

Historic Fort Wayne

DTE Gas Renewal on Meige and Cram Streets

Overview:

The work along Meige, Cram and Brady Streets in Historic Fort Wayne is part of a much larger project.

In 2023, work began on the design of DTE Gas grid project Southwest Detroit 3A. The scope of the project encompassed an area bound by I-75 / Fort Street on the north, and the Detroit River on the south, going from the Rouge River on the west to the Lodge Freeway on the East.



Figure 1 Southwest Detroit 3A project area

Construction of this gas grid project began in early 2024, and is now largely completed.

The current conditions of the gas network inside of Fort Wayne:

Most of the fort is currently supplied with gas mains installed between 1975 and 2018. These mains are fed from a single point connection to a larger gas main running down West Jefferson Ave.

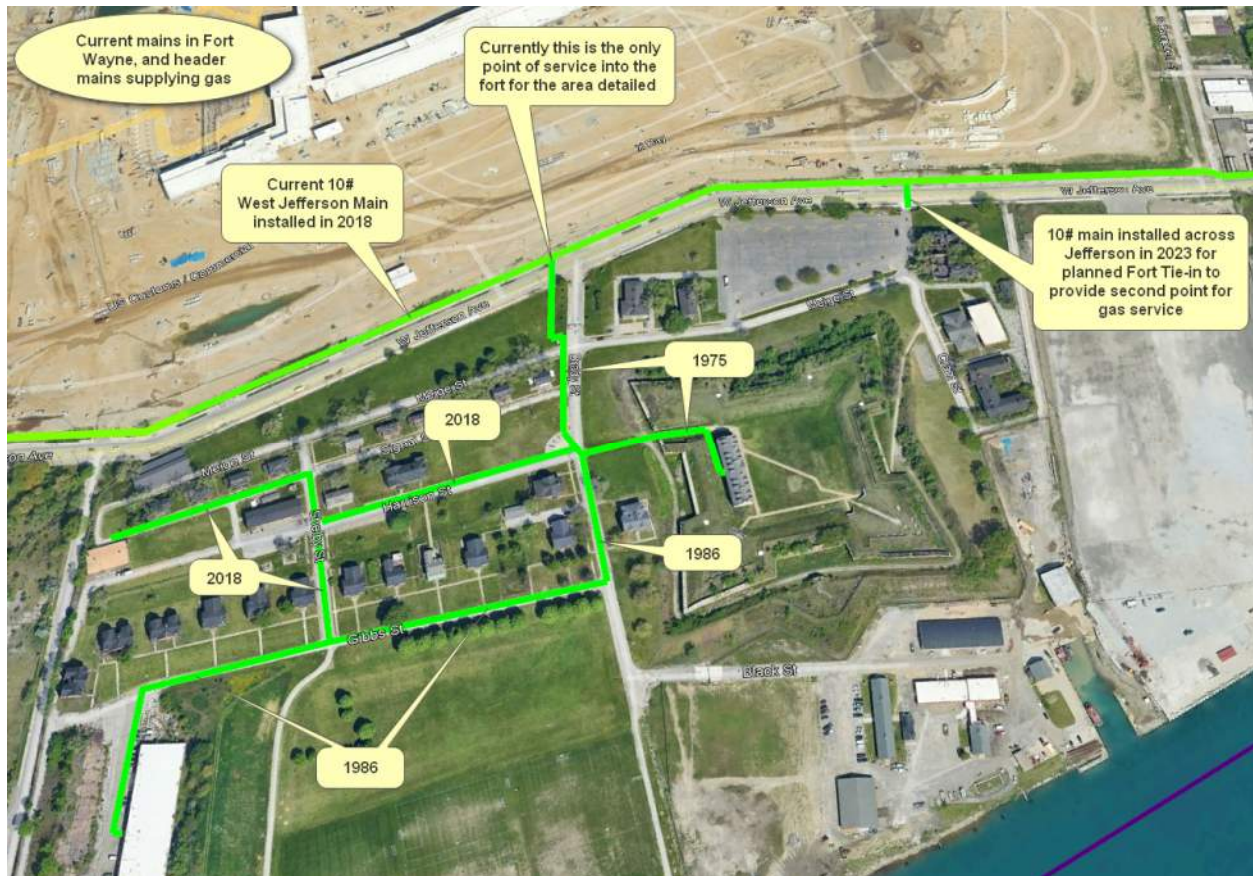


Figure 2 Current mains in Fort Wayne

The area serviced by the main network is largely west of Brady street. The garrison building in the star fort itself is supplied by a main installed in 1975, and needs no improvement at this time.

