



ELEC WR

GAS WR **3696388**

CITY / TOWN / VILLAGE: V/Brown Deer

CUST/PROJ NAME: WR 3696388

PROJECT LOCATION: N 60th St

WORK DESCRIPTION: Replace existing steel main with PE main

PREPARED BY: Robert Ludan

E-MAIL: robert.ludan@daarcop.com

OFFICE #: 414-935-4427 CELL #: _____

PAGER #: _____ IO #: MRO47500542

PROJECT ID: _____ CGS #: _____

DATE PREPARED: 12/30/14 DATE REVISED: 1/21/15

COMMON INFORMATION

STAKING REQUIREMENTS:

- SURVEYOR STAKED
- DESIGNER NOT NEEDED

MAIN / SERVICE IN EASEMENT:

- YES NO

RESTORE PRIVATE PROPERTY: WE ENERGIES CUSTOMER

WORK IS APPROX _____ FT, DIRECTION _____ OF CL OF _____
NEAREST CROSS STREET
(ALSO FOR GAS SERVICE TEE)

ELECTRIC INFORMATION

OPER MAP #: _____ FEEDER/LINE #: _____

CATV JOINT USE #: _____ TEL JOINT USE #: _____

PROPOSED GAS SERVICE INFORMATION

MTR SIZE: _____ MTR TYPE: _____ EFV

SERV PIPE SIZE: _____ MATERIAL: _____ RELIGHT

MTR LOC: _____ FT. _____ OF _____ CORNER CURB VLV

CONSTRUCTION TYPE: _____ TIE IN PIPING

EROSION CONTROL LEGEND

	APPROXIMATE BORE PIT LOCATION (WITH AND WITHOUT PERIMETER CONTROL)
	INLET PROTECTION, TYPE
	HAY OR STRAW BALES
	SILT FENCE
	STONE DITCH CHECK
	MANUFACTURED DITCH CHECK
	TRACKING PAD
	TIMBER MAT
	SAND or ROCK BAG
	CULVERT PIPE DITCH CHECKS
	SURFACE WATER FLOW
	SOIL STABILIZER, TYPE B
	EROSION MAT CLASS I (SEE SEEDING NOTE)
	EROSION MAT CLASS II (SEE SEEDING NOTE)
	EROSION MAT CLASS III (SEE SEEDING NOTE)
	MULCH (SEE SEEDING NOTE)
	SOD
	VEGETATIVE BUFFER

NOTES:
ALL STOCK PILES SHALL BE PROTECTED WITH 12" WATTLES OR TRAPPED.

NO STOCK PILES OR MATERIAL SHALL BE STORED ROADWAY OVERNIGHT AND THE ROADWAY CURB-GUTTER MUST BE SWEEPED UP AT THE END OF THE DAY.

ANY PAVEMENT OR SIDEWALK DISTURBANCE THAT IS NOT BEING REPLACED AS PART OF THE PROJECT MUST HAVE PERMANENT RESTORATION.

SAND PAD ALL MAINS AND SERVICES. BACKFILL THE MAIN AND SERVICES UNDER WALK OR PAVEMENT WITH COMPACTED GRANULAR OR SLURRY BACKFILL.

NO EXCAVATIONS FOR SERVICE LATERAL CONNECTIONS OR BORE PITS ARE TO BE MADE WITHIN SIX FEET OF ANY CITY TREE.

IF DISTURBANCE OCCURS BETWEEN MID-NOVEMBER AND MID-APRIL (WINTER) RESTORE WITH SOIL STABILIZER, TYPE B, UNLESS NOTED. FURTHER RESTORATION AND SEEDING IN SPRING IS NEEDED.

IF DISTURBANCE OCCURS AFTER MID-APRIL AND BEFORE MID-NOVEMBER (SUMMER) RESTORE WITH PERMANENT SEED, MULCH AND TACKIFIER, UNLESS NOTES.

NOTES:
Existing facilities should be field verified prior to excavation.
Utility information shown are from plans and have not been field verified.
Contact Digger's Hotline prior to excavation.
Maintain 12" min vertical clearance from existing electrical facilities.
Maintain 6" min vertical clearance from other existing facilities.
Maintain 18" min vertical clearance from existing storm sewer pipes.
Maintain 5' clearance from storm sewer inlets.
Staking of route by surveyor required prior to construction.
Confirm all services have been transferred to new main prior to abandoning existing main.
Restore all pavement, ROW, sidewalks, and customer's private property.



