

CITY OF RALEIGH
STORMWATER MANAGEMENT ADVISORY COMMISSION (SMAC)
Minutes

Raleigh Municipal Building · 222 W. Hargett Street · Conference Room 305
3:00pm · Thursday, April 7, 2016

Commission Members Present: Marc Horstman (*chair*), Matthew Starr (*vice-chair*), Chris Bostic, Evan Kane, Kevin Yates, Vanessa Fleischmann, Ken Carper and Marion Deerhake (*new appointment*)

Stormwater Staff Present: Blair Hinkle, Suzette Mitchell, Kelly Daniel, Chris Stanley, Kevin Boyer, Sheila Thomas-Ambat, Dale Hyatt, David Kiker, Veronica High, Lory Willard, Lauren Witherspoon, Ben Brown, Carrie Mitchell, Dominick Smalls, Veronica Barrett, Justin Harcum and McKenzie Gentry

Members Absent: David Webb and Francine Durso

Guest: Jonathan Smith, Kimberly Brewer and Trevor Clements (*Tetra Tech*), Doug Clark and Arlene Hogan, Karen Rindge

Meeting called to order: 3:07 by Marc Horstman

Motions (Absentees and Minutes)

- Absence: Mr. Yates made a motion to excuse David Webb and Francine Durso from today's meeting and Mr. Starr seconded. The motion was approved unanimously.
- March Meeting Minutes: Mr. Yates made a motion to approve and Mr. Starr seconded. The motion was approved unanimously.

The following items were discussed with action taken as shown.

Item 1 – Commission/Stormwater Staff Update on Matters of Importance to the Stormwater Management Advisory Commission

1.1 Stormwater Staff Report –

- Program Staffing Update –
 - CIP (*Project Engineer II*) – David Kiker
- Budget Update – *Presented at Council work session on March 21st. A portion of the presentation was on the proposed rate adjustment. This will help us to accelerate some old projects, expand the Drainage Assistance program from \$750,000 to \$1.25 million, and create two new crews for Transportation Field Services Division. The effective date is July 1st.*

Item 2 – Drainage Assistance Project Approvals

- 2.1 **Chris Stanley** presented the spring cycle of drainage petition projects. Staff is recommending four of the top priority projects for approval for this cycle.
- 2.2 Petition Projects Summary (*table below and in the agenda packet*)

City of Raleigh Stormwater Management Program									
Master Developing Drainage Assistance Projects Portfolio (April 2016)									
Project Name	Primary Type of Project	Sub-Watershed	Council District	Total Project Score (TPS) (0 - 100)	Safety Criticality Score (SCS) (0 - 100)	Mission Criticality Score (MCS) (0 - 100)	Study and/or Engineering Design Cost (\$)	Construction Cost (\$)	Total Project Cost (\$)
Courtland & Mordecai	Infrastructure	Pigeon House	C	37.17	50.00	34.4	N/A	220,000	220,000
3412 Astro Court	Integrated	Marsh Creek	B	36.88	40.00	30.06	N/A	65,000	65,000
Valley Lake	Stream/Erosion	Mine Creek	A	32.51	60.00	41.23	4,400	38,600	43,000
5009 Wickham Rd	Infrastructure	Simmons Branch	D	31.33	90.00	27.57	N/A	40,500	40,500
Spring Recommended Projects =								\$ 368,500.00	

Question\Comments from SMAC

2.3 Project: 3412 Astro Court

2.3.1 Mr. Horstman asked whether both properties being constructed at the same time would result in a cost savings.

2.3.1.1 Chris Stanley replied yes, and it will probably be recognized in the form of mobilization cost.

Introduction of Appointment at 3:27pm (Marion Deerhake) – Appointed to the Commission on April 5th and currently works as an Environmental Scientist at RTI International

2.4 Project: Valley Lake

2.4.1 **Mr. Horstman** asked if there are any plans to remediate the dam.

2.4.1.1 Chris Stanley replied he doesn't know. Certainly he would recommend it to be looked at some point. It is recognized as high hazard and he doesn't know if the State has issued anything.