The area east of Brady has a different supply point. Currently the buildings along Meige and Cram streets are supplied by a single service line connection, that is branched multiple times. A similar situation is supplying gas to the Army Corp of Engineers facility along the south side of the star fort. These service networks are tied to an aging Cast Iron main in West Jefferson, that has segments dating back to 1901. This main needs to be taken out of service, but that cannot occur until all active services have been tied into the newer gas main network in western part of the fort, and all inactive services are confirmed to be off line.

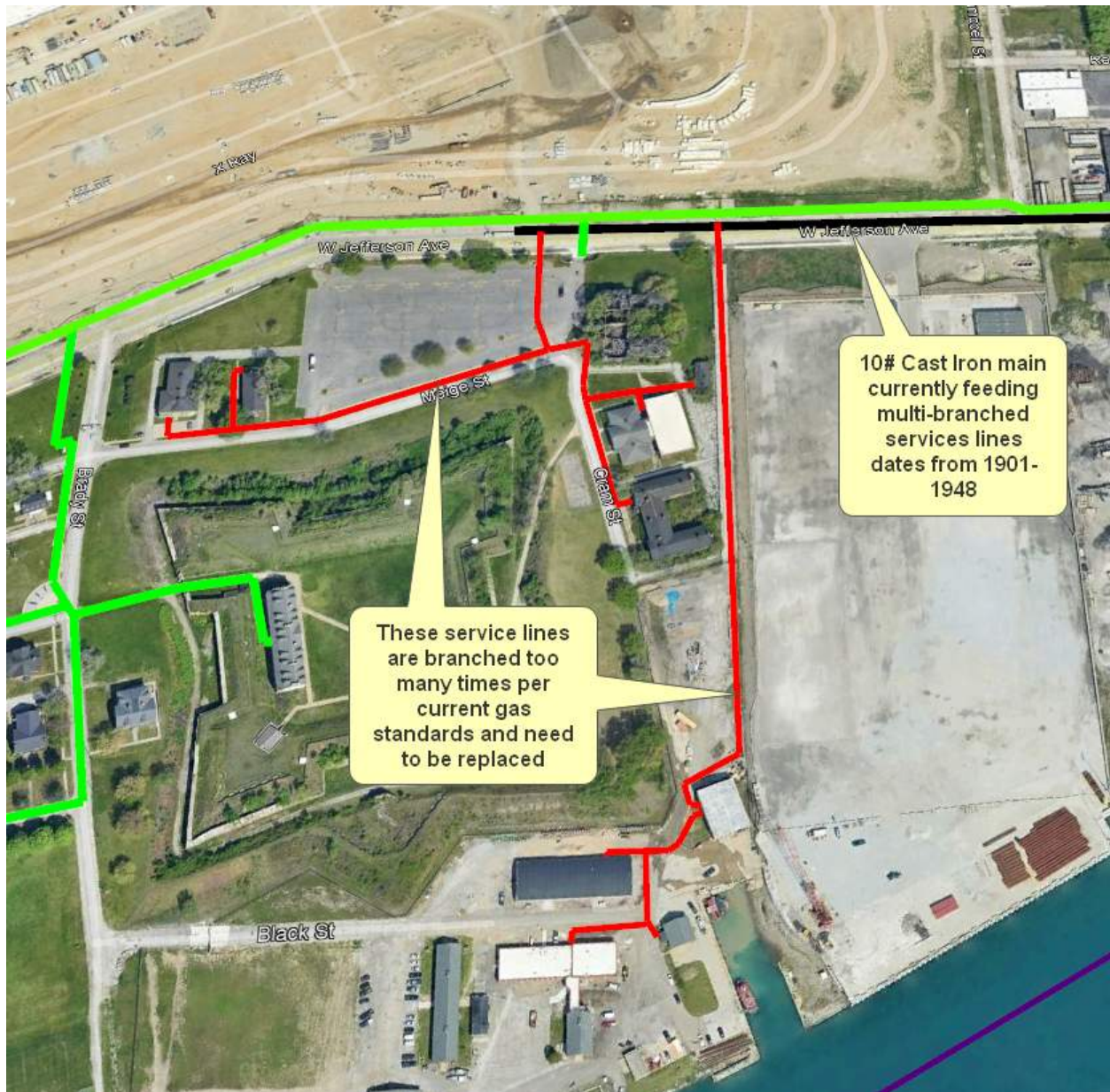


Figure 3 Service network in the east part of Fort Wayne

Proposed solution for gas for the fort east of Brady:

These service networks cannot simply be tied over to the new main in their current state. Per the Federal Gas standards, services cannot be branched more than twice. These services need to be separated for safety and future maintenance concerns.

