

Huntsville, Alabama

305 Fountain Circle Huntsville, AL35801

Cover Memo

Meeting Type: City Council Regular Meeting Meeting Date: 5/8	8/2025 File ID: TMP-5495
<u>Department:</u> Huntsville Utilities	
Subject:	Type of Action: Approval/Action
Resolution authorizing the Mayor to approve additional costs of expenditure to replace an existing water main along Swancott Recontractor unexpectedly encountered an unforeseen mass of concost-exceeds \$25,000. (Utilities: Water)	oad from Rockhouse Road to Pryor Road. The
Choose an item.	
Finance Information:	
Account Number: NIA	
City Cost Amount:\$ NIA	
Total Cost:\$ NIA	
Special Circumstances:	
Grant Funded: \$NIA	
Grant Title - CFDA or granting Agency: NiA	
Resolution #: N/A	
Location: (list below)	
Address:	
District: District 1 □ District 2 D District 3 □ District	t 4 District 5 D
Additional Comments: NIA	

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RESOLUTION 25	
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WHEREAS, the City Council of the City of Huntsville, Alabama previously approved the expenditure to replace an existing water main along Swancott Road from Rockhouse Road to Pryor Road; and

WHEREAS, the Huntsville Utilities contractor for the project has encountered an unforeseen mass of concrete and rebar while attempting to bore across Beaverdam Creek within the Wheeler Wildlife Refuge; and

WHEREAS, the bore must be extended and made deeper near the launching and_receiving bore pits to avoid the concreate material; and

WHEREAS, the additional project costs as a result of the re-design and additional construction requirement is \$894,433.28; and

WHEREAS, additional funding approval is requested in the amount of\$894,433.28; and

WHEREAS, the estimated additional cost of said Purchase is in excess of \$25,000.00 and requires the consent and approval of the City Council of the City of Huntsville, Alabama;

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Huntsville, Alabama the additional expenditure to replace an existing water main along Swancott Road from Rockhouse Road to Pryot Road in the amount of \$894,433.28 be, and the same is hereby approved and the written consent or approval of the City Council of the City of Huntsville is hereby granted to the City of Huntsville Waterworks Utility Board for the expenditure of sufficient funds from the proper fund belonging to the City of Waterworks Utility Board for the payment of the cost thereof.

ADOPTED this the 8.fu day of May, 2025.

President of the City Council of the City of Huntsville, Alabama

APPROVED this the 8th day of May, 2025,

Mayor of the City of Huntsville, Alabama



MEMORANDUM

To: Huntsville City Council

From: Wes Kelley, President & CEO

Date: April 24,2025

Subject: Huntsville Utilities Item for City Council Agenda May 8, 2025

Resolution author izing the Mayor to approve additional costs of \$894,433.28, for a previously approved expenditure to replace an existing water main along Swancott Road from Rockhouse Road to Pryor Road. The contractor unexpectedly encountered an unforeseen mass of concrete while boring. The

estimated additional cost exceeds \$25,000. (Utilities: Water)

Approval of the resolution authorizing the Mayor to approve additional costs of \$894,433.28, for a previously approved expenditure to replace an existing water main along Swancott Road from Rockhouse Road to Pryor Roa d. The contractor unexpectedly encountered an unforeseen mass of concrete while boring. The estimated additional cost exceeds \$25,000. This is not a FY25 budget item. (Utilities: Water)



MEMORANDUM

To: Waterworks Board

From: Stacy Cantrell, VP Engineering

Date: April 16, 2025

Subject: Change Order - Swancott Road West Water Main

The following change order is presented to the Gas and Waterworks Board in the amount of \$894,433.28.

Background and supporting information:

The service area along Swancott Road was acquired from Limestone County in 2019. The existing 8-inch PVC line along Swancott Road is one of three feeds to the Greenbrier and Mooresville areas. Hydraulic modeling was performed in early 2020 to determine system improvements required for the newly acquired service area. The analysis identified upgrading the existing 8-inch to a 16-inch main along Swancott Road through Beaverdam Creek as the area's fourth highest priority.

