

Policy for Sewer Locating

Our highest priority is our Customers satisfaction. We achieve this by providing accurate sewer records from quality locates and detailed mapping. We live by our four core values of

1. Safety- first and foremost
2. Quality- in everything we do
3. Commitment- to the team
4. Reputation- built on integrity

1. Sewer Crew Job Start

- Supervisor will schedule the work for the sewer crews and provide job prints

2. Sewer Camera Crew Job Execution

- Prior to running anything with the camera tractor you must designate the push crew or personally locate, measure and mark all manholes and catch basins. (Bottom of pipe)
- Designate the push crew or personally push locate and mark all storm mains, catch basins, and non-runnable sanitary mains. (Bottom of pipe)
- Draw all intersection and alley crossing cards.
- Scan the original sewer card to the share drive
- Check mark the job print indicating the cards have been drawn and saved to the share drive.
- Begin lateral launching from main to foundations with lamp system
- To be considered completed locates, we must reach within 5 feet of foundation. Identifying the location and depth where the lateral exits the property.
- Mark all locates per new standard
- Color code **all** prints per new standard
- As you locate draw a rough sketch per the look of sewer card for easy information transfer. Including but not limited to intersections and crossings, residential homes, commercial buildings and alleys and empty lots.
- **Draw card for all properties even if locate information was not captured, or no sewer facility exist. This will provide a record and trigger the need for a push crew investigation.**

3. Continuous Job Organization- all sewer cards drawn need to go through the following steps:

- Camera crew will create a sewer card for each property within proposed job scope. Including current information known.
- Scan the original card to your computer, rename and then transfer to share drive.
- Scan and label each card individually and as a PDF, then transfer to company share drive.

4. Camera Crew Pre-locate Job Wrap-up

- The camera crew will turn in the organized original sewer cards at the area shop or with push crew to finish the remaining work.
- The organized copied sewer cards will be handed off to area superintendent or job foreman to be used for gas installation.
- The pre-video will be given to the gas company coordinator or area supervisor

5. Push Crew Pre-locate Job Wrap-up

- The push crew will remain on job and complete remaining pre-locate work, utilizing the original sewer cards.
- If the job has started the push crew will pass copies directly to the job foreman.
- As the work is wrapped up the push crew will follow the same procedure as the camera crew when filing each card or video.

6. Pre-locate Guidelines

- All known proposed gas install and sewer transections need to have a locate at the intersecting point
- All laterals need depths approximately every ten feet or per gas company requirements whichever is more stringent.
- All known laterals that exit opposite of the proposed gas installation can be an exception. (Locate the lateral at a minimum of two points. The sewer main and the foundation of the property. This proves the lateral's path is not in conflict.)
- All storm sewer lines need to be located. Catch basin drops and storm mains.
- All laterals need located to a point within five feet of the foundation.

7. Gas Crew (Main and Services) Job Start and Completion

- Superintendent to hand over job packet to gas crew that will include copies of each sewer card.
- Gas crew will perform gas installation per Miller Pipeline's damage prevention policy. Utilizing job prints, utility locates and provided sewer card information.

8. Post Video Verification

- Ideally the sewer crew which performed the pre locates will be scheduled to perform the post video verification following the gas installation. This must happen within 24 hours of any unspotted bore crossing of a sewer facility and before the gas line is energized.
- Sewer locating crew must capture a picture snapshot and video of the bore crossing from inside the sewer facility. Verifying no damages occurred.
- A copy of the video and snapshot must be given to the job foreman so it can be turned in with the job Packet.
- All post video verification need to be located by crew members at the farthest point in the line closest to the foundation or passed all gas installation to confirm no damage has occurred.
- If the use of a camera tractor is unable to complete the verification, the use of a push camera is acceptable.

9. Records process

- Sewer crews will create both a pre and post video using Cues' Granite XP software
- Crews will label each project in the software using the company standards.
- Every 3 months or less each crew will manually export the videos to an external hard drive, and ship to a central location. The videos will be downloaded to a master computer in which we will store the information.

Always know and understand Customer Requirements for Sewer Locating and Recordkeeping

Standard Share Drive Filing

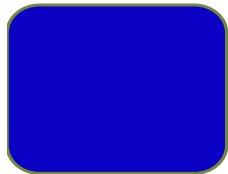
Scan & label each card individually and as a pdf, then transfer to company share drive.

Card Type	=	Label Standard
<u>Completed Cards</u> Example-	=	<u>Address & Street Name</u> 4990 Scioto Darby Rd.
<u>UTP Cards</u> Example-	=	<u>Address, Street Name, & UTP</u> 4990 Scioto Darby Rd. UTP
<u>Empty Lot Cards</u> Example-	=	<u>EL, (NSEW) of Address & Street</u> EL West of 4990 Scioto Darby Rd.
<u>Intersection Cards</u> Example-	=	<u>INT of the cross streets</u> INT of Broad St and Main St.

