

# BLAINE PUBLIC WORKS

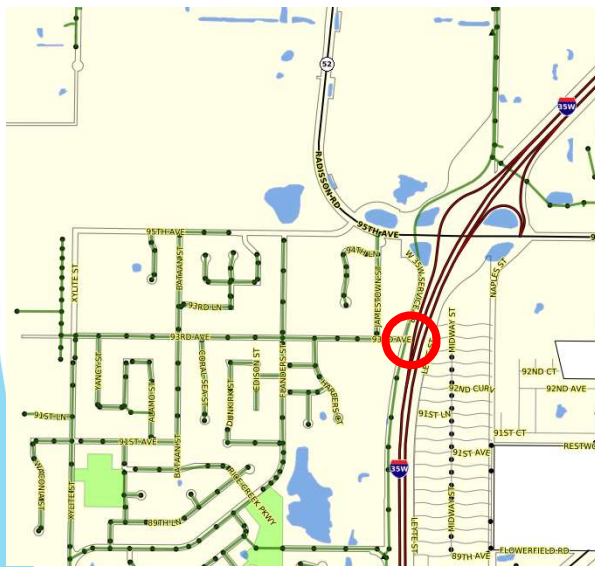
Providing High Caliber Municipal Services to Develop a Quality Community



**Safety – Accountability – Communication  
Trust - Respect**



## Sewer Repair 93<sup>rd</sup> Ave / I35W Service Rd



## Work So Far...



Jan 25-27:

Repaired failure of the 8" main at connection to the 16" main

Bypass Pump Forcemain  
Using Vac Trucks



## Work So Far...



Jan 27-Feb 1:

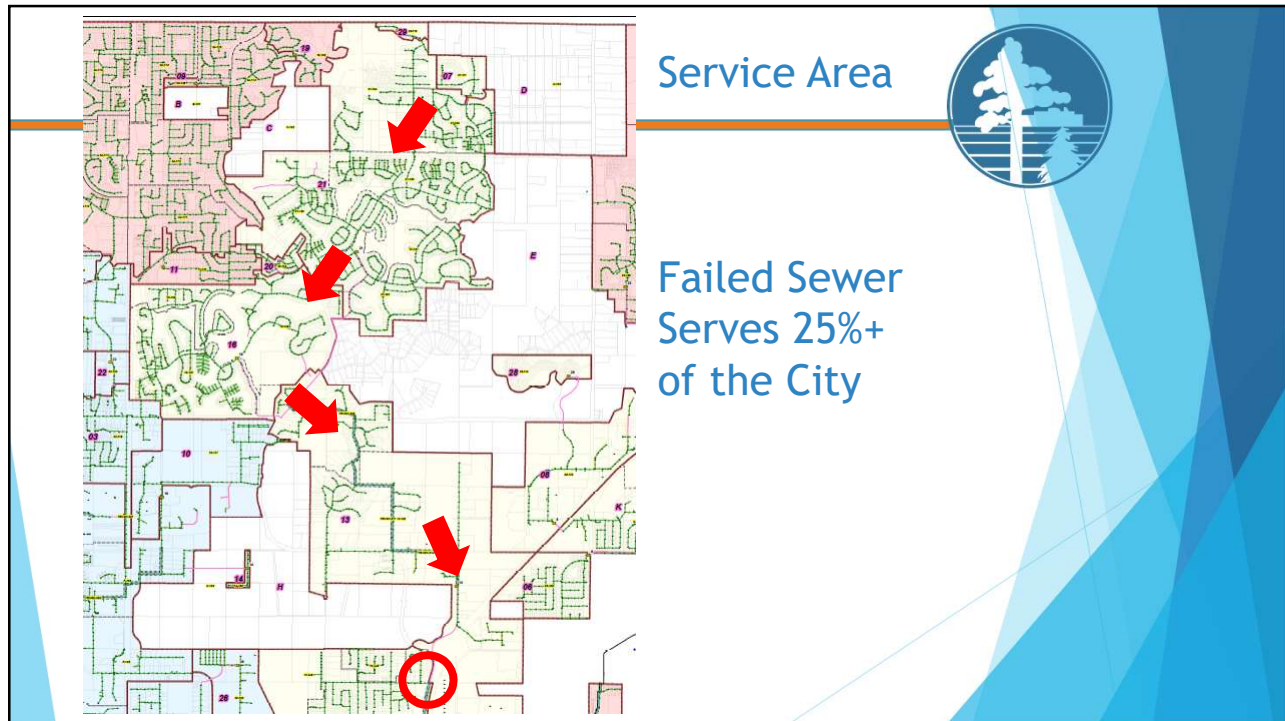
Determined sewer had collapsed  
outside of the 35ft deep Manhole