2.4.2 **Mr. Horstman** wanted to know if there would be a liability if we send a crew out there and something happens to the dam.

2.4.2.1 **Blair Hinkle** responded that one of the things we require for people entering into the drainage program is an execution of an agreement that has specific hold harmless language.

2.4.3 **Mr. Kane** asked if the project being done is in coordination with the dam repairs.

2.4.3.1 **Chris Stanley** replied no. There are no current plans to repair that dam/spillway that we are aware of. If something comes up during the design, then they would have to pursue that. We would have to back away because it's not something we would get into as far as this program goes.

- **Chris Stanley** announced there are residents from Clearbrook Drive that wish to speak.
- **Marc Horstman** added their project is on the list, but is not selected with this round of projects based on the priority ranking model.

- **Public Comments**

- **Doug Clark and Alene Hogan (residents of 8301 & 8305 Clearbrook Drive).** Mr. Clark first thanked the Commission for allowing him to speak. Two years ago this project was approved before it was disapproved to save some money for the following year. When this started the creek was about six inches deep. Within the last five to six years, it's gone from 5 feet deep to 10 feet and from 8 feet wide to 20 feet wide. Last year due to erosion, about a 60 foot tree came down and luckily fell away from the house into the creek. There are three to four large trees in the creek that's been weakened. When it rains it's like a torrent coming down. Construction between Falls of Neuse Road and Strickland Road is throwing all the water down

there and it's causing major erosion. I'm concerned that it will continue to erode, and the trees will weaken, and with high wind and rain it's a possibility the trees will fall on our house.

- **SMAC Comments**

- **Mr. Horstman** noted we will receive a budget increase to 1.25 million from Council in July. That will increase the capacity for us to do these projects, and will allow us to take out bigger chunks out of the overall list.
- **Mr. Yates** asked about our budgeting options since we are over \$4,500 in this cycle.
- **Blair Hinkle** responded the funding for these four projects are available and will be allocated once they are approved by SMAC and recommended by Council.

2.5 Motions

2.5.1 Mr. Carper made a motion to recommend approval of the four Drainage Assistance projects, and Mr. Bostic seconded. The motion was approved unanimously.

2.6 **Chris Stanley** noted we anticipate moving ahead with changes in both the policy and budget. We are looking at different options for reviewing projects with the Commission and seek your input on how to make it better.

Item 3 – Drainage Assistance Program Policy Revisions

3.1 **Blair Hinkle** indicated we discussed this policy last October. We took your recommendations to the Council work session in November and staff will provide a detail discussion of the policy revision.

3.2 **Chris Stanley** said we have generated a new draft of the Stormwater Drainage Assistance policy. In the fall we were tasked to draft a policy and wanted feedback and approval to move forward.

- **Summary of Recommended Policy**

- Cost share from property owners will no longer be required beginning and following July 1, 2016. Qualifying projects will be identified, prioritized, and recommended for implementation based on the vetted program priorities for capital improvement and drainage assistance projects and subject to available and authorized budgetary resources.
- SMAC will maintain discretionary authority to approve Drainage Assistance projects; however projects may be brought to SMAC for consideration at varying frequencies throughout the year as needed.
- Permanent public drainage easements must be dedicated to the City at no charge by property owners in order for drainage assistance projects to proceed.
- Anticipated effective date of 7/1/16

Kevin Yates left at 4:00 pm

- Proposed new policy will be forwarded to Council for consideration following SMAC recommendation.
- Increased Program Funding
 - Incorporated into the FY17 budget request
 - Rate adjustment of \$1.00 per SFEU with \$0.70 going towards an enhanced capital and drainage assistance program and \$0.30 towards new dedicated stormwater maintenance/construction crews

3.3 SMAC Questions\Comments

3.3.1 **Mr. Carper** asked regarding the on-call contractors is there a goal based on the design being approved and when you want to get it to construction.

3.3.1.1 **Chris Stanley** answered yes, we don't have life cycles on when projects are approved and when they are done. The average time is two years, but we would like to get it down to a year or six months if possible.