NORTH

CONVENTIONAL SYMBOLS

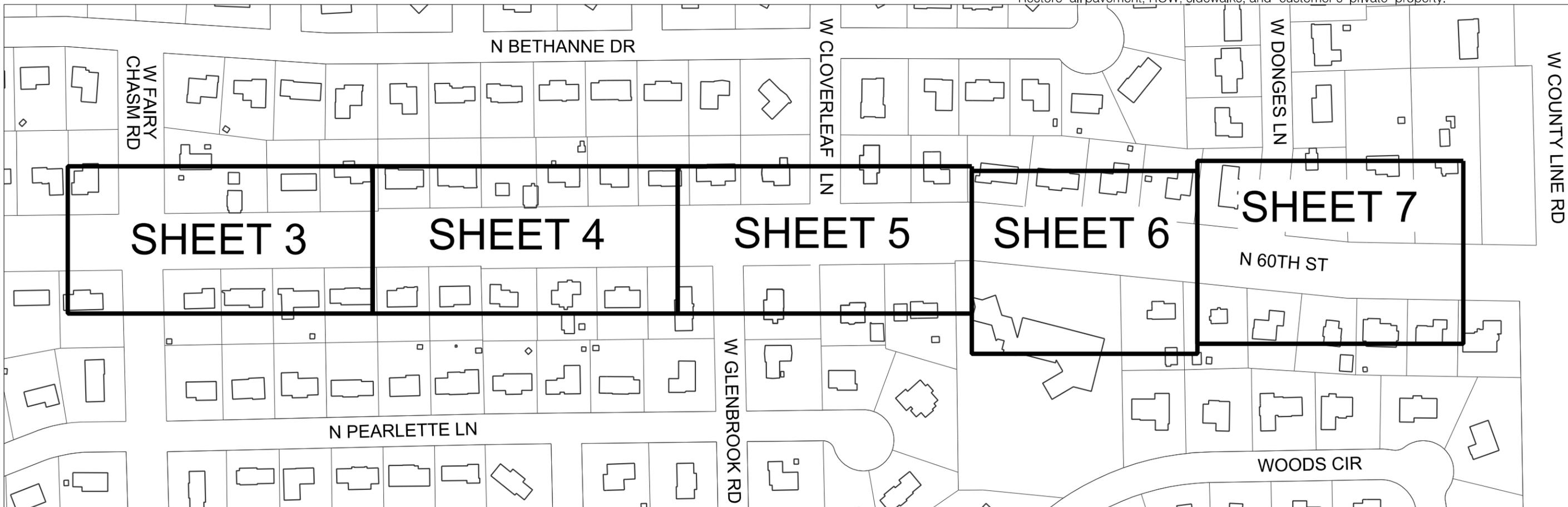
- END OF MAIN CAPPED WITH AN ANODE ATTACHED TO THE TRACER WIRE -2' x 4' EXCAVATION.
- GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION.
- VALVE IN AN 8" DIAMETER METALLIC BOX SET TO GRADE
- 17# ANODE ATTACHED TO THE MAIN IN THE SAME TRENCH
- DENOTES METER CHANGE
- RECONNECT LONGSIDE SERVICE

ALL PROPOSED MAIN TO BE DIRECTIONALLY BORED.

RELATED WORK REQUESTS:
 WR 3717703 - SERVICE RECONNECTS (1)
 WR 3717704 - SERVICE REPLACEMENTS (35)
 WR 3717706 - MAIN RETIREMENTS

INSTALL APPROX. 2,516' OF 2" PE MAIN
INSTALL APPROX. 2,549' OF 4" PE MAIN

RETIRE APPROX. 49' OF 1 1/4" ST MAIN
 RETIRE APPROX. 135' OF 3" ST MAIN
 RETIRE APPROX. 10' OF 4" PE MAIN
 RETIRE APPROX. 1,214' OF 4" ST MAIN
 RETIRE APPROX. 1,340' OF 6" ST MAIN



SCALE 1"=200'

SHEET NO. 1 OF 7

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WE ENERGIES WORK REQUEST ENVIRONMENTAL NOTES

NORTH

Notes #1 - #7 apply to ALL work requests:

General

1. If WDNR and/or USACE permits were obtained for the project, all permit conditions shall be met during construction of the project.

Erosion Control

2. If soil disturbance occurs on slopes or channels/ditches leading to wetlands or waterways, or within wetlands, the disturbed areas shall be stabilized and appropriate erosion control Best Management Practices (BMPs) shall be implemented.
3. Erosion control BMPs shall meet or exceed the approved WDNR Storm Water Management Technical Standards (http://dnr.wi.gov/topic/stormwater/standards/const_standards.html). Refer to We Energies' Construction Site Sediment and Erosion Control Standards.
4. Inspect installed erosion control BMPs at least one time per week and after 1/2-inch rain events; repair as necessary.
5. When temporary stabilization is required (e.g. for winter or short-term construction) prior to final restoration, soil stabilizer shall be installed wherever possible. Erosion mat shall be used temporarily only where appropriate, in accordance with state standards, and when approved by the Operations Supervisor.

Contaminated Soils

6. Whenever soil exhibiting obvious signs of contamination (e.g., discoloration, petroleum or solvent odor, free liquids other than water, buried containers or tanks, or other obvious signs of environmental impacts) is encountered during excavation or installation, cease work immediately, take appropriate immediate precautions to ensure worker health and safety, and contact the Operations Supervisor or Inspector.

Spills

7. If an oil spill occurs on during construction, call the Environmental Incident Response Team (EIRT) at (414) 430-3478:
 - a. Any quantity of oil is spilled into surface water;
 - b. Any oil spill greater than 50 ppm PCB into a sewer, vegetable garden, or grazing land;
 - c. Any oil spill containing greater than 500 ppm PCB;
 - d. Five gallons or more of oil spilled to the ground;
 - e. Any oil spill involving a police department, fire department, DNR, or concerned property owner.

