means that various Alternative 2 strategies can both function in a combined
 fashion or individually, with various combinations possible.
- Mr. Avery and Ms. Loquidis presented three Hybrid Alternative concepts, including the: Channel Focus Concept, Community Focus Concept, and Complete System Concept.
 - The Channel Focus Concept emphasizes channel widening and deepening to improve conveyance capacity, and includes the addition of an ecological edge along these channels to improve water quality and habitat.
 - 2. The Community Focus Concept centers on improving public services and providing community benefits. It could include green infrastructure features (e.g., curb cutouts or bioswales) along the main roadways in conjunction with Hackensack River access and educational opportunities.
 - 3. The Complete System Concept would incorporate all of the above features. This concept would connect the various flood protection, stormwater management, habitat improvement, and open space features into one large, integrated system.
- Mr. Benosky then provided an overview of the next steps. The RBDM Project Team will continue to develop and refine the concepts, alternatives, and costs. The next CAG meeting will be in September 2017. CAG members were encouraged to continue to build interest in the Proposed Project and to visit the Proposed Project website at www.rbd-meadowlands.nj.gov or email questions to rbd-meadowlands@dep.nj.gov for more information. Mr. Benosky informed the CAG Members that the RBDM Project Team is interested in obtaining feedback from the CAG Members as the Proposed Project continues to move forward. Please provide all comments and input to NJDEP concerning CAG Meeting #10 by July 11, 2017.
- Following the completion of the presentation, the CAG Members posed the following questions and comments:
 - 1. Is the 7-foot elevation for the Alternative 1 line of protection final?
 - Response: As a result of the Alternative 1 screening process, the 7-foot elevation (NAVD 88) line of protection was identified as the feasible solution based on cost, schedule, and the topography of the Project Area.
 - 2. Would Alternative 1 protect against another Hurricane Sandy?

Response: No. The Proposed Project would only protect the Project Area up to an approximately 50-year storm event (without sea level rise). However, it would also provide some interior drainage improvements (i.e., pump stations).

3. What's the soonest we can expect to see something built?

Response: It is anticipated that construction bids would be issued in 2019. The Proposed Project would be completed by September 2022.

4. Where will the force main and pump station be located on Losen Slote under Alternative 2 (i.e., Component #3)?

Response: The location of the pump station and force main are still under development. The force main may be located below the channel or it may be routed on adjacent public roads to eliminate maintenance issues. The exact location and length of the force main will be determined based on the modeling results. However, it will likely be located upstream to push water downstream to the existing pump station.

5. I live on Chapman Drive near the downstream pump station along Losen Slote. I have never experienced flooding except during Hurricane Sandy. How would the downstream pump station be affected with the addition of a new upstream pump station?

Response: Operations and maintenance (O&M) measures would be put in place at the upstream pump station to prevent flooding downstream in the event the downstream pump station stopped working properly.

6. During a recent rain event, we noticed that Losen Slote had plenty of capacity downstream. However, water conveyance appeared to be restricted upstream.

Response: Alternative 2 is looking at solving this particular issue.

7. Have you considered using Mehrhof Pond as a bypass to detour excess water in the Project Area temporarily? This pond has additional storage capacity.

Response: The Project Team is exploring this option; it is still going through the screening process.

8. Do you coordinate with the Bergen County Utilities Authority (BCUA)? They were going to implement flood control measures for their facility. How is this being considered in the Proposed Project's design?

Response: Yes. The NJDEP Project Team meets with the BCUA regularly. However, we are not sure if BCUA still intends to implement this plan and if this would occur prior to the Proposed Project being implemented.

9. Losen Slote is being kept purposefully low because they are dredging in the area, but the equipment is getting stuck. The drainage in the Project Area needs to be improved as soon as possible. The pipes, culverts, and drainages need to be cleared of sediment.

Response: We understand and agree that drainage needs to be improved in the Project Area as soon as possible.

10. AECOM/NJDEP is doing a good job of looking out for us. Thank you for your hard work and willingness to help.

Response: Thank you.

The meeting adjourned at 6:55 pm ET.

Attachment 1.

Power Point Slide Presentation (as delivered)

REBUILDBYDESIGN **MEADOWLANDS**

CITIZENS ADVISORY GROUP MEETING #10

ALTERNATIVE 3: HYBRID June 27, 2017

AGENDA



Christopher Benosky, AECOM (2)

- Welcome
- The Meadowlands Challenge
- Concept Review
 - Alternative 1
 - Alternative 2
- Building the Hybrid
 - **Development Process**
 - Initial Ideas
 - **Building Blocks**
- **Next Steps**
- Question & Answer



REBUILD BY DESIGN MEADOWLANDS









THE MEADOWLANDS CHALLENGE

7

FACTOR: INFRASTRUCTURE CHALLENGED TO PUMP & PROTECT





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CAG Meeting #10 // June 27, 2017