3.3.2 **Mr. Kane** asked since we are moving away from petitions to drainage requests, what's the gate that kicks off city staff to evaluate and define the scope of these projects.

3.3.2.1 **Chris Stanley** replied the main criteria will still be does it carry public runoff and the customer must still be actively paying a stormwater fee. Then staff would analyze the issue, see if it's something the city would address and where does it rank versus other issues.

3.3.3 **Mr. Kane** asked if Stormwater has standardized processes in evaluating complaints.

3.3.3.1 **Chris Stanley** answered yes. We have two Drainage Technicians that do the front-end leg work. They receive the phone calls and go out and do the preliminary leg work on what qualifies, what aspects of the project are, and what will it involve.

3.3.4 **Ms. Deerhake** stated that it appears the primary motivation is to reduce the physical hazards such as right-of-way and dam risks. Are there ways to estimate the water quality benefits associated with these to reduce sediment and erosion and nutrient level.

3.3.4.1 **Chris Stanley** said yes. We have the prioritization model in place that includes metrics for scoring the impact of water quality.

3.3.4.2 **Blair Hinkle** added that you will hear staff speak a lot on the model. It now causes us to be cognizant of all the benefits of the stormwater project when we look at sediment level reduction and nutrient reduction, for instance, that's associated with a bank stabilization project when in the past we would not necessarily have quantified that.

3.3.5 **Mr. Kane** wanted to know how the easements will be determined.

3.3.5.1 **Chris Stanley** replied we have standards in the manual that touch on that. Primarily it will involve the depth of the pipe, the size, and if it's an open channel or closed system. We do get permanent easement on large CIP projects, so we have some experience doing that.

- Mr. Kane and Ms. Deerhake requested a copy of the Stormwater Prioritization model.

3.4 **Motions**

3.4.1 Mr. Carper made a motion to approve the revision to the Drainage Petition program, and Mr. Kane seconded. The motion was passed unanimously.

Item 4 – GI/LID Work Plan Implementation

4.1 **Blair Hinkle** stated this is a significant milestone for the program and the City in our efforts to encourage GI/LID throughout the city. We will be presenting staff recommendations that were based on results of the stakeholders input process.

4.2 **Kevin Boyer** summarized that in 2013 SMAC presented recommendations to Council and based on those recommendations and Council direction, staff hired TetraTech to provide expertise and facilitation for Advancing GI/LID in Raleigh. In 2014 a city staff taskforce had several meetings under the facilitation of TetraTech to put together a work plan. A year ago SMAC reviewed the work plan that's been under the implementation stage the past seven to eight months. Today's presentation is about the combination of the implementation of six of the seven tasks in the work plan. The seventh is being handled in house by city staff. In email, you received two work product documents, one was the Implementation Report and the other was the Code Review Report. That work along with recommendations is included in a summary memo in your agenda packet. We plan to take this to Council in May.

4.3 "Advancing GI/LID in Raleigh" presentation facilitated by Jonathan Smith, Trevor Clements and Kimberly Brewer from TetraTech

- Five characteristics of Advancing GI/LID – *Voluntary, Educational, Multi-use, Multi benefits and Incentives*
- The meaning of GI/LID – *Everything from Open Space, compact Development, Green Streets, Green Parking, and On-site green BMP's*
- Key Features of GI/LID and their Overlap – *GI is collection of site's landscape features that help manage stormwater, natural areas and structural engineered practices that mimic nature), (LID is land development process, preserve open space, reduce impervious area, on-site stormwater controls that mimic nature. Goal: Mimic predevelopment hydrology on-site*
- Multi-Use Stormwater Approach Can - Create more developable land onsite (where pond otherwise would be), reduce landscaping costs, reduce infrastructure costs and provide more site design flexibility.
- Multi-Benefits - GI/LID BMPs can provide multiple community benefits from managing stormwater runoff to multiple other environmental benefits such as groundwater recharge and improved air quality and improve community livability. These are benefits that traditional stormwater BMPs don't provide.
- City Council - voiced strong commitment to promoting GI/LID to help improve health of local streams, lakes, and Neuse River and adopted GI/LID policies as part of City's Strategic Plan and 2030 Comprehensive Plan
- What makes a successful GI/LID program – Policies & Ordinances, Coordinated & Training Staff, Tools and Incentives and Outreach & Education
- Two Work groups formed
 - Code Review Work Group -Ordinances revisions, Incentives and Design templates for streets
 - Implementation Work Group- Site planning factsheets, O&M guide and Cost-effectiveness tool research
- Next Steps
 - City Council Work session (May), City Council Meeting (June) and Formal Advisory Board Meeting
- Next Steps (Path Forward) ,
 - Council Action, Continue Building Capacity, SOPs and Training Cost-Benefit Tool Development, Outreach program and Performance Tracking