Notes #8 - #27 apply as noted at specific points within each work request:

Dewatering

8. Dewatering of pits or trenches shall be done in accordance with state standards. Use an approved sediment bag, a straw bale dewatering basin, a combination of both, or equivalent.

Wetlands

9. As much as practicable, the majority of the work shall be staged from the public roadways and road shoulders, keeping equipment out of adjacent wetlands.
10. All work shall be conducted to minimize soil disturbance. No rutting will be allowed within the wetlands.
11. If soils are not frozen or stable to a point that avoids rutting, timber mats, mud tracks, or equivalent shall be utilized to access pole locations.
12. Excavated soils cannot be stockpiled in wetlands.

13. All excess spoils shall be removed from wetlands and placed in a suitable upland location.
14. Trenching and pit excavations within wetlands shall include soil segregation to facilitate restoration of pre-construction soil stratification, and restoration to pre-construction elevations.
15. Poles scheduled to be removed, and that occur within wetland, shall be cut at the ground surface.

Waterways

16. No work can be performed within the banks or below the ordinary high watermark of any navigable waterways/streams.
17. No crossing of navigable waterways with equipment can occur. Foot traffic is allowed.
18. Any disturbed soil within 75-feet of the ordinary high water mark of any navigable waterways/streams shall be stabilized within 24 hours of construction completion.

Threatened and Endangered Species

19. Threatened or endangered species are known to occur in the work area. It is illegal to harass, harm, or kill a protected species under state and federal regulations. Proper precautions shall be taken to ensure harm to individuals is avoided.
20. In order to protect the threatened or endangered species, work must be conducted between November 5 and March 15.
21. Exclusion fencing must be installed at the work area prior to March 15.
22. A qualified biologist must be present when conducting work at this location.

Invasive Species

23. State regulated invasive species are known to occur in the work area. Reasonable precautions are legally required to prevent the spread of these species. The Wisconsin Council on Forestry Transportation and Utility Rights-of Way Best Management Practices should be followed: (<http://council.wisconsinforestry.org/invasives/transportation/>).

Cultural and Historical Resources, cont.

24. The project is within or adjacent to an area that is identified by the State of Wisconsin as potentially having Native American artifacts, burial mounds or burial sites, which could be encountered during construction.
25. If human bone or any artifacts are discovered during construction, work must cease immediately. Contact the Environmental Department who will contact the State Burial Sites Preservation Office and determine the next steps that must be taken in order to comply with state law. Work at that site MAY NOT PROCEED until the Environmental Department authorizes it.
26. A "qualified archaeologist," as specified under Wis. Stats 157.70 (1) (i) and Wis. Admin. Code HS 2.04 (6), must be present to monitor all ground disturbing activities.

Frac-out Contingency Plan

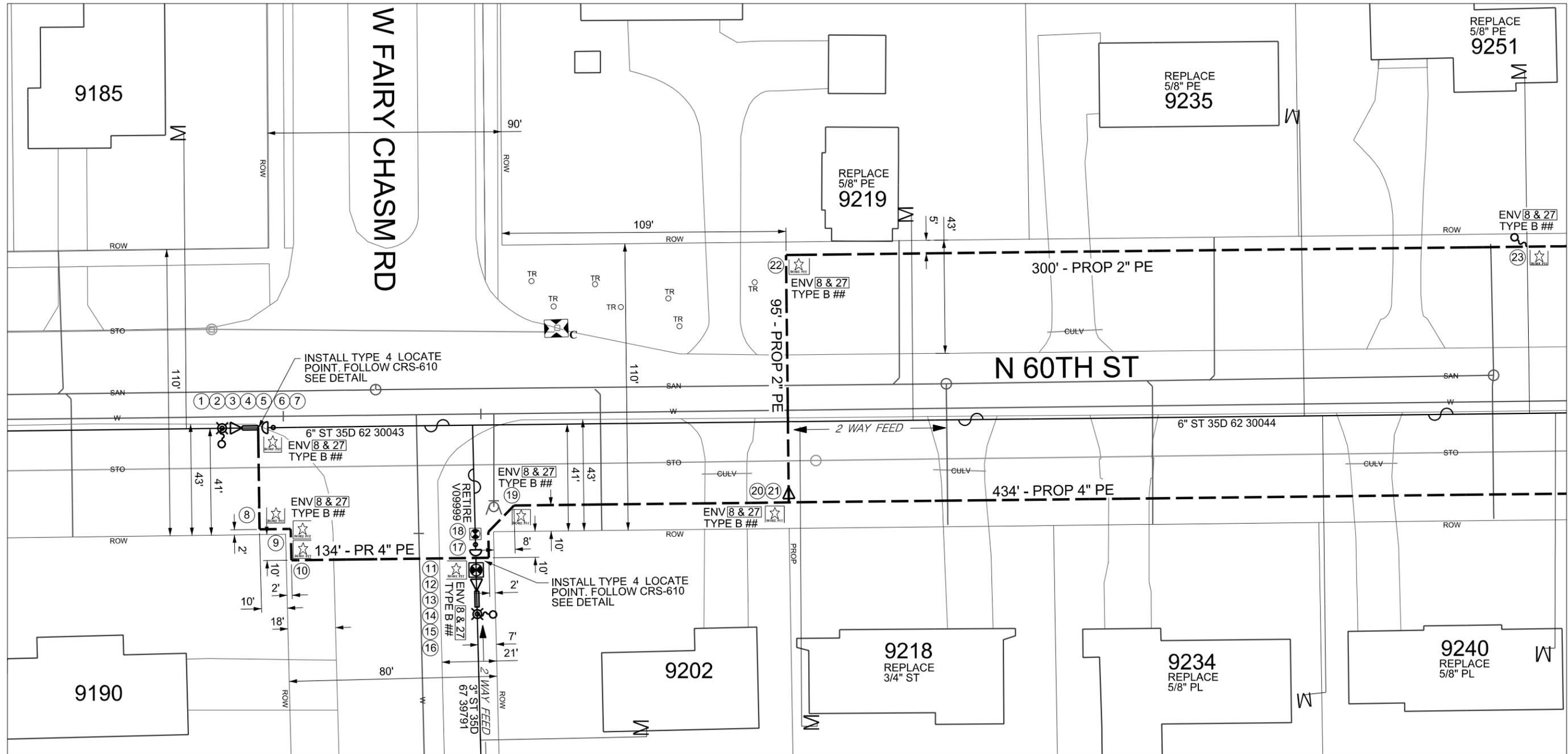
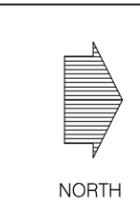
27. A frac-out contingency plan shall be on-site and implemented accordingly. The contingency plan shall incorporate the following components.
 - a. Continuously inspect the bore paths for frac-outs in order to respond quickly and appropriately.
 - b. Containment materials (e.g. silt fence, straw bales, sand bags, etc.) shall be on site and available should a frac-out occur.
 - c. A vac truck shall be accessible on short notice in order to respond quickly to a frac-out.

INSTALL APPROX. 395' OF 2" PE MAIN
INSTALL APPROX. 568' OF 4" PE MAIN

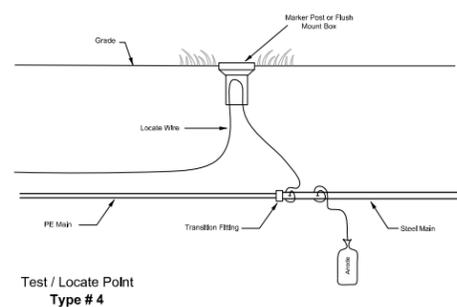
SCALE: 1" = 40'

CONVENTIONAL SYMBOLS

- END OF MAIN CAPPED WITH AN ANODE ATTACHED TO THE TRACER WIRE - 2' x 4' EXCAVATION.
- VALVE IN AN 8" DIAMETER METALLIC BOX SET TO GRADE
- 17# ANODE ATTACHED TO THE MAIN IN THE SAME TRENCH
- GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION
- METER CHANGE
- RECONNECT LONGSIDE SERVICE

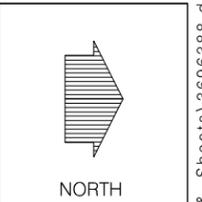


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- | | | |
|-------------------------------|--------------------------------------|-------------------------------|
| ① 6" LINE STOPPER FITTING | ⑨ 4" PE 90 ELL | ⑰ 3" ST CAP |
| ② 6" X 4" ST REDUCER | ⑩ 4" PE 90 ELL | ⑱ 2" SAV-A-VALVE |
| ③ 4" ST/PE TRANSITION FITTING | ⑪ 4" PE 3 WAY TEE (BUTT FUSE) | ⑲ 4" PE 90 ELL |
| ④ 4" PE 90 ELL | ⑫ 4" PE VALVE BOX #24161 & VALVE BOX | ⑳ 4" PE 3 WAY TEE (BUTT FUSE) |
| ⑤ ANODE, 17 LB | ⑬ 4" X 3" PE REDUCER | ㉑ 4" X 2" PE REDUCER |
| ⑥ 6" ST CAP | ⑭ 3" ST/PE TRANSITION FITTING | ㉒ 2" PE 90 ELL |
| ⑦ 2" SAV-A-VALVE | ⑮ 3" LINE STOPPER FITTING | ㉓ ANODE, 1 LB |
| ⑧ 4" PE 90 ELL | ⑯ ANODE, 17 LB | |