AECOM

THE MEADOWLANDS CHALLENGE PROJECT STRATEGY: DEVELOP 3 BUILD ALTERNATIVES





Alternative 1: Storm Surge Flooding

Alternative 2: Stormwater Flooding

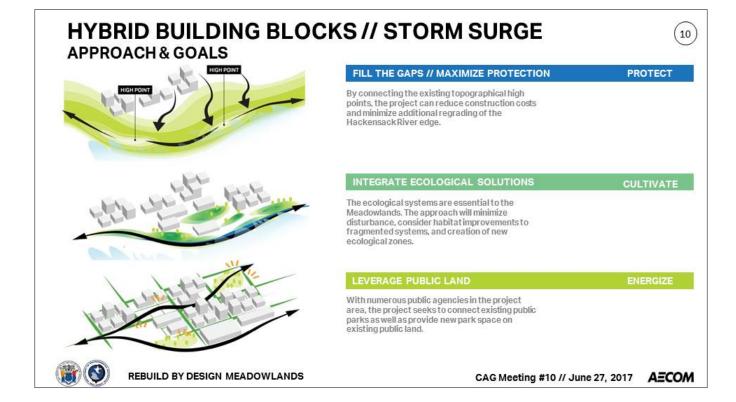
Alternative 3: Storm Surge & Stormwater Flooding

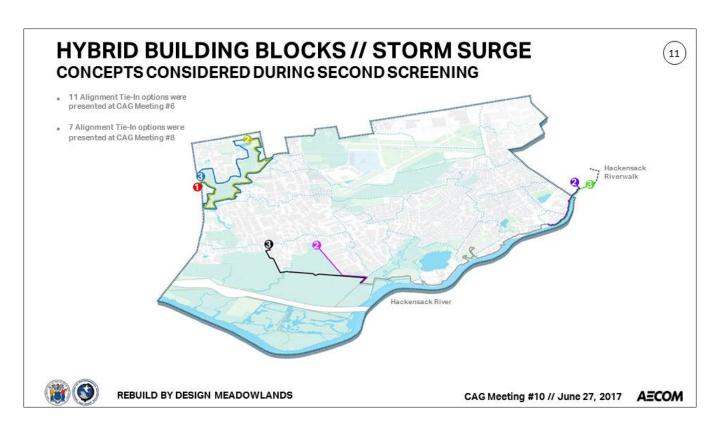


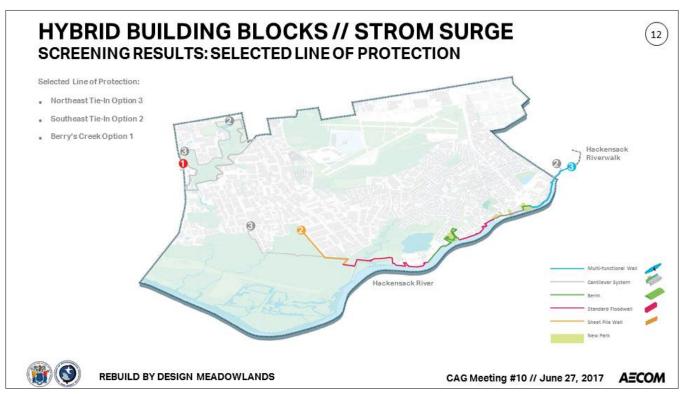
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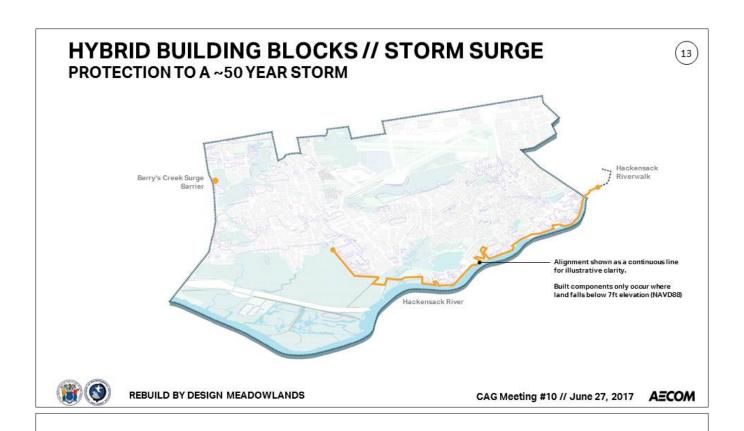
HYBRID BUILDING BLOCKS

ALTERNATIVE 1: STORM SURGE FLOODING **GARRETT AVERY, AECOM**





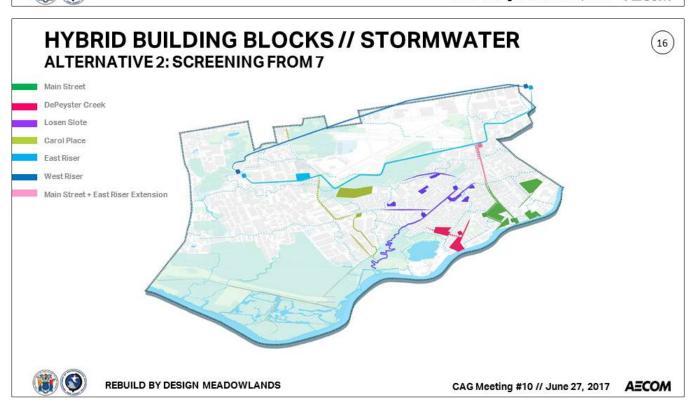


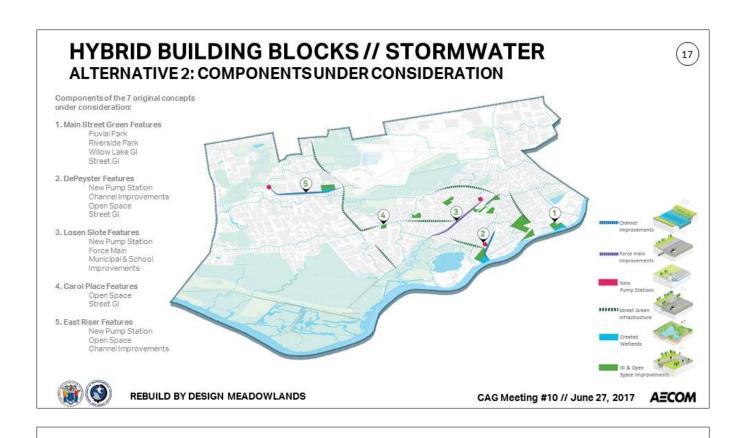


HYBRID BUILDING BLOCKS

ALTERNATIVE 2: STORMWATER LULU LOQUIDIS, AECOM

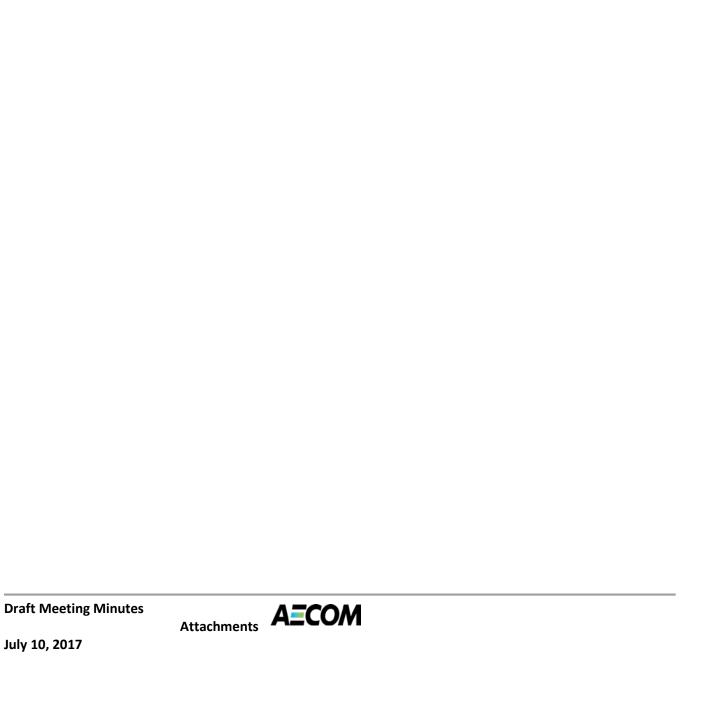
HYBRID BUILDING BLOCKS // STORMWATER 15 APPROACH & GOALS **IMPROVE CHANNELS** PROTECT Through deepening and regrading, the existing channels of the project area will have capacity to convey stormwater away from flood-prone areas Native plantings and naturalized channel edges provide habitat and improve water quality. The creation of new public parks creates more opportunities for gathering and recreation. The public realm is enhanced by providing landscape and park improvements to existing public parks, municipal buildings, schools yards, and libraries. REBUILD BY DESIGN MEADOWLANDS CAG Meeting #10 // June 27, 2017 **AECOM**





BUILDING THE HYBRID

INTEGRATING STORM SURGE FLOOD REDUCTION AND STORMWATER DRAINAGE IMPROVEMENTS GARRETT AVERY, AECOM



BUILDING THE HYBRID

CONSIDERATIONS





Performance

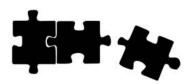
Testing concepts throughout development with hydraulic model to better understand and optimize performance.



Screening

The Hybrid is being developed from components previously assessed and screened under Alt 1 or Alt 2.

For Alternative 3, criteria such as 'Ability to Complete Project by 2022' take on new meaning.



