

## **Edgewater-Rosecrest STORM DRAINAGE IMPROVEMENTS Public Meeting minutes**

**Location:** St. Andrews United Methodist Church, Charlotte, NC

**Date:** February 21, 2019

**Time:** 6:30 P.M. – 8:00 P.M.

**Attendees:** 25 Residents representing 19 properties attended the meeting  
Sign-In Sheet and Agenda attached

### **I. Welcome and Introductions**

- Shawn McDonald, City Storm Water Services (CSWS) Project Manager, began the meeting by welcoming and thanking the residents for their attendance.
  
- Shawn introduced himself and the team members for the project: CSWS and LaBella Associates (LaBella)
  - Doug Lozner, CSWS Watershed Area Manager and Shawn's supervisor
  - Robby Wayne, LaBella Project Manager & Andrew Cheek, LaBella Design Engineer
  
- Shawn noted that there would be a formal presentation (PowerPoint), general question and answer period, and a specific question and answer period during break-out groups afterward.

### **II. Meeting Purpose**

- Shawn stated the purpose of this meeting was to provide a brief explanation of the project history and existing conditions, present the proposed improvements to be designed, explain the remaining project milestones, and to receive input from the residents and property owners related to the plan for improvements.

### **III. Charlotte-Mecklenburg Storm Water Services (CMSWS)**

- Shawn briefly described CMSWS history and program. He explained the purpose of a Storm Drainage Improvement Project (SDIP) and the need for improved storm water collection systems and maintenance within the project area.
  
- Shawn also briefly described the phases of a SDIP and noted typical durations as follows:
  - Planning (Complete)
  - Design (Typically 21 to 34 months)
  - Permitting (Typically 3 to 9 months and overlaps the Design Phase)
  - Easement Acquisition (Typically 9 to 12 months and partially overlaps the Design Phase)
  - Bid and Award (Typically 7 to 8 months)

- Construction (2 years)
- Shawn noted the citizen input received from the residents within the Edgewater-Rosecrest SDIP area had contributed to the identification of the project improvements. Information received included, but was not limited to inadequate and deteriorating infrastructure, road and structure flooding, sink holes, and erosion within the channel running through the project area.
- Shawn stated the SDIP's goals were to update the existing infrastructure, reduce flooding potential at structures and roads, increase channel capacity, reduce erosion, and improve water quality. The improvements must be merged into a larger watershed-wide project because the extents of repair could not be managed with smaller spot repairs.

#### IV. Project History and Proposed Improvements

Note: The following exhibits were provided for attendees to review.

1. Exhibit – General Proposed Improvements, existing conditions analysis results and the citizen input reported to date, summarized the proposed improvements to be designed for the area and identified the impacted properties.
  2. Exhibit – Detailed Proposed Improvements on larger scale “blowup” : overlay of the existing conditions results and proposed improvements, highlighted the type and category of the improvements, and identified impacted properties.
- Shawn informed the residents the Edgewater-Rosecrest SDIP watershed is approximately 472 acres and contains over 40,000+ linear feet of drainage system. The project limits are generally bounded by Emerywood Drive to the north, Park South Station Boulevard to the east, Starbrook Drive to the south and Old Pineville Road to the west.
  - Shawn described the goals for developing improvement alternatives: optimizing public safety while minimizing private property impacts and public costs.
  - Robby Wayne noted the analysis performed on the existing system utilized hydrologic and hydraulic modeling programs. Robby explained that two hydrologic flow scenarios, existing and future conditions, were used to analyze the existing system and produce the proposed improvements. Portions of the drainage system were not expected to meet current design standards because of the change in design criteria over the years. The storm drainage design standards have changed (to meet a higher level of service) since the original neighborhood was built. Therefore, part of the analysis and evaluation focused on the performance of the existing system and identification of areas or locations where potential road and structural flooding may occur. As a result, the analysis indicated the presence of undersized systems throughout the watershed. In addition, many of the systems were found to be in poor condition. An overall exhibit was presented during the presentation to summarize the existing

conditions results. The exhibit highlights locations of reported citizen concerns, potential structure flooding, potential road flooding, culvert, pipe, and inlet systems that do not meet current standards, and channel segments where capacity and instability currently exist.

- The team has analyzed the existing system and selected improvements that are comprehensive to the entire drainage area. Robby presented an Overall Systems Map that shows all the proposed improvements included within the project limits. The overall mapping was then broken down into 6 subdivided larger scaled grid maps. These grid maps and corresponding improvements on each map were presented during the presentation and explained the larger scaled maps are provided at two tables for the “Break out Question & Answer” session following the presentation. Improvements discussed were as follows:
  - Culverts: the culverts at Brookcrest, Candlewood, Edgewater, Rosecrest, Burnley Drive, and Wisteria Drive will be replaced.
  - Pipe Systems: drainage systems throughout the neighborhood, along roadways, and in back yards will be replaced, realigned, and/or rehabilitated.
  - Channels: the existing channels will be improved to provide adequate conveyance, minimize erosion, and stabilize. Two types of channel improvements will be implemented: full improvements and stabilization only improvements. Full improvements are required and necessary for the hydraulic performance of the overall system. Full improvements may include adjustments to the vertical grade (depth), horizontal grade (width), alignment, and stabilization. Stabilization only improvements are not required, but preferred. All stabilization techniques will use natural rock and vegetation to improve the existing channel banks.