One solution would be to run services from each building to the existing gas mains. However, we estimate that just for the Cram and Meigs area, this would result in close to

2,200 feet of installation and involve crossing a freshly paved West Jefferson at least three times.

A solution for Army Corp has been approved and the easement attained with SHPO, indigenous groups and Army Corp itself for the portion along Black Street. A new main will connect to the existing main on Brady, near Gibbs St, and run into their facility along Black Street. Each building will have a separate service connection to this main.

The proposed solution for the north side of the fort is to run new mains down Meige and Cram streets. These mains will tie into the current gas system at two points: Brady Street on the west end of Meige, and into a main running across West Jefferson stopping at the gate into the parking lot at the east end of Meige. Making tie-ins at two points will provide a more reliable gas supply, not only for Meige and Cram, but the entire gas network in the fort. The total length of the installation for these mains will be less than 1,500 feet. Adding the service lines that will still be needed to run off these new mains, the total remains under 2,100 feet.



Figure 4 Proposed mains and services

Distribution mains also fall under a greater level of scrutiny than service lines. This is not to say that service lines are thrown in slipshod or fast and loose; they are of course installed with great care. However, mains fall under an even greater level of safety regulations. For that reason, an easement is being obtained for the mains through SHPO.

Methods of Installation:

The preferred method of installation is Horizontal Directional Drilling (HDD). In HDD installation a drilling machine feeds a long line of rods which can be flexed and change direction of the drilling path. Once the drill has reached its targeted end point, pipe that has been previously welded together, or that is on a reel, can be pulled back to the drill rig. In this method only an entry and exit excavation is needed, if no existing utilities are being crossed. In the case of crossing utilities, a small “pothole” excavation must be made so that construction crews can visually see that the main being installed has a vertical clearance of 18 inches, either above or below, depending on the depth of the existing utility, and the minimum depth at which the main must be installed.

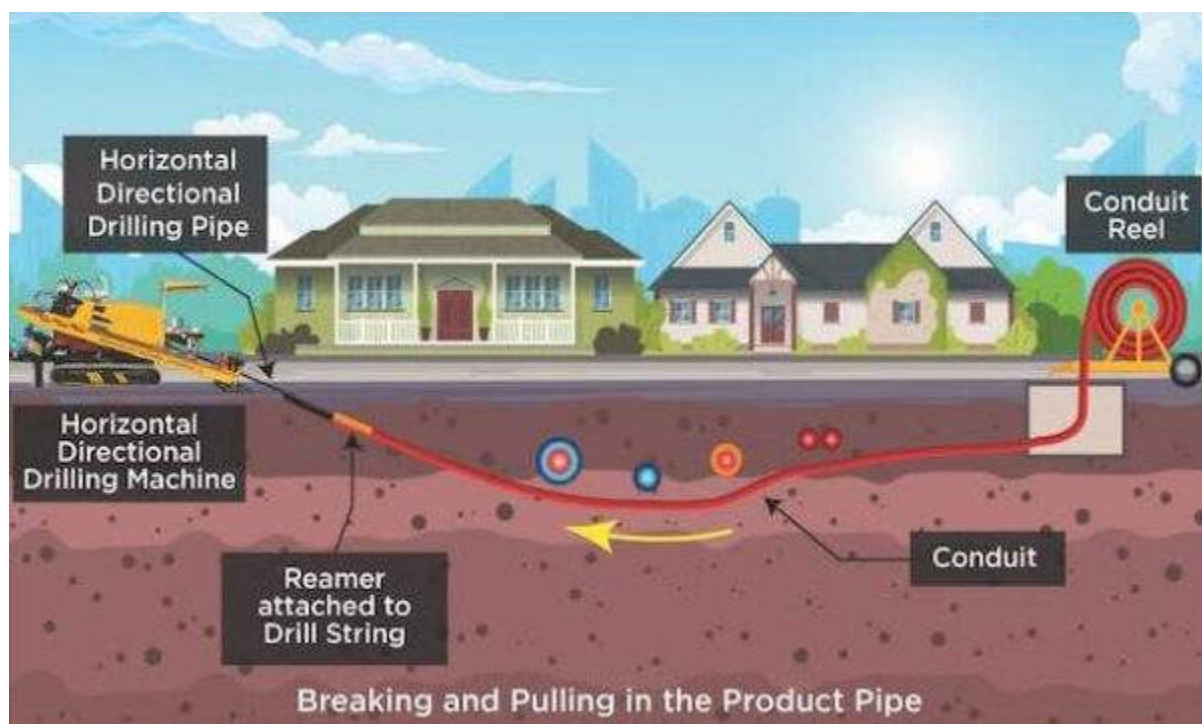


Figure 5: general HDD diagram

In cases where HDD cannot be performed, Open Trenching would be used. Open Trenching is as it sounds, excavating a long trench for the length of an installation. This method is usually used for areas that are either very crowded with existing utilities requiring that any new installation follow a very precise running line, or a wide-open area with no utilities and