Standard Print Color Code



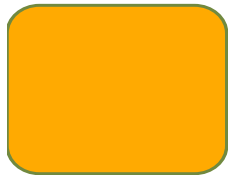
Sewer locates completed for this property
(clear to bore mainline & service)



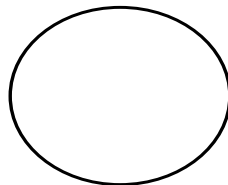
Sewer locates completed for mainline bore
(clear to bore mainline only)



Sewer locates not completed
(not clear to bore anything)



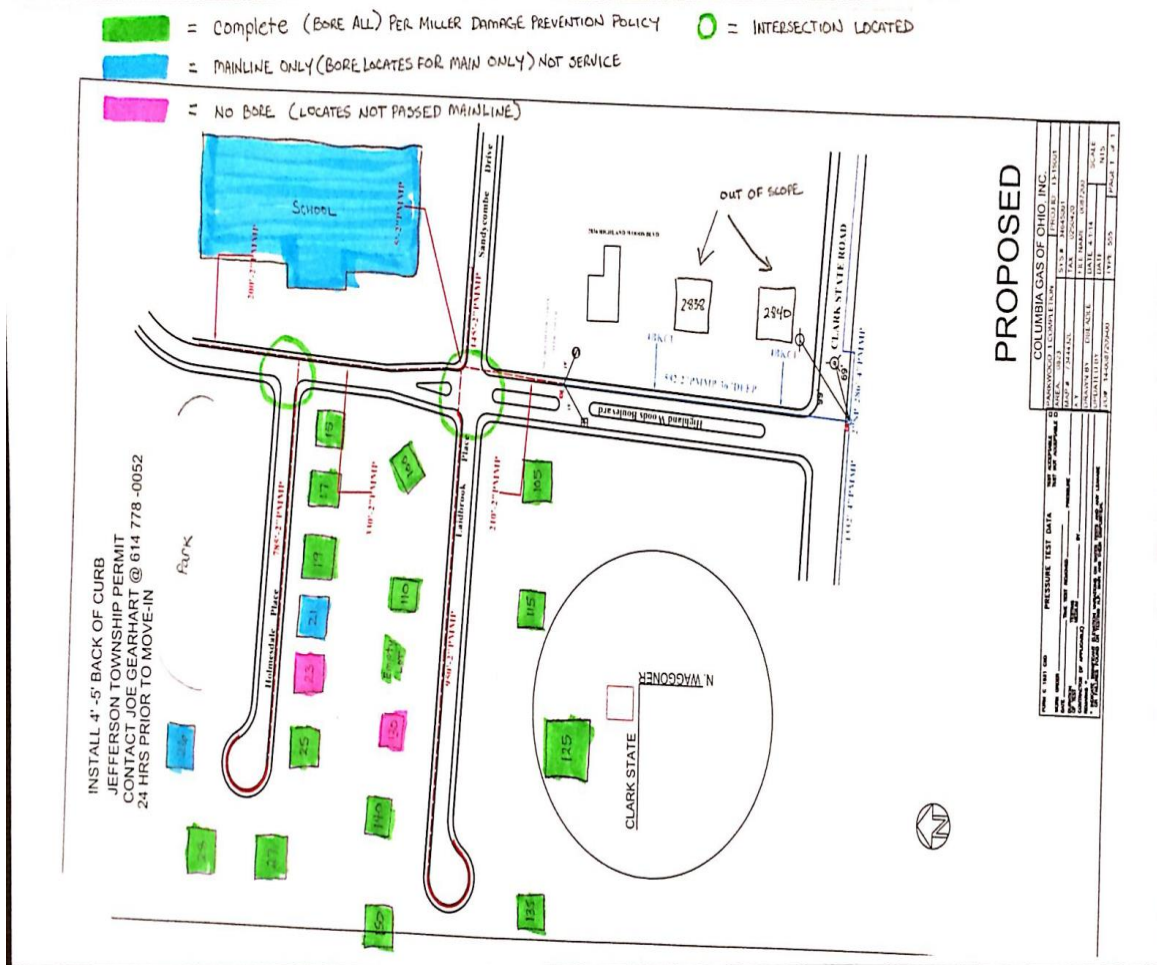
Sewer crews (Camera & Push Rod) have exhausted all efforts
Sewer crews could not completely locate the property
(see sewer card for info)