Future Plan

Once performance modeling and screening are complete, system function will guide a project build

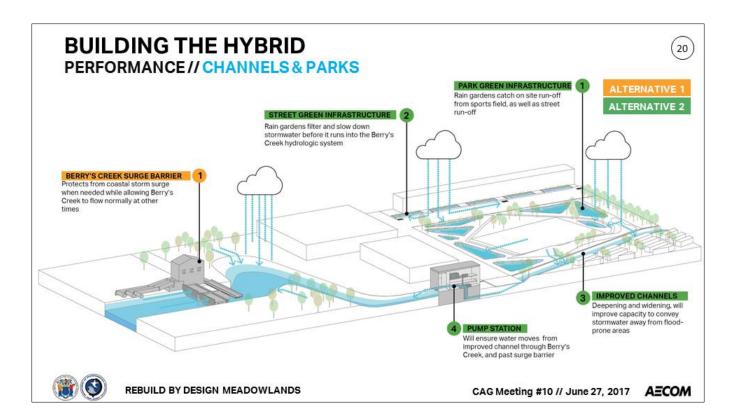
Components that aren't selected for the build plan could become elements of a Future Plan, which could be implemented by others over time as new funding sources become available.

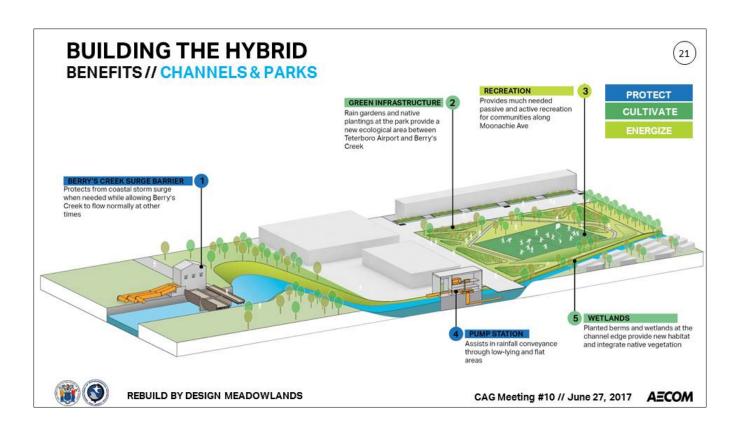
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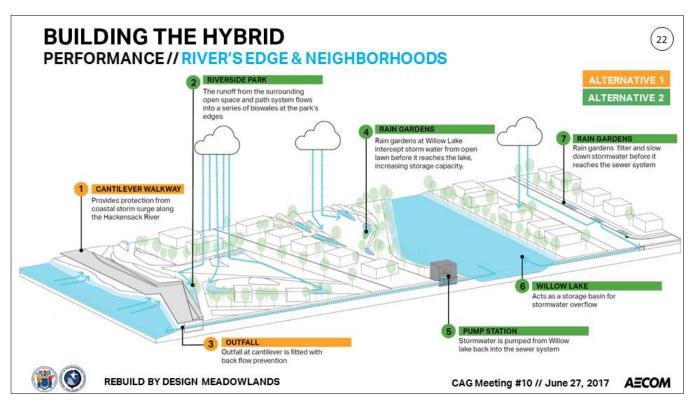
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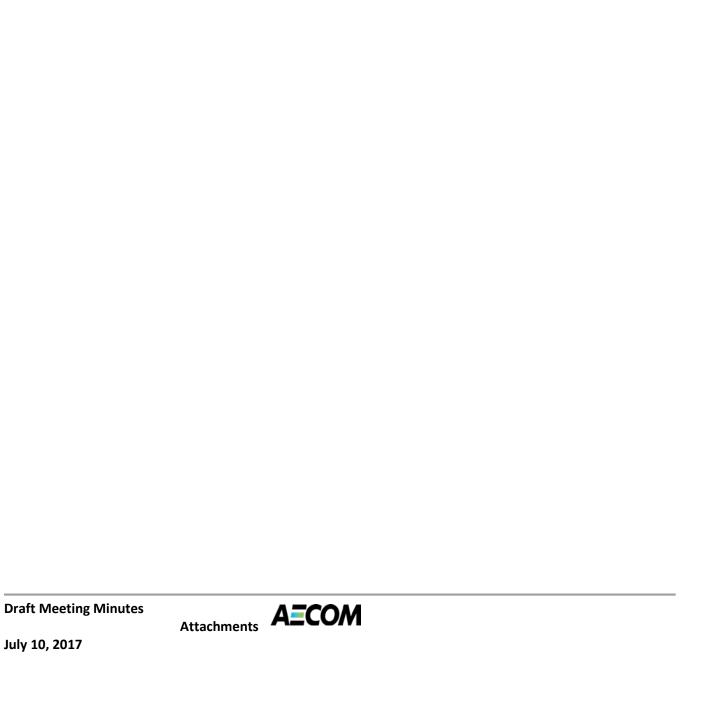