Set up Static Pump bypass

Designed Forcemain Bypass Plan

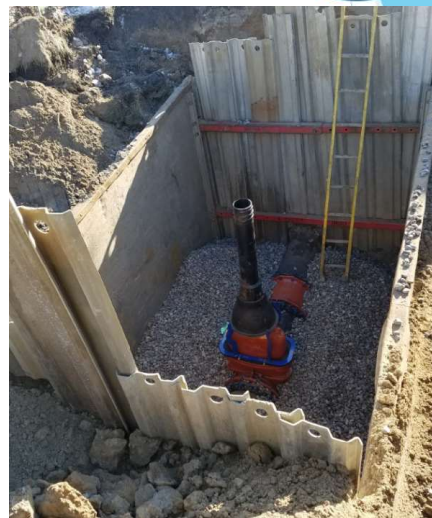
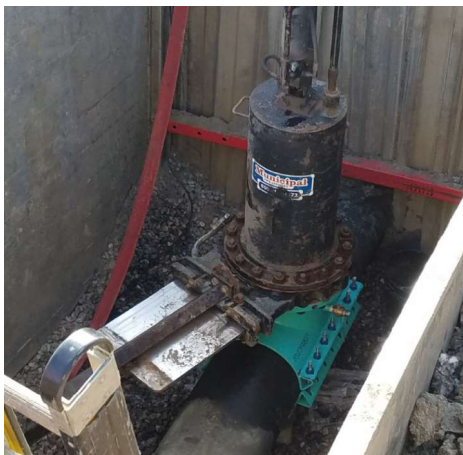






## Work So Far...

Feb 2 - Feb 7:  
Line Stop & Valves for Watermain



## Work So Far...



Feb 2 - Feb 7:  
Fuse 12" PVC Bypass

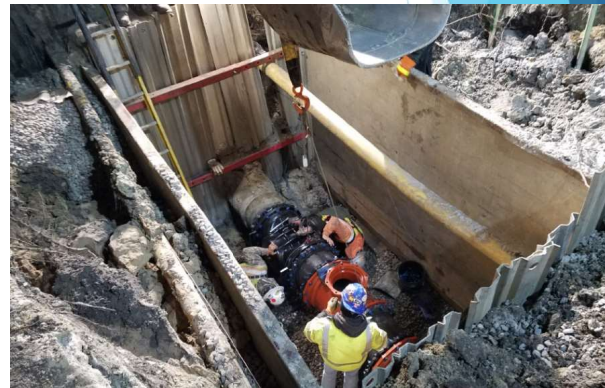
Build & Install Tee



## Work So Far...

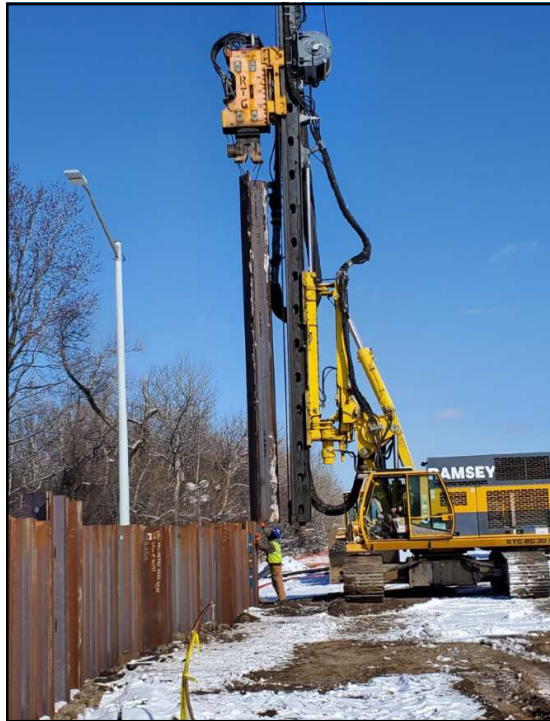


Feb 2 - Feb 7:  
Tee was Cut in at 1 a.m. Friday Morning Feb. 7









## Work So Far...



Feb 12, 15, 17-18:  
Installed Sheet Piling

Can now begin  
excavation

## Next Steps:



Remove Asphalt

Remove Frost - 4-6ft Deep Approx 900 CY  
Will need to be hauled away to thaw

Begin Dewatering Operations

Excavate to Water Table,  
Then to bottom of Tier 1 Dewatering

Install First Level Tie Backs



## Next Steps 2:



Tier 2 Dewatering - Approx 15ft to 25-30ft

Excavate

Install Tier 2 Tie Backs

Excavate to bottom of Manhole



## Next Steps 3: Weeks of March 2 - March 13



Remove Old Manhole

Repair Broken Pipes

Install new Manhole and Pipes

Backfill out

Reinstall Watermain

Site Restoration

Remove all Equipment



## Cost:

### Costs to Date:

Vactor Rental & Hauling	\$ 145,070
Prime Contractor	\$ 188,300
Shoring Contractor	\$ 520,850
Pump Equip & Rentals	\$ 10,850
City Labor	\$ 79,700
Add'l Materials	\$ 1,700
	<u>\$ 946,470</u>