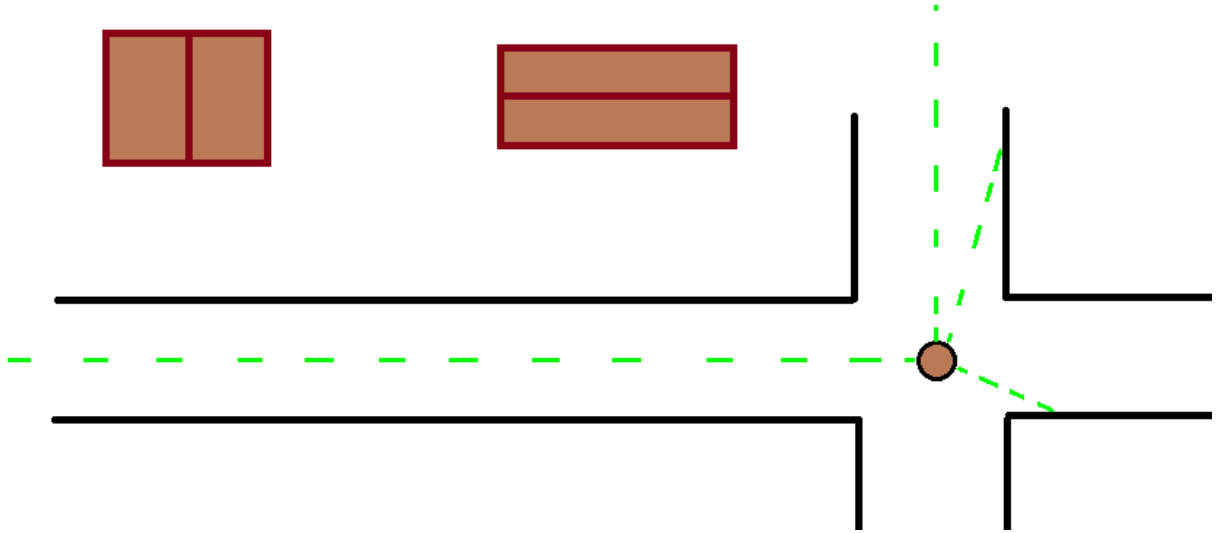
Completed Intersections

Blanket Print Example

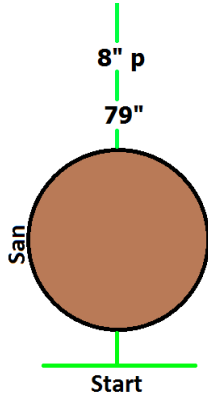
All projects can and should use this code. It allows anyone to easily view the current job status.



Standard Striping the Mainlines Every 10 feet



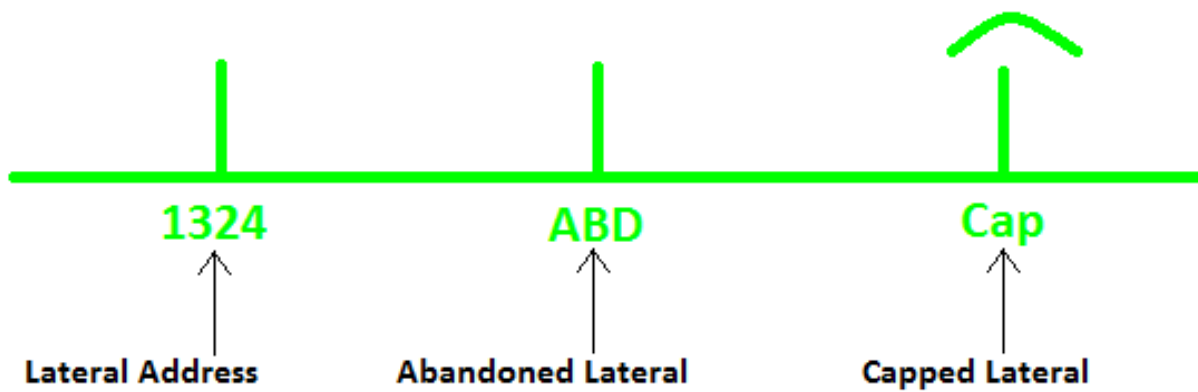
Standard Manhole Markings



All manholes need to be marked stm or san or combo

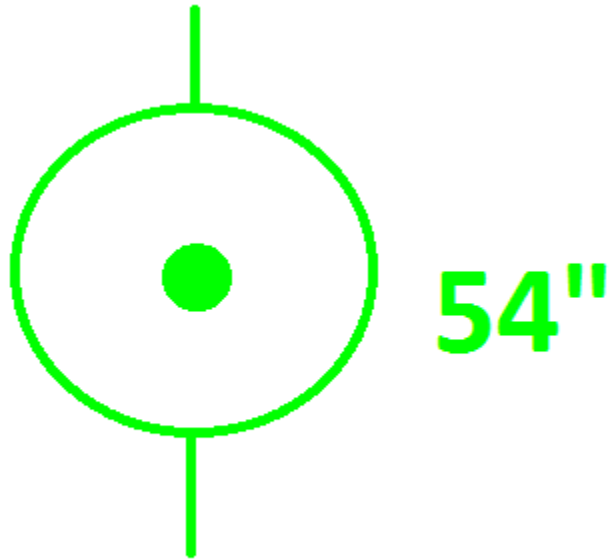
Standard Lateral Identifier Markings

- Indicates the type of laterals that “T” off of the sewer main.



Standard Pre-Locate Mark

- Indicates the point and depth at which the line was located.



Standard Locate Marks with UTP

- Indicates where the line and depths were located, but shows the crew was Unable To Push any further.