Kevin Boyer wanted to acknowledge the work of past staff (*Amy Hathaway, Mark Senior and Danny Bowden*), present staff, TetraTech, and the work groups that were made up of staff and outside stakeholders.

Marc Horstman noted this has been a long process that SMAC help to shape. The city is looking to SMAC for a vote of confidence from staff recommendations that can be taken to City Council.

4.4 SMAC Discussion

4.4.1 **Ms. Fleischman** wanted to know on the path going forward, would those steps be incorporated into a retro-fit.

4.4.1.1 **Kevin Boyer** replied that a stormwater retro-fit device would be largely covered under the programs we have now. The Stormwater Quality Cost Share is for devices that are largely on private properties, although it's really for any property owner that pays into the stormwater utility fee, and those by in large are retrofits. There is no reason why they could not be put on new development or redevelopment, but they cannot contribute to compliance with required stormwater treatment.

4.4.1.2 **Jonathan Smith (TetraTech)** added that the fact sheet is intended to show practices primarily for new development but all those practices could be retrofit to existing development.

4.4.2 **Chris Bostic** wanted to know how was the city stakeholders involved in the discussions on stormwater practices in landscape and in street right-of-way.

4.4.2.1 **Jonathan Smith** said the city staff has been involved especially in the landscape and on the code review issues as well as the street templates. There were subtle changes to our first draft and we addressed those comments. We had a field exercise where we went out and looked at curb bump-outs on a recently approved street, and talked about how green infrastructure can be utilized and implemented into those practices.

4.4.2.2 **Kimberly Brewer** (*TetraTech*) added that we develop the work groups to make sure all key departments would be in charge of implementing and individual language.

4.4.3 **Ms. Deerhake** asked was there an effort to compare the code revision or any city policy to anything that may have been adopted at the state level for consistency.

4.4.3.1 **Kimberly Brewer** indicated there was two ways we handle the design criteria for Stormwater Management. One was to keep the same existing criteria for the city, but allow our low impact development to make it easy for people to use those practices in meeting the existing stormwater development material. When we looked at the expedited review, we said what does the State of NC require and we just “cadillac” in the STORMEZ tool where it’s recommending low impact development. What is the specific criteria they are using for that tool they adopted and that’s what we used for the expedite review.

4.5 Motions

4.5.1 **Mr. Horstman** made a motion to support staff recommendation on the Green Infrastructure Plan Implementation, and Mr. Starr seconded. The motion was approved unanimously.

- **Stakeholder Comments**

Karen Rindge of *Wake up Wake County* urged Raleigh to move forward with GI/LID. She enjoyed being a stakeholder and part of the process and thinks this is a great step forward for the city. She appreciates TetraTech assistance and expertise with this and is confident that City Council will follow the recommendations and this will be a great star for the City of Raleigh. She believes that other cities will look to see what Raleigh has accomplished and water quality will be better for it.

Item 5 – Other Business

5.1 Mr. Horstman mentioned that SMAC typically takes one month off during the summer and he would like to discuss now since we are getting closer to the summer. The board agreed.

5.1.1 Mr. Horstman made a motion for SMAC to take off July’s meeting and Mr. Carper seconded. The motion was passed unanimously.

Adjournment

Mr. Horstman made a motion to adjourn and Mr. Kane seconded. The meeting adjourned at 5:07 p.m.

Suzette Mitchell