# HARRIS COUNTY WCID 110 FLOOD MITIGATION UPDATE October 6, 2020

\*\*\*\*\*\***UPDATE**\*\*\*\*\* <u>I-45 at Cypress Creek</u> TxDOT has advised that its project to rebuild/replace the southbound frontage road at I-45 and Cypress Creek is on schedule for Summer of 2021. TxDOT provided the following status –

- Survey work is complete
- Preliminary Level B subsurface utility engineering is complete, with a final report expected October 19, 2020
- Two of the three Geotech borings are complete. The third bore location will be drilled after verification of a potential utility conflict
- A draft hydraulic analysis drainage report is expected by the end of October
- A preliminary bridge layout is expected by the end of October or early November
- Preliminary horizontal alignment for the southbound frontage road is expected by the end of October
- The hydraulic analysis, preliminary bridge layout, and horizontal alignment are subject to change pending the findings of the utility subsurface utility engineering investigation

\*\*\*\*\*\*UPDATE\*\*\*\*\*

Enchanted Stream - HC 110 and LEI are currently working with CenterPoint and AT&T to relocate existing utilities along Enchanted Stream, just south of Cypresswood. CenterPoint has provided to LEI a preliminary design plan to relocate the power lines along Seals Gully, at an estimated cost of \$62,570, along with the installation of LED streetlights on each relocated pole at an estimated cost of \$1544. AT&T is working on its design plan. After design plans are approved, relocation may begin in early 2021. After existing utilities have been relocated, detention pond(s) may be constructed to divert some of the flood waters flowing into Senger Gully. It is anticipated that, after the utilities have been relocated, HC 110 may partner with HCFCD on the detention pond projects.

# HARRIS COUNTY WCID 110 FLOOD MITIGATION UPDATE JULY 8, 2020

IN COOPERATION WITH FEDERAL, STATE AND LOCAL ENTITIES, ACTIONS CONTINUE TO BE TAKEN TO MITIGATE FLOODING IN THE CYPRESS CREEK WATERSHED AND HC WCID 110. FLOOD MITIGATION CONTINUES TO BE A TOP PRIORITY FOR HARRIS COUNTY WCID 110. Your HC 110 Directors, Langford Engineers ("LEI"), and Harris County Flood Control District ("HCFCD") are diligently working to reduce flooding within HC 110 and the Cypress Creek Watershed. HC 110 continues with its two-prong approach: (1) steps that can be taken <u>now</u> to immediately reduce the risk of flooding; and (2) steps to facilitate long-term projects for additional flood abatement infrastructure. Your Directors have committed funds and have authorized HC 110 to partner with HCFCD, the United States Corp of Engineers ("USACE"), and the Texas Department of Transportation ("TxDOT)" on various projects.

<u>Haas Detention Pond</u> - HC 110 and HCFCD have partnered to excavate, enlarge, and improve the current detention pond located behind the Fred Haas dealerships, which will provide additional volume to facilitate drainage and mitigate flooding. LEI is finalizing the construction plans and will submit to HCFCD for approval once an agreement is produced, with construction scheduled to begin Fall 2020.

<u>Enchanted Stream</u> - HC 110 and LEI are currently working with CenterPoint and AT&T to relocate existing utilities along Enchanted Stream, just south of Cypresswood. CenterPoint and AT&T have agreed to these relocations and are working with LEI on finalizing designs and determining preliminary cost estimates to relocate existing power poles and communication lines. Relocation is expected to begin in Fall 2020. After existing utilities have been relocated, detention pond(s) can be constructed to divert some of the flood waters flowing into Senger Gully. It is anticipated that, after the utilities have been relocated, HC 110 will partner with HCFCD on the detention pond projects.

<u>I-45 at Cypress Creek</u> - In cooperation with HCFCD and TxDOT, drainage issues at I-45 and Cypress Creek are being addressed. TxDOT has scheduled improvements of the southbound frontage road bridge for Summer 2021. This project, upon completion, is anticipated to further mitigate flooding in this area and along Cypress Creek.

<u>USACE</u> - In July 2019, four (4) Letters of Intent were provided to USACE by which HC 110 requested that the USACE conduct an investigation to determine an effective flood reduction project which could be completed within the boundaries of HC 110, and pledged up to \$200,000 to match funds provided by USACE. In October 2019, John Davis with LEI and representatives of USACE met onsite at the District to determine the scope of a study of the Cypress Creek Watershed and the District. At this time, HC 110 is still awaiting a response from the USACE.

<u>Other Projects</u> - Several other flood mitigation projects are currently under construction or have been recently completed which will reduce flooding within the boundaries of HC

110. Although HC 110 was not involved in the projects, your Directors want to provide accurate information regarding the current projects. Seals Gully - HCFCD approved a channelization project to address slope erosion and various slope failures for Seals Gully. The work on the south side of Cypresswood Drive that proceeded downstream approximately 1900 feet, has been completed. Both east and west sides of the Gully have been repaired. Work south of Louetta Rd. and north of Cypresswood Dr. continues. Senger Gully - HCFCD approved a Sediment Removal from Concrete Lined Channels project, east of I-45, between Magic Oaks Dr. and E. North Hill Dr. Per HCFCD website, this project is still on-going. Hardy Toll Road at Cypress Creek - Harris County Toll Road Authority completed channelization work on both sides of Cypress Creek underneath the Hardy Toll Road. The project included hard edge treatment on lower sections of the stream banks, new storm drain outfalls, and removal of sediment on both sides of Cypress Creek. The improvements have lowered the low-level flows about two (2) feet. Cypress Creek - HCFCD issued a maintenance contract for erosion and channelization repairs of the Cypress Creek main channel from the west side of Hardy Toll Road upstream approximately 4,000 feet. This project includes hard edge treatment on lower sections of stream banks, replacement of storm drain outfalls, correcting flowline issues, and removal of sedimentation on both side of Cypress Creek. Construction began in September 2019 and is anticipated to be complete end of 2020.

# HARRIS COUNTY WCID 110 FLOOD MITIGATION UPDATE AUGUST 6, 2020

#### **BEFORE**





#### **AFTER**