## V. Next Steps

- Shawn stated the Planning Phase would be concluded after the comments received at tonight's meeting are evaluated by the team.
- Shawn also stated the Design Phase will be the next project milestone and will begin at the conclusion of Planning. The team will prepare construction documents, cost estimates, permitting, easement acquisition, etc. during the Design Phase. Additional field surveys and data collection will be necessary to complete the design.
- Shawn also explained that an additional public meeting will be held once the construction documents are approximately 70% complete. The meeting purpose will be to present the improvements to the public and provide an opportunity to discuss specific neighborhood and private property impacts. The meeting will also serve to initiate the easement acquisition.

- Shawn requested public support through the remaining project phases and specifically during the easement acquisition. The project schedule can be impacted because of lengthy negotiations with the property owners for temporary and permanent easements required to construct improvements. Shawn explained channel improvements cannot be performed on a property by property approval. For the channel improvements to perform appropriately, the channel improvements must be continuous in nature. In an attempt to reduce public costs and minimize delays, segments including stabilization only improvements and are not critical to the overall performance of the drainage system. Stabilization only improvement segments may be removed from the project if a property owner is not willing to grant an easement or does not support the work.
- Shawn noted that once the Design Phase is concluded the project will be advertised for bid and the construction contract would be award by City Council. Construction of the improvements would begin after award of the contract.
- The formal presentation was concluded after a general Question and Answer session. Specific questions were also answered by team members during the break-out session afterward.

## VI. General Q & A

**Question:** Will storm drainage project address buildup of multiple overlays of asphalt along the curb lines?

**Response:** This may be addressed in areas where storm drainage improvements are proposed, but only in the close vicinity of the improvements. The Storm Water Improvements Project will not address the issue on a global scale throughout the project area. The team suggested contacting the Charlotte Department of Transportation (CDOT) to report the issue. A CDOT representative would be the contact to voice your concern over the extensive asphalt overlay at the curb line.

**Question:** How will the channel improvements be accessed?

**Response:** Typically, access to the channel improvements would be supplied at culvert replacement locations. A temporary haul road may be required to transport construction materials along the channel. The temporary haul road would be constructed parallel to the channel improvements, removed after construction, and vegetation will be re-established in the construction area. There may be some locations, for instance, a long section of channel improvements, where access to the channel could be required at a "mid-point". Development of the channel design will be required to answer the question specifically, but a future public meeting will be held during design development to present potential property impacts and specific construction needs.

**Question:** Will trees be able to be saved along the channel improvements?

**Response:** The City would like to save all the trees along with improving the channel, but construction and stabilization will require an extensive amount of tree removal along the channel corridor. Development of the channel

design will be required to answer the question specifically, but a future public meeting will be held during design development to present potential property impacts and specific construction needs. At this time, each property will be able to see the impacts and discuss the potential for tree save outside the immediate channel improvements.

**Question:** Will grass be repaired/replaced after construction?

**Response:** Yes, the contractor will be required to establish new grass growth prior to completing the project.

**Question:** Near 2024-2042 Edgewater – We have holes in our yard where you can see the sewer line, will this be fixed with the improvements? City personnel has been investigating for some time and sewer has been exiting the system.

**Response:** The team asked if the visible pipe appeared to be sanitary sewer or storm drainage. The property owner's description led the team to believe that the visible sewer line was a sanitary sewer line. The team responded that the issue would not specifically be resolved with the storm water or channel improvements. Charlotte Water would be the contact to report the specific issue to be resolved if it is sanitary sewer. The team told the property owner the sanitary sewer would be upgraded and restored to full function and proper design standards within the easement limits required for the channel construction.

**Question:** Will the channel improvement require fill material or will material be removed?

**Response:** *At this time, the answer is unknown. We hope to be able to utilize cut and fill material within the project limits and "balance" the cut and fill material, but typically channel improvements require cut of the existing ground that will be hauled off-site. Development of the channel design will be required to answer the question specifically, but a future public meeting will be held during design development to present information regarding the question.*

**Question:** Will slope stabilization include retaining walls?

**Response:** Typically, no, with the exception of endwalls at the entrance and exit of culvert openings. The channel stabilization will typically be provided by laying back the slopes of the channel banks to a 2:1 slope. This allows for bank stabilization to occur by vegetating the new slope with grasses and small trees and shrubs. Retaining walls are considered on a case by case basis depending upon the impacts to a permanent structure (home) or other permanent features.

**Question:** How wide will the channel improvements be?

**Response:** *At this time, the answer is unknown. Development of the channel design will be required to answer the question specifically, but a future public meeting will be held during design development to present information regarding the question.*

**Question:** When will you know what the property impacts of the channel improvements will be?

**Response:** The plans will be completed to approximately a 70% design. At this point, a public meeting will be held to present information regarding the question specifically for each property impacted by the improvements.