### Future Costs:

Dewatering	\$ 100,000
Soils - Trucking/Disposal/Replacement	\$ 50,000
Paving & Turf Restoration	\$ 20,000
	<u>\$ 170,000</u>

**Estimated Total: \$1,116,470**



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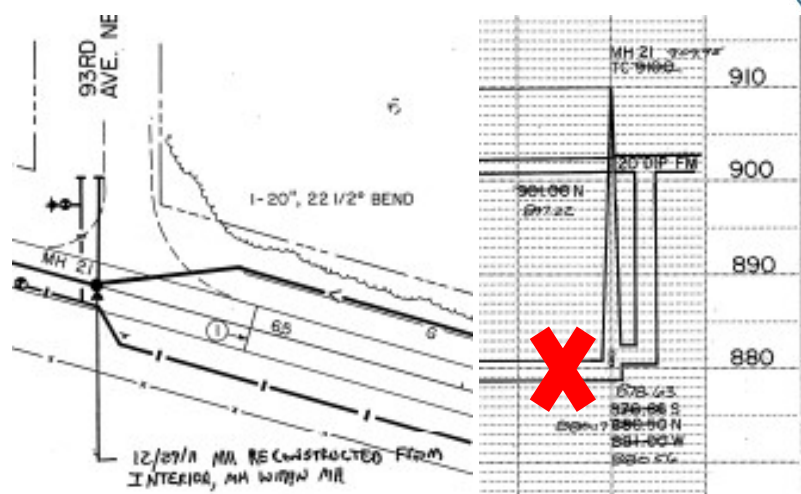
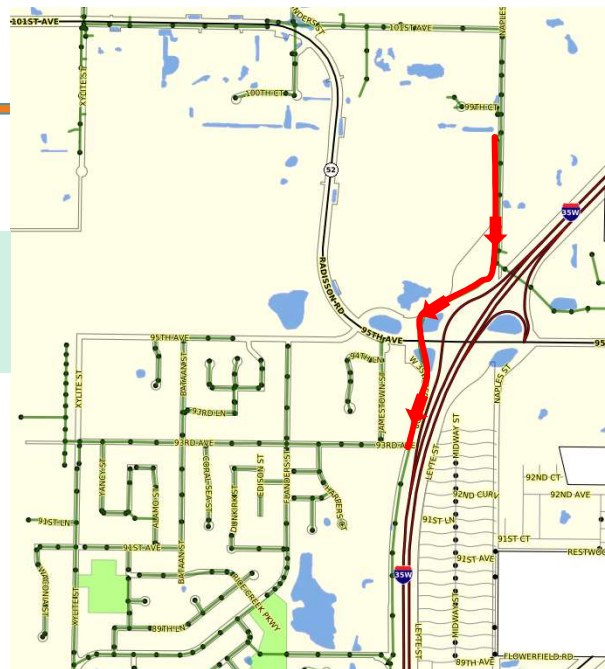
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## Scope of Work - Week 2 (Feb 3-9)

1. Relocate Centerpointe Energy Gas Main
2. Line Stop & Isolation Valve on 16" Watermain
  - Temporarily remove approx. 100 ft of this
3. Fuse & lay 12 Fusible PVC bypass line
4. Cut in bypass Tee & Plug Valve on 20" Sewer
  - 1am Wednesday
  - Will have Vector Trucks on standby
5. Begin Dewatering for Manhole Replacement



## Scope of Work - Week 3 (Feb 10-16)

1. Install Shoring and Trench Stabilization
2. 2<sup>nd</sup> Stage Dewatering 15ft to 32ft Deep
3. Demo of 35ft Deep Manhole
4. Clean & Repair downstream Sewer



## Scope of Work - Week 4 (Feb 17-23)



1. Install New 35 Ft Manhole
2. Reconnect Sewer
  - Downstream 27" sewer
  - 93<sup>rd</sup> Ave sewer later
  - New Forcemain connection
3. Switch back to Full Sanitary Sewer Operation

Suspend 24/7 Monitoring  
Emergency Stabilized

## Scope of Work - Week 5 (Feb 24-29)



1. Reinstall Watermain
2. Reconstruct Road