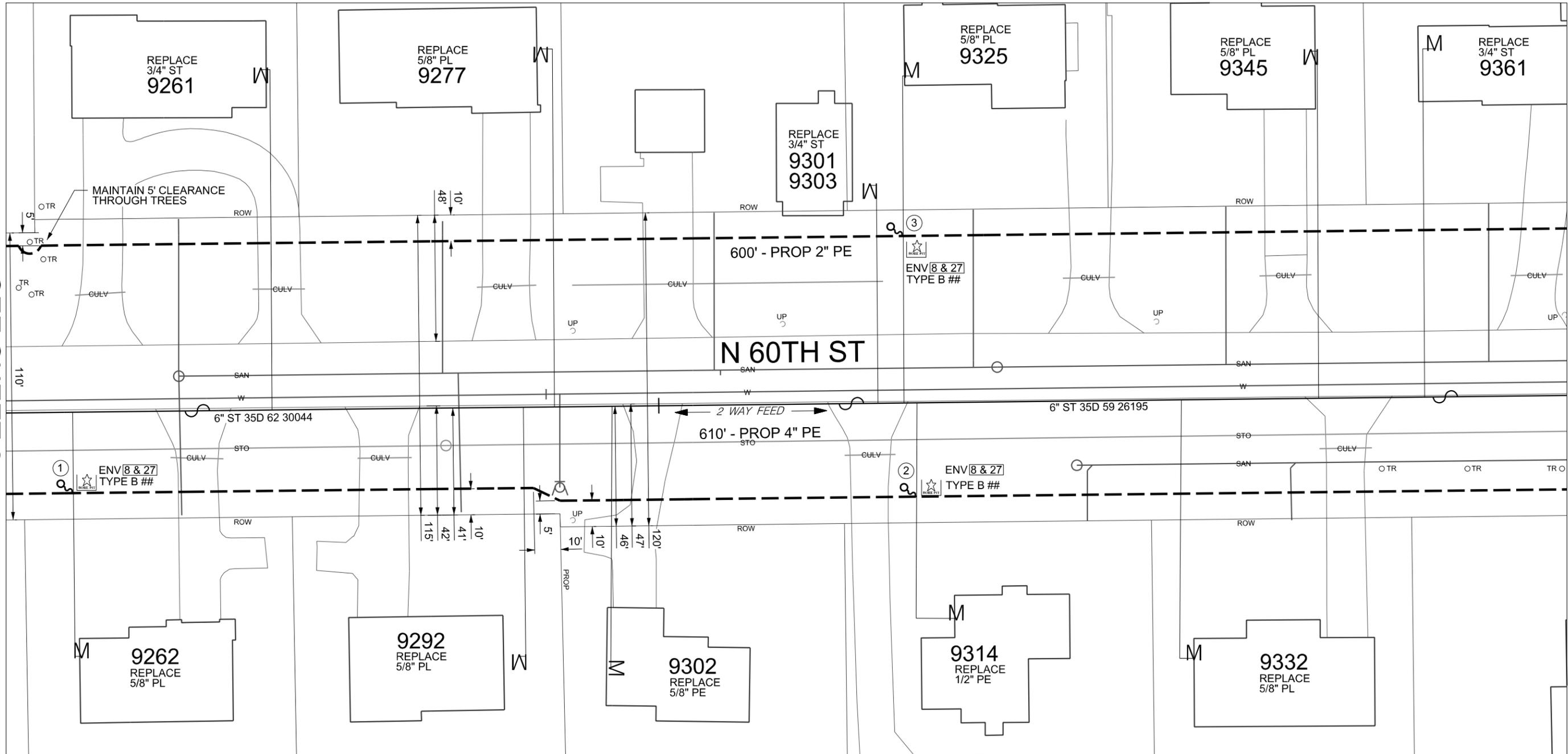
SEE SHEET 4



SCALE: 1" = 40'

SEE SHEET 3

SEE SHEET 5



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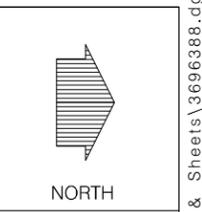
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	VALVE IN AN 8" DIAMETER METALLIC BOX SET TO GRADE
	17# ANODE ATTACHED TO THE MAIN IN THE SAME TRENCH
	GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION
	METER CHANGE
	RECONNECT LONGSIDE SERVICE