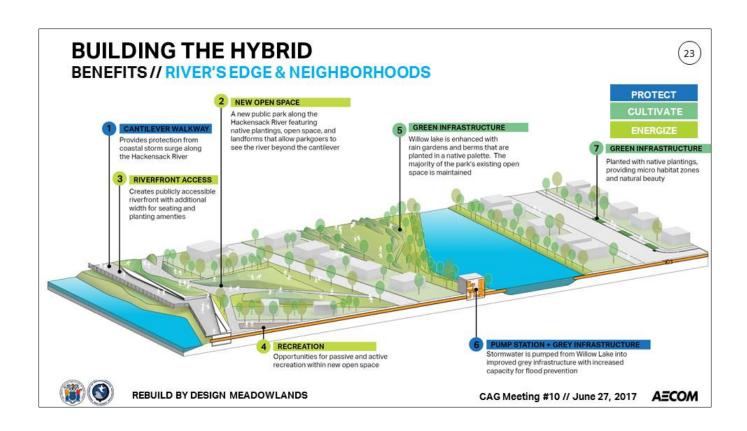
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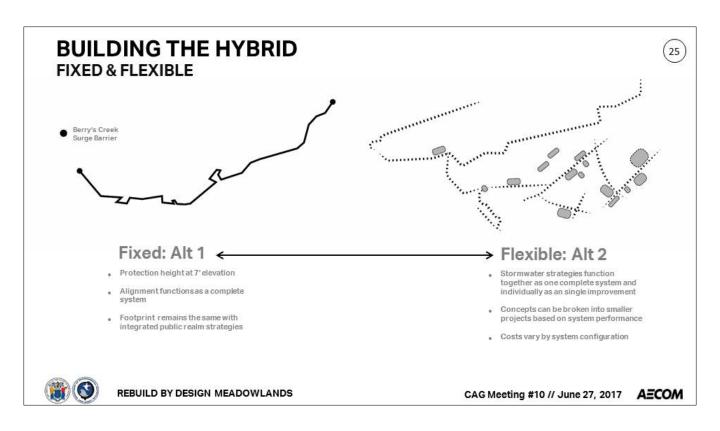