The Swancott Road West water main project includes installing approximately 4,300 linear feet of 16-inch pipe along Swancott Road from Rock House to Pryor Road. Most of the project is within the Wheeler Wildlife Refuge and required extensive permitting and the acquisition of an easement for the water line. The current USACE permit for this project expires March 14, 2026.

The existing 8-inch water line that crosses Beaverdam Creek lies on the bottom of the creek and is held in place with concrete anchors. In November 2023, the

Approved by: ;a-- Water &Gas Board

Board Approved Date: ;22/4-f"

BoardApproved Date:



Electric Board

existing line broke in two places in the creek, and the line was taken out of service. Pictures of the main break are included at the end of this memo.

HU crews could not repair the existing line, so several contractors were consulted, and all indicated that replacement was the best option. Since the SWdncott Road West project was nearing final design at that time, the decision was made to wait for the Swancott Road project to be completed and to purchase water from Limestone County to support the Greenbrier and Mooresville areas.

currently, around 3,600 out of the 4,300 linear feet of main have been installed by Rast Construction, Inc. The only portion that has yet to be installed is about 600 linear feet of 16-inch HOPE by Horizontal Directional Drilling (HOD) across Beaverdam Creek within the Wheeler Wildlife Refuge. HOD Inc., a subcontractor to Rast, began drilling on October 29th and was later paused on November 8th after encountering an unforeseen mass of concrete and rebar. See below the actions taken following the pause on November 8th:

- November 26th Submitted permit to Wheeler Wildlife for exploratory digging (potholing) to examine and locate a concrete structure. Permission was granted to use vacuum excavation only; no open excavation was permitted.
- 2. December 3rd 5th Badger hydro-vacuumed locations of the unforeseen mass.
- 3. December 18th Met with Rast, HDD Inc., and Sain Associates, Inc. onsite to review findings. It was determined that the structures were fill material used during the bridge's construction. Pictures of the concrete masses after vacuum excavation are included at the end of this memo. The bore must be extended and deeper near the launching and r.eceiving bore pits to avoid the concrete material. HDD Inc. also recommended moving the launching pit to the north side of the bridge. A drawing of the revised horizontal directional drill is included at the end of this memo.
- 4. December 20th Rast submitted a change order to re-bore Beaver Creek
 - a. Discussed change order amount with ADEM and HU Purchasing and Legal Department to determine if rebidding would be requited.

- b. Rebidding would not be required.
- 6. January 27th Met with Rast to discuss the cost estimate for the change order. Asked Rast to compare prices with other boring contractors and to revise the cost estimate to potentially reduce the cost.
- 6. February 11th Rast submitted revised change order. (Attached)

Rast reached out to three HDD drillers for quotes to complete the new bore. Rast provided the best quote using their current subcontractor, HDD Inc. The recommendation is to move forward with a slightly longer Horizontal Directional Drill under Beaverdam Creek. Th.e bore would change from 600 ft. to 860 ft. The contractor will launch the bore from the opposite side of the creek and adjust the launch angle to get the pipe deeper much quicker to avoid the concrete obstacles.

The original contract amount was \$1,264,367.70,of which \$1,164,987.38 has been paid to date. Rast Construction, Inc. resubmitted a change order to re-bore Beaver Creek for \$894,433.28. After adding the change order cost to the amount paid to date, the revised contract amount will be \$2,069,420.66. We request that the Board approve the change order for the requested amount so that this project can be completed and one of the critical feeds to the Greenbrier and Mooresville areas can be re-established.

Picture 1 of Broken Main:



Picture 2 of Broken Main:



Picture <u>1 of Concrete</u> Mass after vacuum excavation:



Picture 2 of Concrete Mass after vacuum excavation:





Picture 4 of Concrete Mass after vacuum excavation:



Revised Horizontal DirectionalDrill Design:

