PUSHING THE ROPE

UTILITY COORDINATION

Why Coordinate

- Avoid Delays
- Identify Conflicts
- Save Money
- Maintain Good Relationships
- Safety

When Things Go Wrong

- Raymond Rd Bridge Replacement
  - Communications conduit not identified prior to construction
  - Conduit contained asbestos
- D Drive N Bridge Replacement
  - Overhead electric line in conflict with crane
- Partello Rd Phase I
  - Large high pressure gas pipeline crossing road
- West Drive
  - Communication line installed under road 1 week after paving
- 25 ½ Mile Rd.
  - Pipeline company dugs up trench 2 days after compaction

When Things Go Right

- Emmett Township Local Road Program
  - 77 miles of road construction over 3 years
  - Gas, water, & sewer conflicts
- Changed design procedures
  - Submit MISSDig design tickets
  - Local utility database
- Hold an annual utility meeting to discuss upcoming projects and potential conflicts
- Learn from our mistakes!

Utility Issues for the Miller Road over Honey Creek Bridge Replacement Project

Nate P. Murphy, P.E.

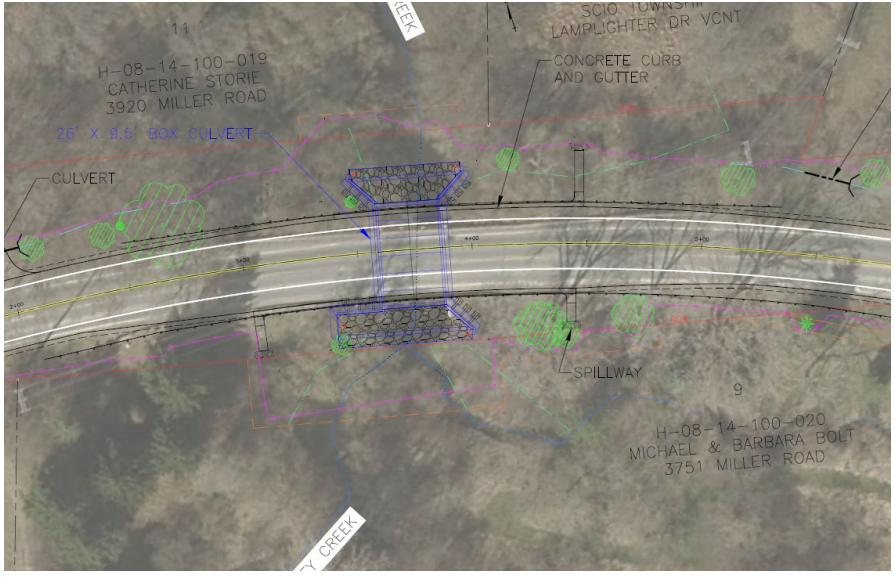
Project Manager and Bridge Engineer
Design & Construction

Direct: (734) 327-6647 | Main: (734) 761-1500
murphyn@wcroads.org

Miller Road Projects

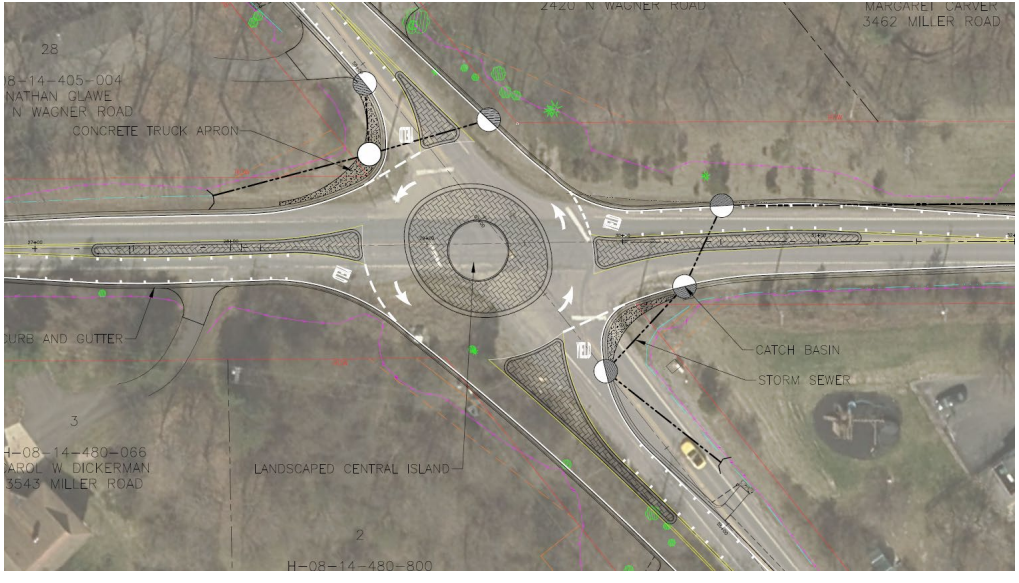
Project included:

Bridge Replacement



Contract Start date: July 6, 2020

Roundabout Intersection

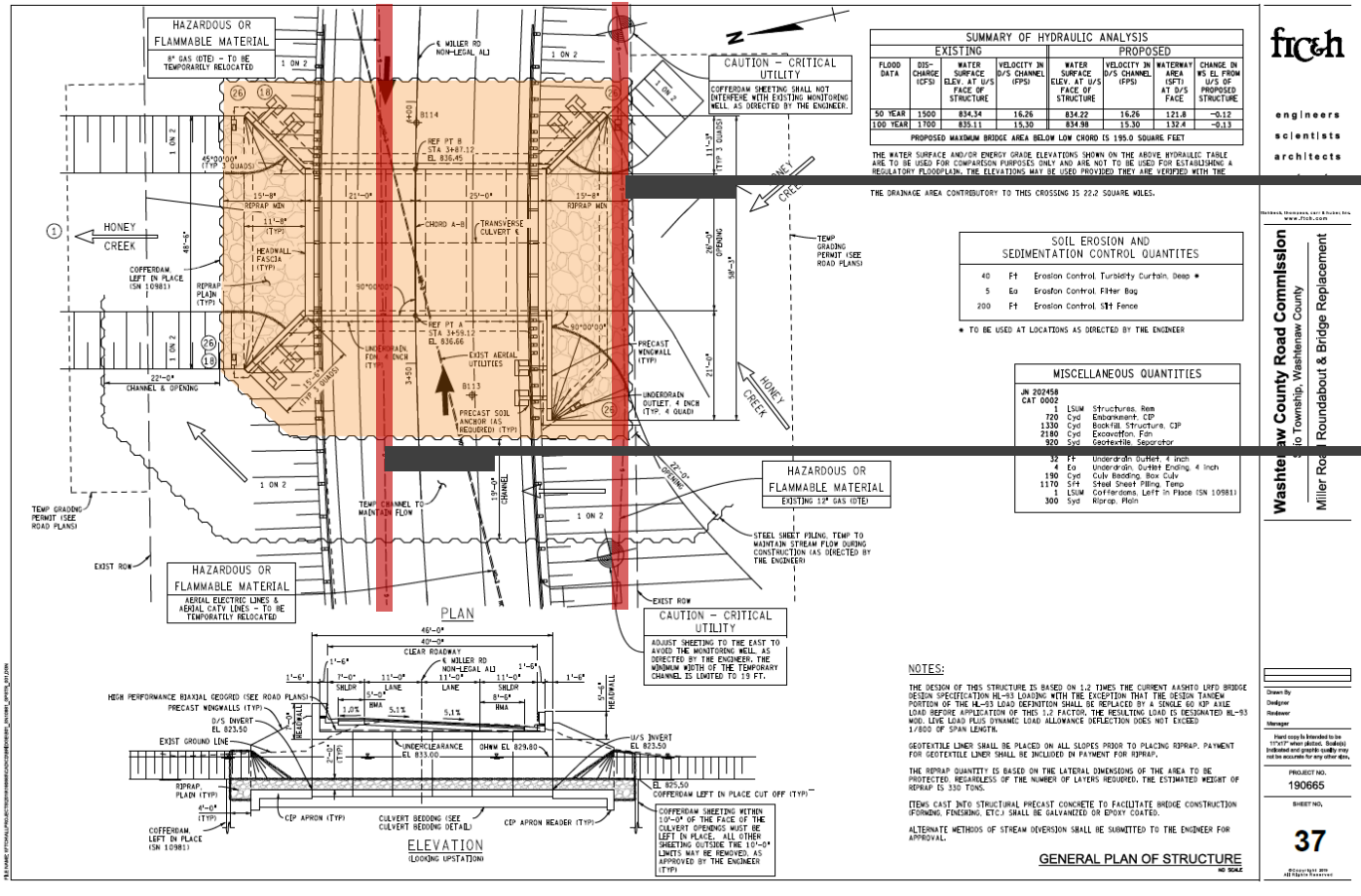


Contract Start date: June 15, 2020

Contract Project Completion: September 30, 2020

Existing Gas Main Locations

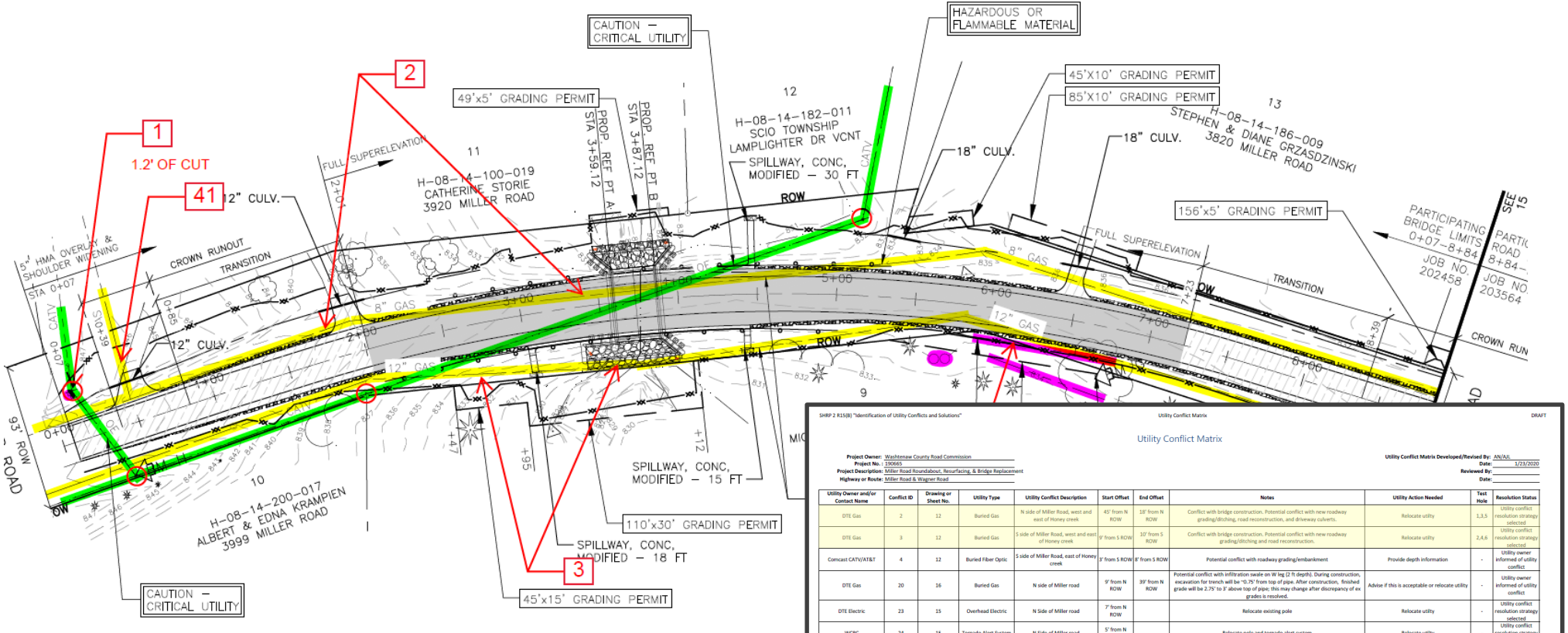
Design Phase – Major Utilities



12” DIA HIGH PRESSURE GAS MAIN

8” DIA HIGH PRESSURE GAS MAIN SUPPORTED ON EXIST BRIDGE

Conflict Matrix and Coordination