no concerns for immediate restoration – like a new construction site. Sometimes open trenching is used in combination with HDD if there is a dense area of pothole excavations.

Per the email conversation that took place between Brennah Donahue and Nataniel Nazareno:

- Infracore plans to utilize HDD whenever possible.
- Excavations at the tie-in points will range between 5'x5' to 8'x8' - depending on the situation.
- Open trenches (only if needed) are 2 to 4 feet wide.
- Utility potholes are typically 2'x2'.

Equipment Used for installations:

Per Infracore, vehicles that could be used on site include:

- 1 – 24x40 HDD Rig**
- 1 – Box Truck – to provide water for HDD drilling.
- 1 – Hydro-Vac truck – used for smaller excavations
- 2 – JD85 Excavators – for larger excavations**
- 1- Pipefitting truck
- 1- enclosed trailer**
- 2 – pickup trucks
- 2 – 10 yard dump trucks
- 2 - Equipment trailers**
- 1 – Coil pipe trailer
- 1 – 40' pipe trailer
- Equipment marked with (**) will remain on site overnight in an approved staging area until they are no longer needed for the construction.
 - The ideal laydown/staging area for the Meige / Cram installation would be the parking lot on the north side of Meige.
 - Staging in this area would minimize the movement of any heavy equipment.
- All other trucks would leave the site every night and return the next day for as long as they are needed.



Figure 6 Stage Area

Details on the Installation of the mains along Meigs and Cram:

The main being proposed has been designed to avoid installing under hard surfaces as much as possible. The installation for Meigs Street is proposed to be under grass, the only exception being when crossing streets or driveways. No excavations other than utility potholes are proposed to happen in streets or driveways.



Figure 7 Area of tie-in at Brady looking down Meigs

What used to be green spaces along Cram now have asphalt over them and are currently occupied by existing infrastructure. From the tie-in point on West Jefferson the main will run under the eastern end of the parking lot, then continue south under the road. The decision to go under the road rather than the sidewalk was based on the condition and age of the walks versus the road. The sidewalks are in good condition, and restoration in kind would involve acid ageing the replacement concrete. The road shows signs of recent patching and a more modern tar and chip covering.

Please refer to the Meige (1) and Cram (1) strip map drawings for the exact proposed locations.



Figure 8 Cram looking south from Meige

Other features to note with this design:

- No tree removals will be needed.
- Depending on the pothole needed for one utility crossing, there is the potential for 1 small piece of curb needing to be replaced at the corner of Meige and Cram.
- Depending on the amount of excavation required to install one fitting, 1 sidewalk flag may need to be replaced at the corner of Brady and Meige.
- Spoils and backfill materials will need to be temporarily staged on the ground near the excavations. Spoils will be hauled off site daily.

Archeological Concerns:

Everyone involved in this project is aware of the deep historical background of this site. To mitigate concerns over possible disturbances of artifacts that could be buried in the construction zone, a Ground Penetrating Radar (GPR) survey was conducted from August 27th to 29th. This was done by Ground Penetrating Radar Services from Toledo, Ohio.



Figure 9 Excerpt from GPR findings map

Utilities were located first by inducing an electro-magnetic pulse through the pipelines. This produced a signal that would be picked up by a scanning wand to mark the path of the utility. The next step was to go over these areas with a GPR scanner to pick up any other

objects hidden under the surface.

Flagging on soft surfaces and spray markings on hard surfaces followed standards color coding:

- White – work areas
- Yellow – Gas
- Red – Electric
- Blue – Water
- Green – Storm Sewers
- Pink - unknown

The GPR scan also gave the approximate depth of the structure being detected. These depths were marked on the pavement as well.

All the points that had been flagged or painted were then captured in a GPS survey.