**Question:** If driveway is removed for drainage improvements installation, how long will the driveway be inaccessible?

**Response:** *The exact duration of the construction impacts to your driveway would be dependent on the contractor's plan for completion.*

**Question:** At the last meeting, we were told the City would pay for our driveway per our own contractor?

**Response:** Typically, the project contractor would be responsible for replacing your current driveway per a City standard driveway detail. There may be the potential for an individual with an existing specialty driveway (e.g. stamped concrete driveway) to be reimbursed through the easement acquisition process. This would only be the case if a driveway has an extravagant design or other extremely complex needs for replacement.

**Question:** Will the project repair our driveway if pipe system is not replaced?

**Response:** *Typically no, but if it is determined that impacts from a failing City maintained drainage system is the culprit for the driveway failure, then the project may replace the driveway. Further field investigation would be required to determine if the driveway replacement would be warranted.*

## VII. Specific Q & A – Break-Out Groups

**Question/Concern (6535 Highwood Place):** The property owner stated they have just had their driveway replaced and they experience no flooding issues on the property or the cul-de-sac.

**Response:** *The current plan for improvements include replacement of an existing pipe under the driveway. The team explained to the owner that the alignment for the new pipe will not be confirmed until additional survey data is collected and the design is developed. Minor adjustments to the alignment are likely and less evasive installation techniques may be utilized (pipe lining). Also, the SDIP contractor will be required to replace any impacted driveway. Further investigation will have to be performed by pipe video to review the current condition of the existing pipe and determine the most appropriate way to improve the pipe system. More will be known at a future public meeting for the project.*

**Comment (6532 Highwood Place):** The property owner reported blowouts in her backyard.

**Response:** It was explained to the property owner that drainage improvements are proposed on the property by replacing the failing existing system.

**Question (1714 Edgewater Drive):** How wide will the proposed channel improvements be in relation to the existing channel size?

**Response:** *It was explained to the property owner that the actual size of the channel improvements and the potential property impacts are currently not designed. The team is at the end of planning, and there will be another public meeting held to present preliminary plans, which will show grading impacts and potential construction limits of the proposed improvements.*

**Question (1933 Brookdale Avenue):** Will the project affect the trees on my property?

**Response:** *Yes, but the extent of the impacts are unknown at this time and will be presented in a future public meeting during the design development.*

**Question (2030 Edgewater Drive):** Will the project affect the trees on my property? How will they access the work on my property, what would be the easement needs for the property?

**Response:** *Yes, the project will affect trees on the property, but the extent is unknown at this time. It is also unknown how the work will be accessed through the property. Each of these issues should be resolved by the time the future public meeting during design development is held.*

**Question (6620 Candlewood Drive):** Where the channels meet, there is considerable erosion of the channel bank and encroachment into the yard, will the project address the erosion and property encroachment?

**Response:** Yes, as currently proposed. The bank erosion along the entire channel reach is considerable and is proposed be stabilized and improved. The design will incorporate a redirected channel connection of the two channels and/or stabilization methods to reduce the amount of future potential stream bank impacts in the future. The culvert is also being replaced at Wisteria Drive, which will help resolve extreme velocities the existing channel is experiencing.

**Question & Comment (1400 Edgewater Drive):** Will the water jumping the curb in front of my property be resolved with the improvements? The property owner noted that the pipe system between 1400 & 1408 has recently been replaced. Will more work be required on the properties as part of this project?

**Response:** *The team will have to investigate the limits of the recently improved project area to answer the question appropriately. If the system has recently been replaced and is sized appropriately, no additional work would be required for the pipe system between the properties. The pipe system outfall may have to be reworked to tie to the proposed channel improvements near the back of the property. The other improvement attached to this system are the addition of inlets at the intersection of Edgewater Drive and Carsdale Place to better roadway inlet capacity deficiencies. The water jumping the curb will have to be investigated during the design development and findings presented at the future public meeting.*

**Question (1810 Wedgedale Drive):** The property owner stated that a portion of his driveway was replaced when the existing storm sewer pipe was installed, and the replaced portion is sinking and cracking. Will the project replace this portion of his driveway?

**Response:** If the pipe can be rehabilitated and does not have to be replaced, but it is determined that the existing storm sewer pipe caused this portion of the driveway to sink and crack, then this portion of the driveway will be replaced. The property owner was advised to contact the project manager if he would like to discuss the issue in greater detail.

**Question (6112 Candlewood Drive):** The property owner stated that the ground around the storm sewer pipe in his back yard is sinking. Will the project repair this portion of his yard?

**Response:** If the pipe can be rehabilitated and does not have to be replaced, but it is determined that the existing storm sewer pipe caused this portion of the yard to sink, then this portion of the yard will be restored. The property owner was advised to contact the project manager if he would like to discuss the issue in greater detail.

*Note: Responses in italics cannot be completed at this time. Additional information will be required during upcoming project phases.*