- ① ANODE, 1 LB
- ② ANODE, 1 LB
- ③ ANODE, 1 LB

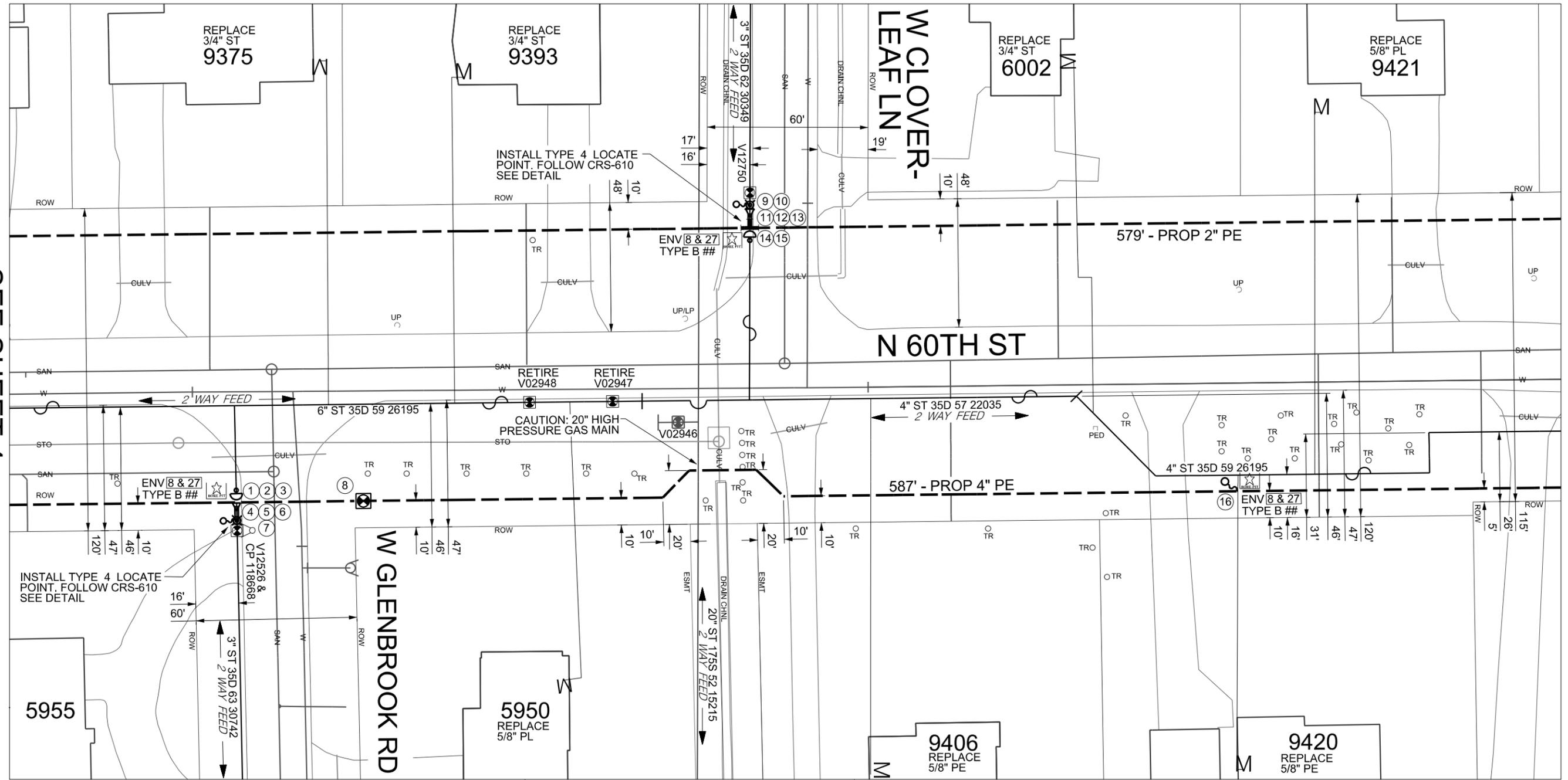
INSTALL APPROX. 579' OF 2" PE MAIN
 INSTALL APPROX. 587' OF 4" PE MAIN

CONVENTIONAL SYMBOLS

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-
- 17# ANODE ATTACHED TO THE MAIN IN THE SAME TRENCH
- GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION
- METER CHANGE
- RECONNECT LONGSIDE SERVICE



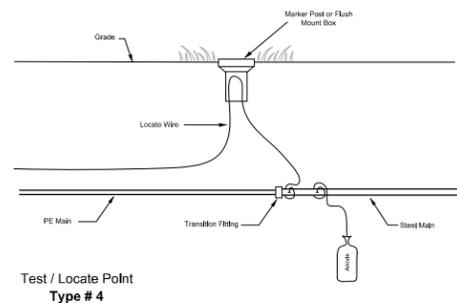
SCALE: 1" = 40'



SEE SHEET 4

SEE SHEET 6

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- ① 2" SAV-A-VALVE
- ② 3" ST CAP
- ③ 4" PE 3 WAY TEE (BUTT FUSE)
- ④ 4" X 3" PE REDUCER
- ⑤ 3" ST/PE TRANSITION FITTING
- ⑥ 3" LINE STOPPER FITTING
- ⑦ ANODE, 17 LB
- ⑧ 4" PE VALVE #24162 & VALVE BOX
- ⑨ ANODE, 17 LB
- ⑩ 3" LINE STOPPER FITTING
- ⑪ 3" x 2" ST REDUCER
- ⑫ 2" ST/PE TRANSITION FITTING
- ⑬ 2" PE 3 WAY TEE (SOCKET FUSE)
- ⑭ 3" ST CAP
- ⑮ 2" SAV-A-VALVE
- ⑯ ANODE, 1 LB



ELEC WR
 GAS WR **3696388**

INSTALL APPROX. 446' OF 2" PE MAIN

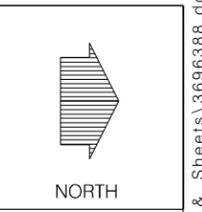
INSTALL APPROX. 446' OF 4" PE MAIN

SCALE: 1" = 40'

CONVENTIONAL SYMBOLS

- END OF MAIN CAPPED WITH AN ANODE ATTACHED TO THE TRACER WIRE - 2' x 4' EXCAVATION.
- VALVE IN AN 8" DIAMETER METALLIC BOX SET TO GRADE
- 17# ANODE ATTACHED TO THE MAIN IN THE SAME TRENCH