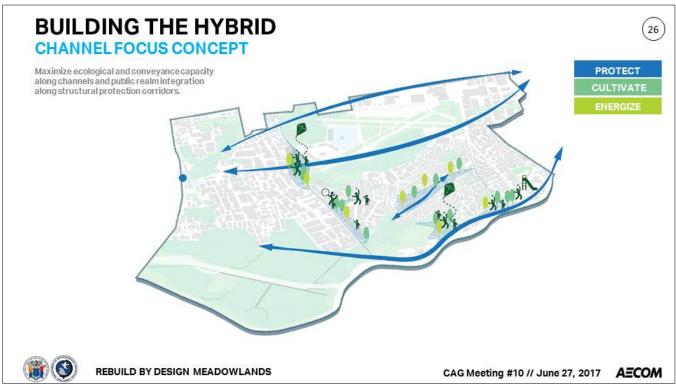


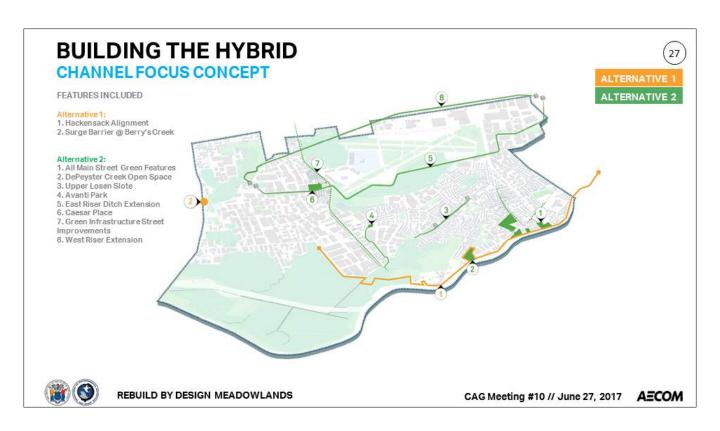


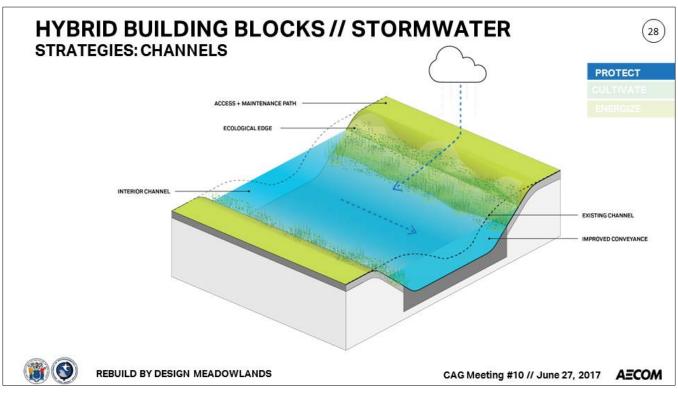
INITIAL IDEAS

CONNECTING THE BUILDING BLOCKS GARRETT AVERY & LULU LOQUIDIS, AECOM



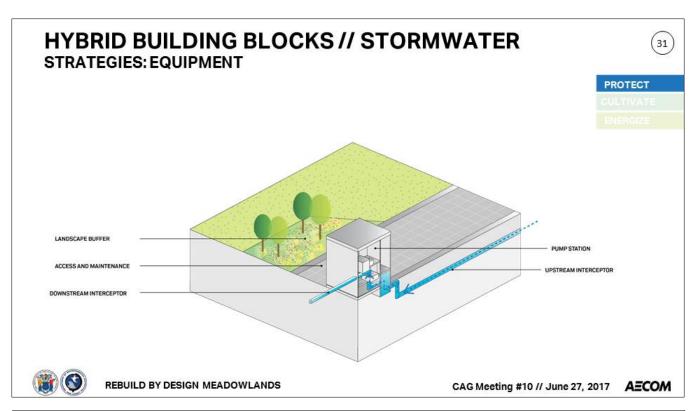




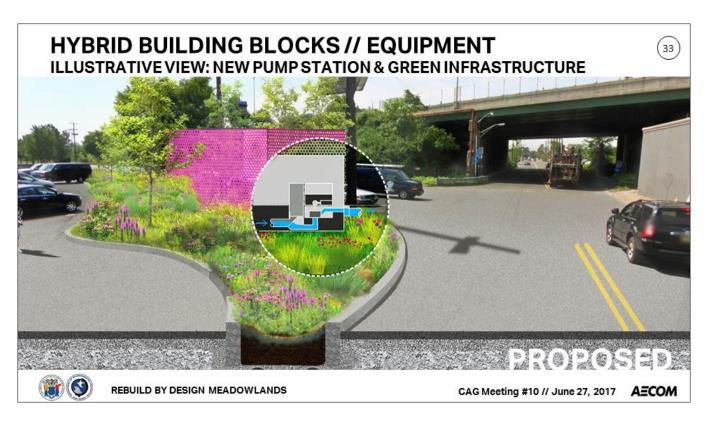




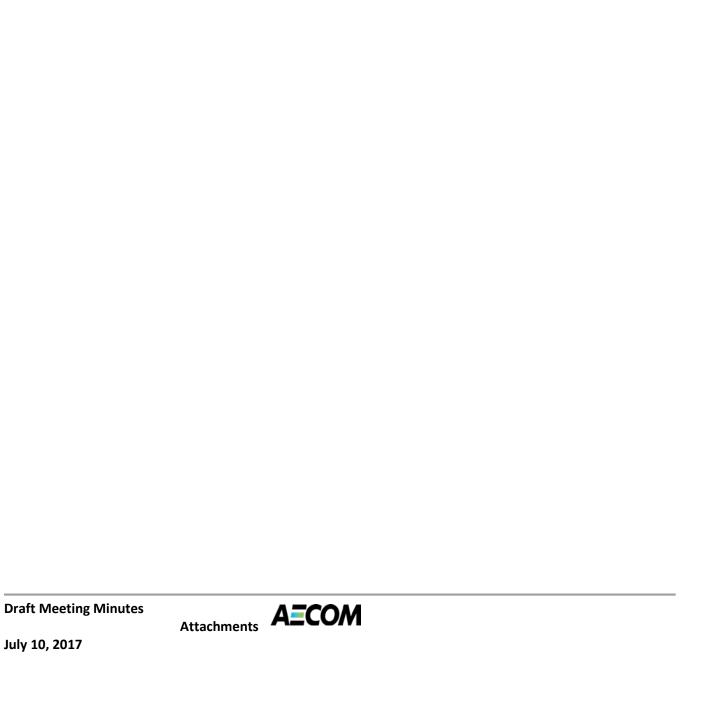


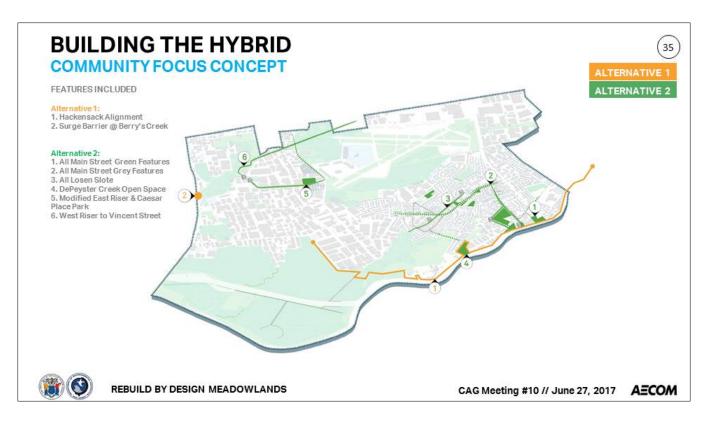


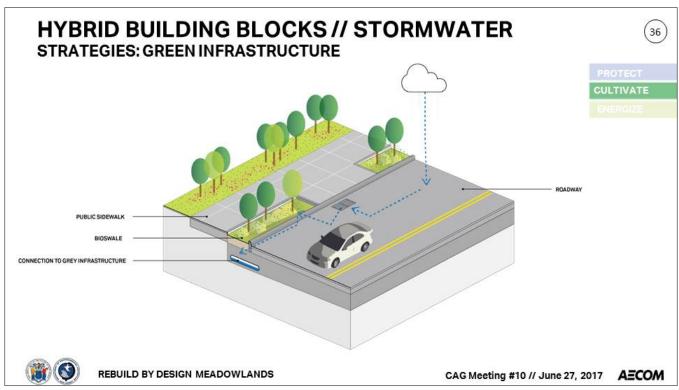


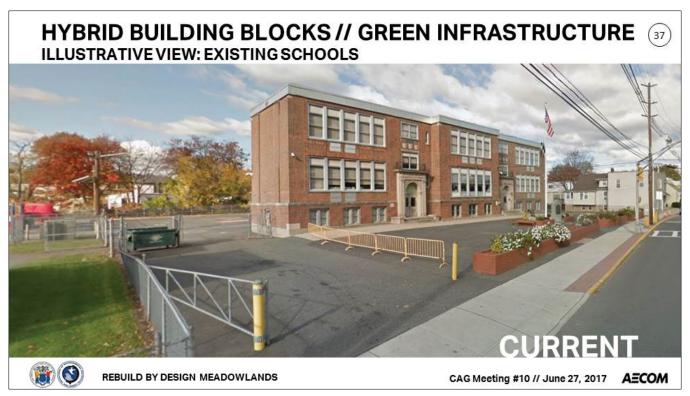




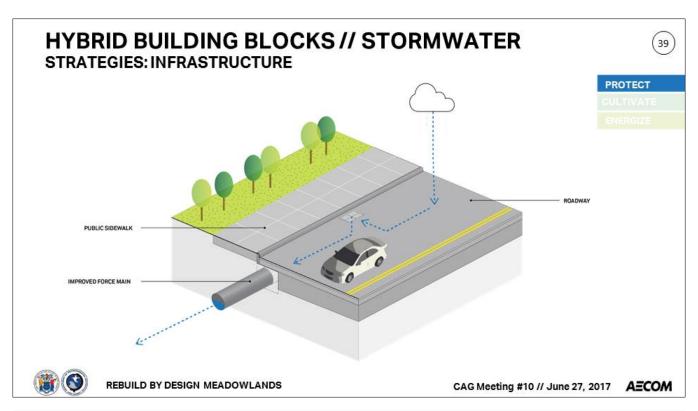




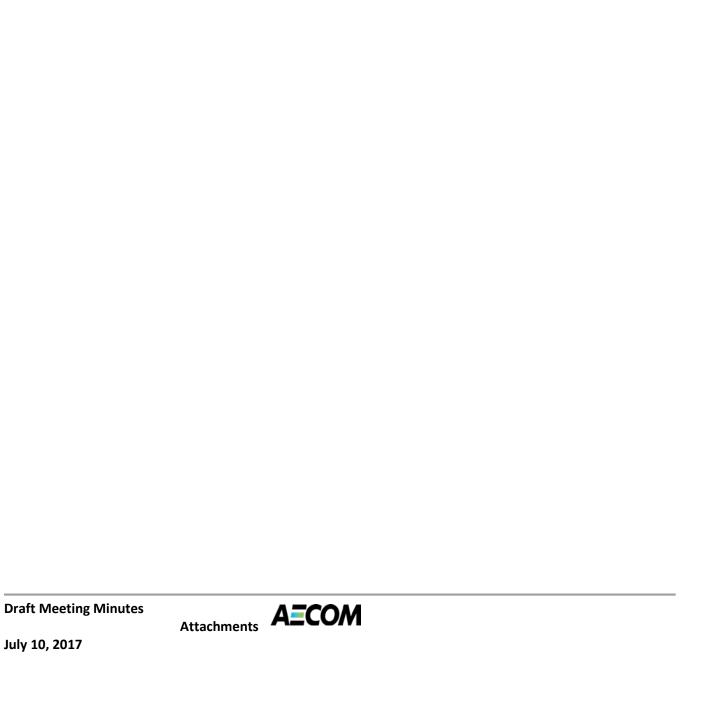




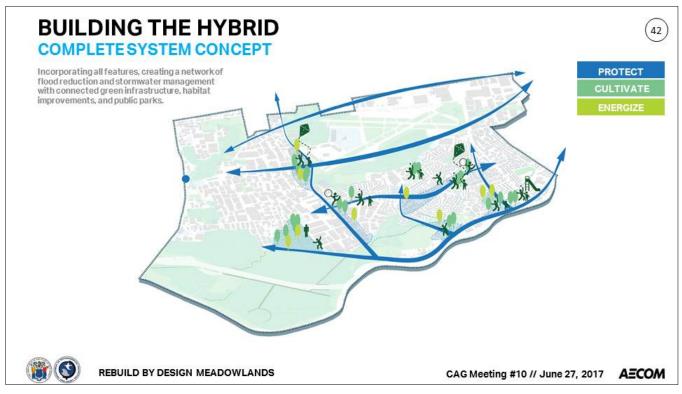


