

Neighborhood Meeting

The purpose of tonight's meeting is to allow you to view the findings and recommendations of a Preliminary Engineering Study (PES) that evaluated existing flooding problems and identified engineering solutions along Indian Creek south of 103rd Street, between Walmer Street and Nall Avenue.

Study Background

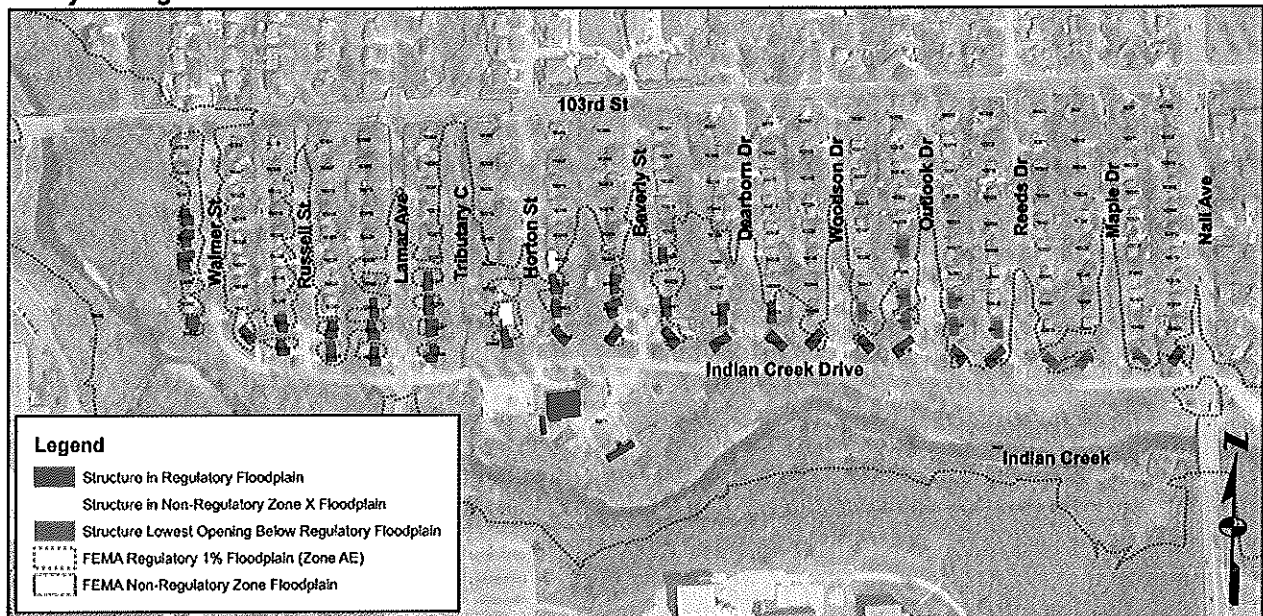


Figure 1 - Existing Conditions

The Nall Hills neighborhood generally developed in the late 1950s to early 1960s. The first flood studies for Overland Park, developed in 1977, identified large portions of Nall Hills, south of 103rd St., to be within the regulatory FEMA floodplain. Historically, the neighborhood has experienced varying degrees of flooding. In the early 1990s, the Corps of Engineers completed a flood control project that alleviated flooding risks in the area, but portions of the neighborhood remain in the regulatory floodplain. Following the record events in 2017, the City retained the professional engineering services of HNTB to complete a PES to evaluate improvement alternatives to alleviate flooding risks, determine costs and identify a recommended alternative.

Study Purpose

The PES is a mechanism to explore the feasibility of improvements to alleviate flooding risks and solicit funding assistance from the Johnson County Stormwater Management Program (JCSMP). The study identifies the risk and severity of flooding; develops a conceptual plan and preliminary costs for 3 alternatives; and identifies a recommended alternative.

Historically, the JCSMP has allotted between \$12M to \$15M per year to support stormwater improvement projects in Johnson County communities. Projects submitted compete based on a cost-benefit ratio (the lower the cost-benefit ratio, the more favorable the ranking), and 75% funding (of the least costly alternative) is offered to the highest ranked projects. Funding offers are generally made by early summer. Projects not offered funding remain on the list for future consideration. For context, in 2018, the cost-benefit ratio for projects offered funding ranged between 5,400 and 16,000.

Conceptual Alternatives and Recommendations

Three conceptual alternatives were developed to reduce street and structure flooding in the study area in accordance with City standards. In addition, the following major issues were considered:

- Safety and access to traveling public
- Displacement of property owners
- Stream corridor impacts
- Impacts to existing utilities
- Property loss and damage
- Neighborhood look and feel
- Park land impacts
- Cost of improvements

The following conceptual alternatives were developed in the study:

Conceptual Alternative	Description	Number of Buyout Structures	Cost	Cost-Benefit Ratio
I	Full Buyout & Major Roadway Alignment	40	\$17.3M	62,072
II	Limited Buyout, Overbank Benching & Minor Roadway Realignment	22	\$24.2M	87,014
III	Limited, Bridge Modification & Detention Basin	16	\$19.0M	68,201

Alternative I was identified as the recommended alternative to reduce flooding risks for structures within the regulatory floodplain and street flooding within the study area. This alternative emerged as the most cost effective; the least disruptive to the existing stream corridor; and conserves usable park space.

Conclusions

For a stormwater project in Nall Hills to move forward, it needs to be added to the City's Capital Improvements Program (CIP). All city-wide stormwater needs are considered for addition to the CIP on an annual basis. When approving stormwater projects for the CIP, the Governing Body considers risk and severity of flooding; availability of funding; and neighborhood support.

The PES documented flooding conditions, was submitted to Johnson County for funding consideration, and is currently under review. Based on the cost-benefit ratio presented in study, the project has a low likelihood of funding. As such, a project timeline has not been established.

Moving forward, staff will engage with the Governing Body to discuss the unique challenges associated with the Nall Hills improvements and explore project feasibility. In addition, the improvements will continue to be considered against all city-wide stormwater needs during the annual CIP planning process.

Being that project improvements are not imminent, residents may consider measures to increase the flood resistance of their home and property. Information can be found at https://www.fema.gov/media-library-data/20130726-1756-25045-8598/protecting_home_book_508compliant.pdf

We thank you for taking the time to come to this meeting and hope that you shared your questions and concerns, so that the individuals making the decisions have the benefit of your feedback. You may also complete a comment form concerning the study or other questions you may have and leave it with a member of the study team.

Project Team: Lorraine Basalo, P.E. Assistant City Engineer | (913) 895-6023
Lauren Garwood, P.E. | (913) 895-6012
Ybairy Duin, E.I.T. | (913) 895-6235