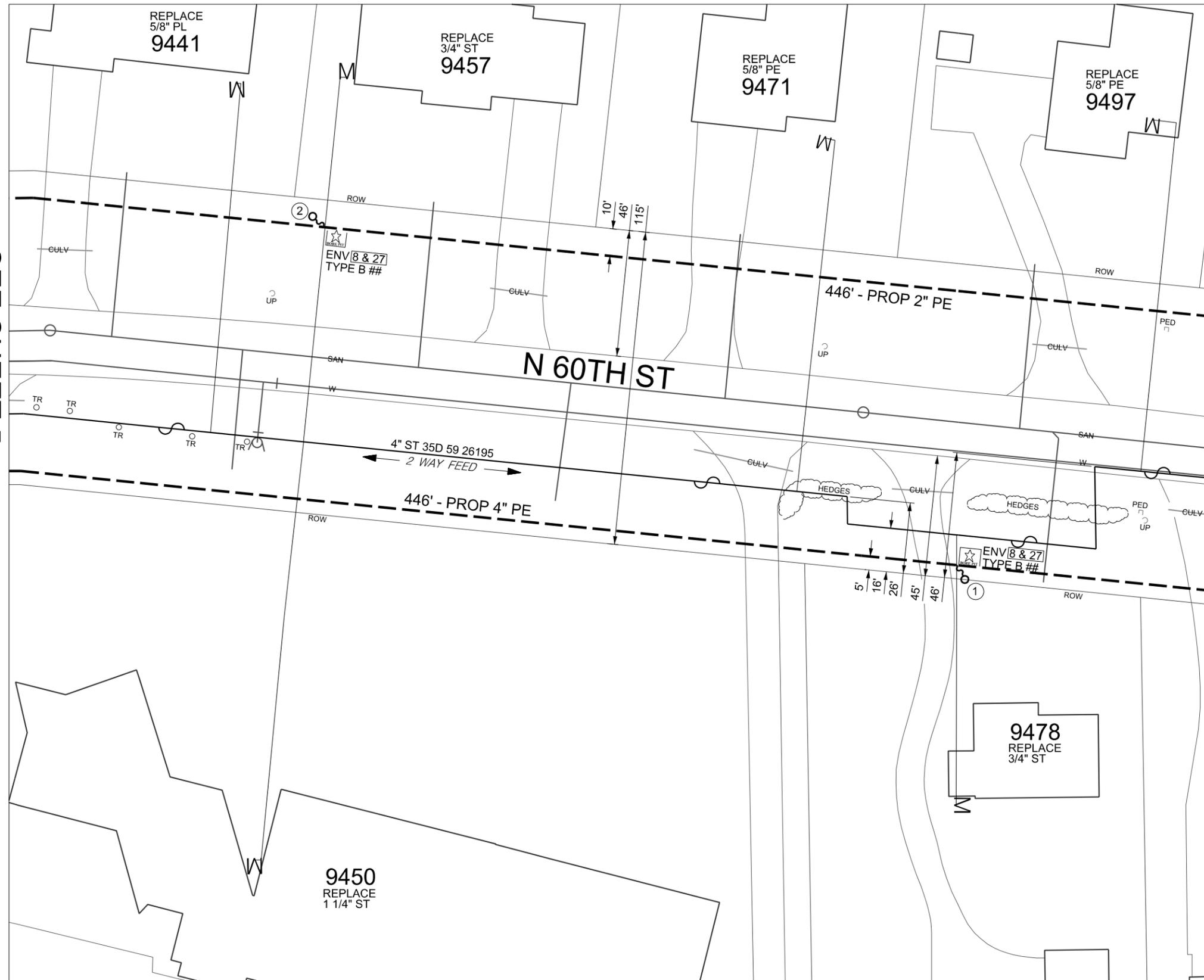
- GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION
- METER CHANGE
- RECONNECT LONGSIDE SERVICE



- ① ANODE, 1 LB
- ② ANODE, 1 LB

SEE SHEET 5

SEE SHEET 7



INSTALL APPROX. 496' OF 2" PE MAIN

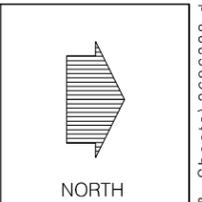
INSTALL APPROX. 347' OF 4" PE MAIN

SCALE: 1" = 40'

