



February 8, 2019

To: City Council

Re: Nathan Hale Storm Basin

BACKGROUND

The City of Parma Heights experienced three significant rainfall events on 04/19/2017, 06/30/2017 and 07/22/2017. These events overwhelmed the City's separate storm sewer system and, due to the resulting inflow and infiltration, caused widespread sanitary sewer backups into residential and commercial basements.

Flooding questionnaires were mailed to all residents and over 1,100 responses were received. After analyzing the data received, the highest priority area was determined to be the neighborhood bounded by West 130th Street, Pearl Road, York Road, and Harwood Drive (along the southern City Corporation limit). This area contains approximately 2,000 residential homes. The majority of this area drains to Big Creek via a storm sewer culvert located along Beverly Drive.

Surcharging and flooding occurred throughout this entire area. In order to lessen the burden on the existing storm sewers during heavy rainfall events, the City is proposing a regional stormwater management basin to be located at Nathan Hale Park. Nathan Hale Park is conveniently located at the upstream terminus of Orchard Boulevard where an existing drainage channel conveys flow from the City of Parma which is located to the south.

The intent is to divert flow from the Meadowbrook Drive rear yard drainage channel and an existing 36" storm sewer on Oakdale Drive to the proposed stormwater basin. In combination, this will divert the majority of the upstream watershed area and allow it to be detained and slowly released over time. Based upon available land and site constraints at Nathan Hale Park, the proposed stormwater basin could provide upwards of 23 acre-feet of storage.

OPINION OF PROBABLE CONSTRUCTION COST

The total construction cost is estimated at \$1,350,000. The City was successful in securing a \$1,000,000 grant from the Northeast Ohio Regional Sewer District (NEORS) as part of the NEORS's 2019 Member Community Infrastructure Program (MCIP). The remaining funds will come from the City's Community Cost-Share Account which is a NEORS managed account that is derived from revenues collected from the Stormwater Fee.

The proposed authorizing ordinance is necessary in order to finalize the MCIP agreement with NEORS.

ATHLETIC FIELDS

In order to facilitate the construction of the proposed basin, the five northernmost athletic fields will need to be taken out of service. This includes one baseball field and four soccer fields.

The four soccer fields located on the southern portion of the park will be regraded (raised) in order to utilize some of the material excavated to create the stormwater basin. The entire park will need to be closed for the 2019 season once construction begins; however, these four fields will be available for events after construction is complete.

STOCKPILE MOUND

The existing restroom building, that includes storage, will be demolished as part of the project to make room for a material stockpile mound. This mound will allow the excavated material to remain on site which significantly reduces the cost of construction making this project economically feasible. The stockpile mound, and the stormwater basin, will have permanent fencing installed around the perimeter.

REFERRAL TO PLANNING

Since this project involves the alteration of an existing City park, referral to Planning Commission is required.

Respectfully,



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