Figure 10 Ryan from GPRS operating the GPR unit

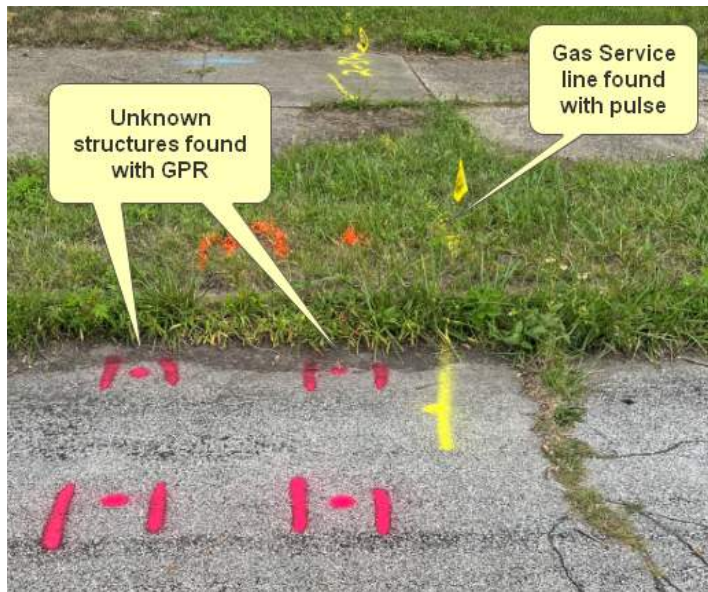


Figure 11 Paint marking and flags

The results of this GPR scan heavily influenced the current proposed running lines as described earlier. With this wealth of information, we are confident that any large object in the ground will be avoided.

During the GPR scan, SHPO requested that techs look at the area around Brady and Gibbs. This area had been scanned previously, but they wanted to see if anything would show up with a newer scanner. The area scanned was clear.

At the request of SHPO, DTE will arrange to have archeological monitoring on site, provided by an SHPO approved archeological service. Excavators and Hydro-vac trucks were mentioned in the list of equipment earlier in this narrative, however SHPO has raised concerns particularly at the south end of Cram, where the chances of coming across artifacts increases. In these areas once a hard surface has been broken through, the archeologist can request that soft digging (hand shoveling) occurs.

Sandstone Curbs:

There are no sandstone curbs in the construction area. Please see the Curb Survey document for a photo essay on the curbs along Meige and Cram.

Service Lines:

On September 8, 2025, Brennah Donahue with the Recreation Division provided us with a diagram showing which buildings they would like to have services lines ran to. The buildings framed in yellow will eventually need gas service, the building framed in red does not, as the roof has completely collapsed.



Figure 12 Excerpt from diagram provided by B.G. Donahue

SHPO has provided guidance as to what needs to be done regarding preserving the historical integrity of these buildings while providing gas service for them.

Many of these buildings are currently not in use. DTE cannot run a service line to a building that will continue to be idle for the foreseeable future. Buildings must meet certain criterium for gas to be safely operated in a structure (such as intact roof). If a service line is run to a building, a meter is put in place, and the meter does not register any usage, DTE will be regulatory forced to remove the meter.

Therefore, if a building is not in use currently, install of the service line and meter will only occur when DTE is informed that the building is going into service.

On 9/17/2025 a meeting was held on site with representatives from Detroit Parks and Rec, SHPO, DTE and Wade Trim. General plans were made for services for all these buildings,

but it was determined that none of the buildings are ready for service lines. A more detailed report on this has been sent as well.

Brady Construction:

The construction along Brady is less intense in that the footage is less, and it is mostly soft surface digging. Once again HDD will be the preferred method of installation. There will be one excavation pit to tie into the existing main north of Gibbs Street, and there will be one excavation to make the turn at Black Street. There may be a handful of potholes needed when crossing a couple of water lines.

Staging the equipment for the installation in this area will take place on the Army Corp property.

There are no services along Brady from Gibbs to Black.



Duration of Construction:

The time frame for construction is currently expected to take 3 weeks to install the gas mains. It is DTE's hope that this project will be done in the fall of 2025 before winter arrives.

Restoration:

The full restoration process will begin as soon as all installation and abandonment work in the fort area has been completed. Restoration will be "in kind", any grass removed will be

replanted with seeds mixes per state standards, any pavement will be patched, and any sidewalks and curbs will be repoured and acid etched if required.

Easement Required:

With the design changes from the GPR, we are in the process of updating our Easement Exhibit. This will need to be approved by Detroit Parks and Recreation, and then recorded with Wayne County, in order for construction to begin. It is our hope that by the time of the October meeting, that this document will be in the hands of Detroit Parks and Recreation to sign.

Narrative compiled by:

Jonathon Ferris, Production Administrator, Wade Trim

September 19, 2025