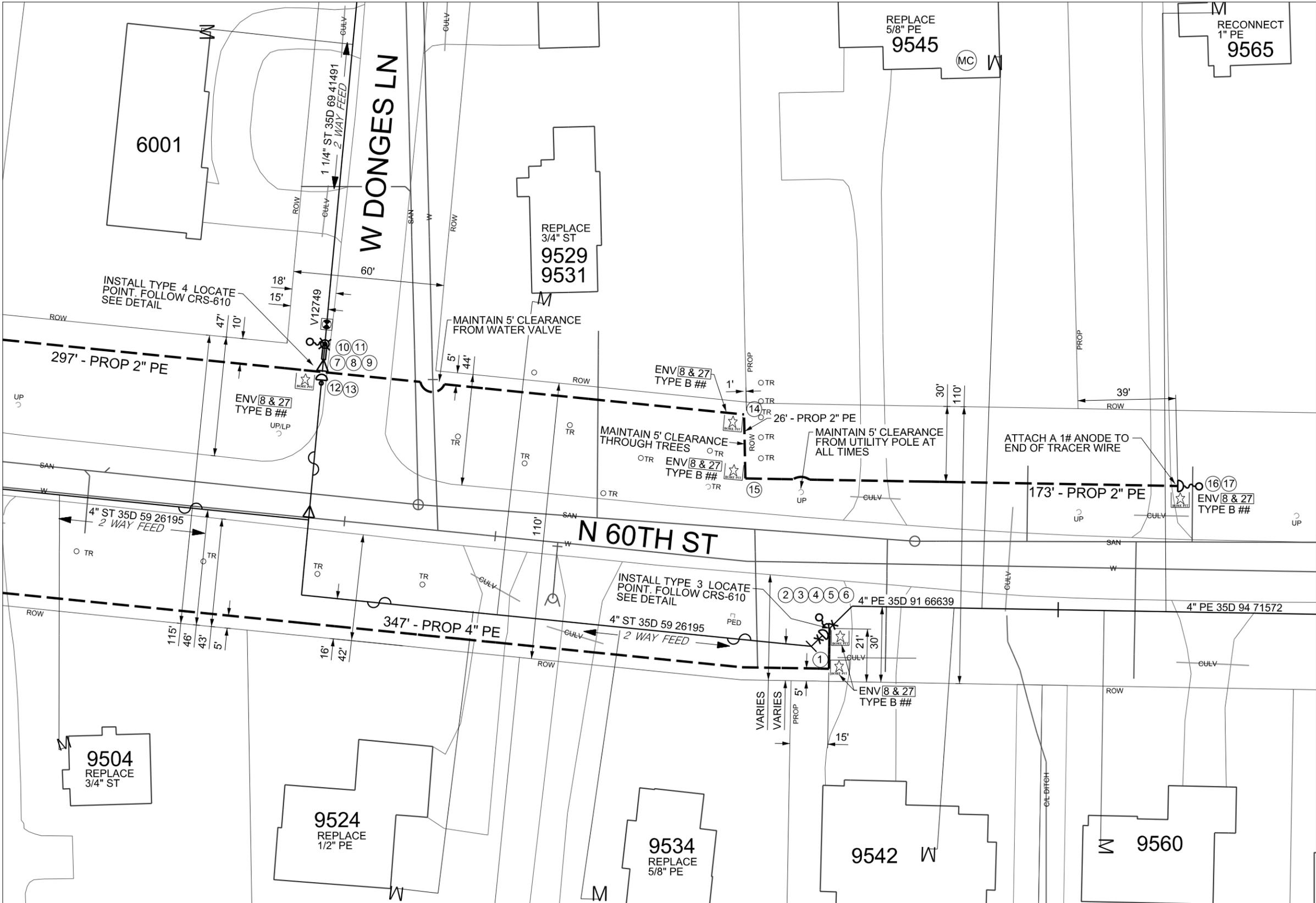
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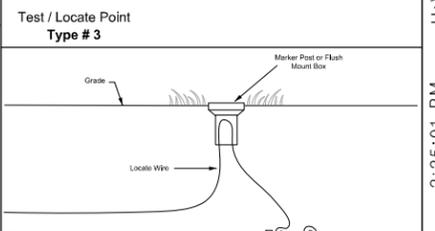
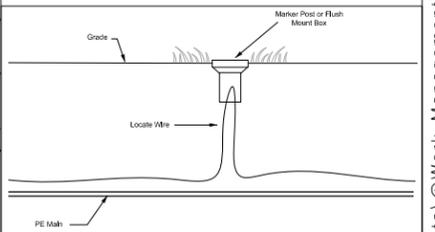
- GAS MAIN CUT OFF AND CAPPED 4' x 5' EXCAVATION
- METER CHANGE
- RECONNECT LONGSIDE SERVICE



SEE SHEET 6



- ① 4" PE 90 ELL
- ② 4" PE CLAMP
- ③ 4" PE CAP
- ④ 4" PE ELECTROFUSE COUPLING
- ⑤ ANODE, 1 LB
- ⑥ 4" PE CLAMP
- ⑦ 2" PE 3 WAY TEE (SOCKET FUSE)
- ⑧ ANODE, 17 LB
- ⑨ 2" X 1 1/4" PE REDUCER
- ⑩ 1 1/4" ST/PE TRANSITION FITTING
- ⑪ 1 1/4" LINE STOPPER FITTING
- ⑫ 3/4" SAV-A-VALVE
- ⑬ 1 1/4" ST CAP
- ⑭ 2" PE 90 ELL
- ⑮ 2" PE 90 ELL
- ⑯ 2" PE CAP w/ 1/2" PURGE
- ⑰ ANODE, 1 LB



Test / Locate Point Type # 3
Test / Locate Point Type # 4
SHEET NO. 7 OF 7