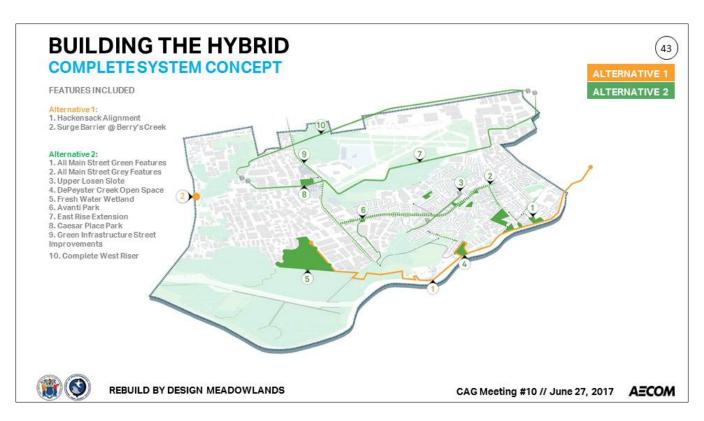


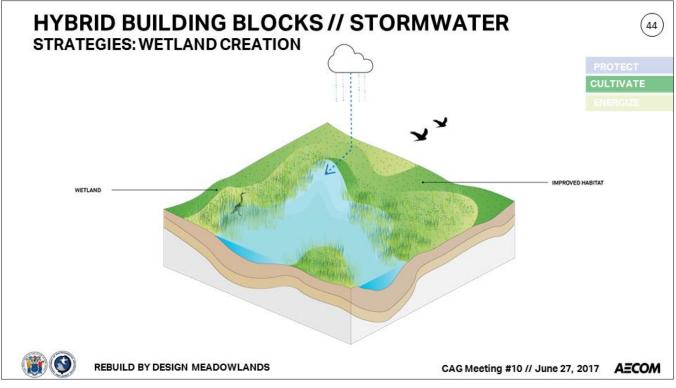






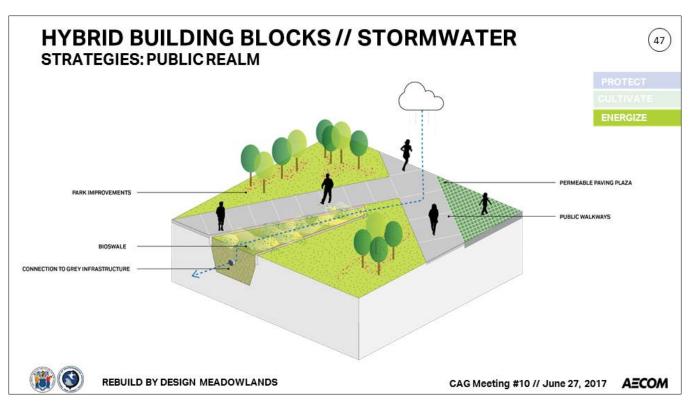


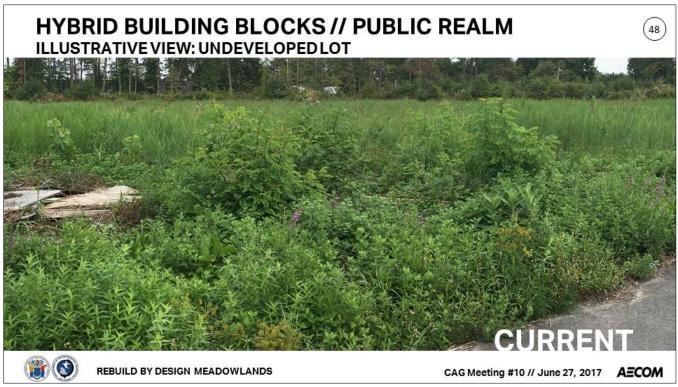














NEXT STEPS

CHRISTOPHER BENOSKY, AECOM

NEXT STEPS



NJDEP / AECOM: UPCOMING ACTIVITIES

- Prepare Meeting Summary for CAG #10
- Continue developing and screening:
 - Hybrid Concepts, Alternatives, and Costs
- CAG #11 in September 2017
 - Alternative 1 Structural Flood Reduction
 - Alternative 2 Stormwater Drainage Improvements
 - Alternative 3 Hybrid Alternative



REBUILD BY DESIGN MEADOWLANDS

NEXT STEPS



CAG: CALL TO ACTION

- Submit comments from CAG #10 meeting by July 11, 2017
- Share information from this meeting with friends and neighbors
- Continue to build interest in the Project
- Ensure the public knows about upcoming information (to be posted on Project website)



REBUILD BY DESIGN MEADOWLANDS

NEXT STEPS

(53)

Critical Information

Project Website

www.rbd-meadowlands.nj.gov

Project Email

rbd-meadowlands@dep.nj.gov

Question & Answer



REBUILD BY DESIGN MEADOWLANDS

THANK YOU

Attachment 2 CAG Meeting	2. 3 Packet #10 (provided)	as handout at meeting)
Draft Meeting Minutes	Attachments AECOM		

July 10, 2017