SHRP 2 R15(B) "Identification of Utility Conflicts and Solutions" — Utility Conflict Matrix — DRAFT

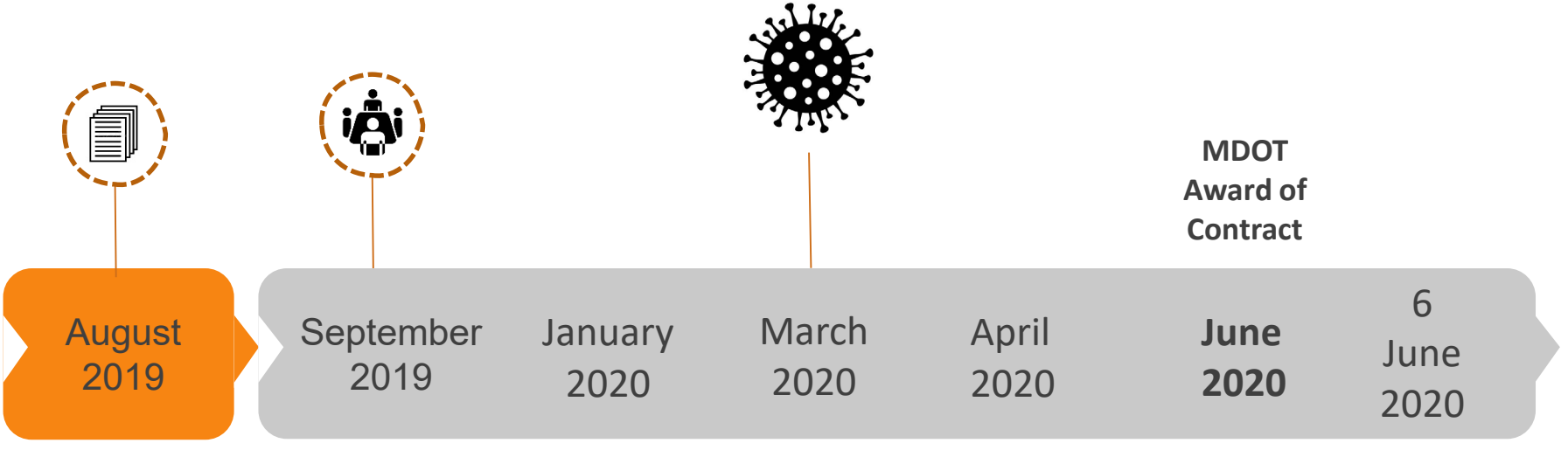
Utility Conflict Matrix

Project Owner: Washtenaw County Road Commission
Project No.: 190665
Project Description: Miller Road Roundabout, Resurfacing, & Bridge Replacement
Highway or Route: Miller Road & Wagner Road

Utility Conflict Matrix Developed/Revised By: AN/AJL
Date: 1/23/2020
Reviewed By:
Date:

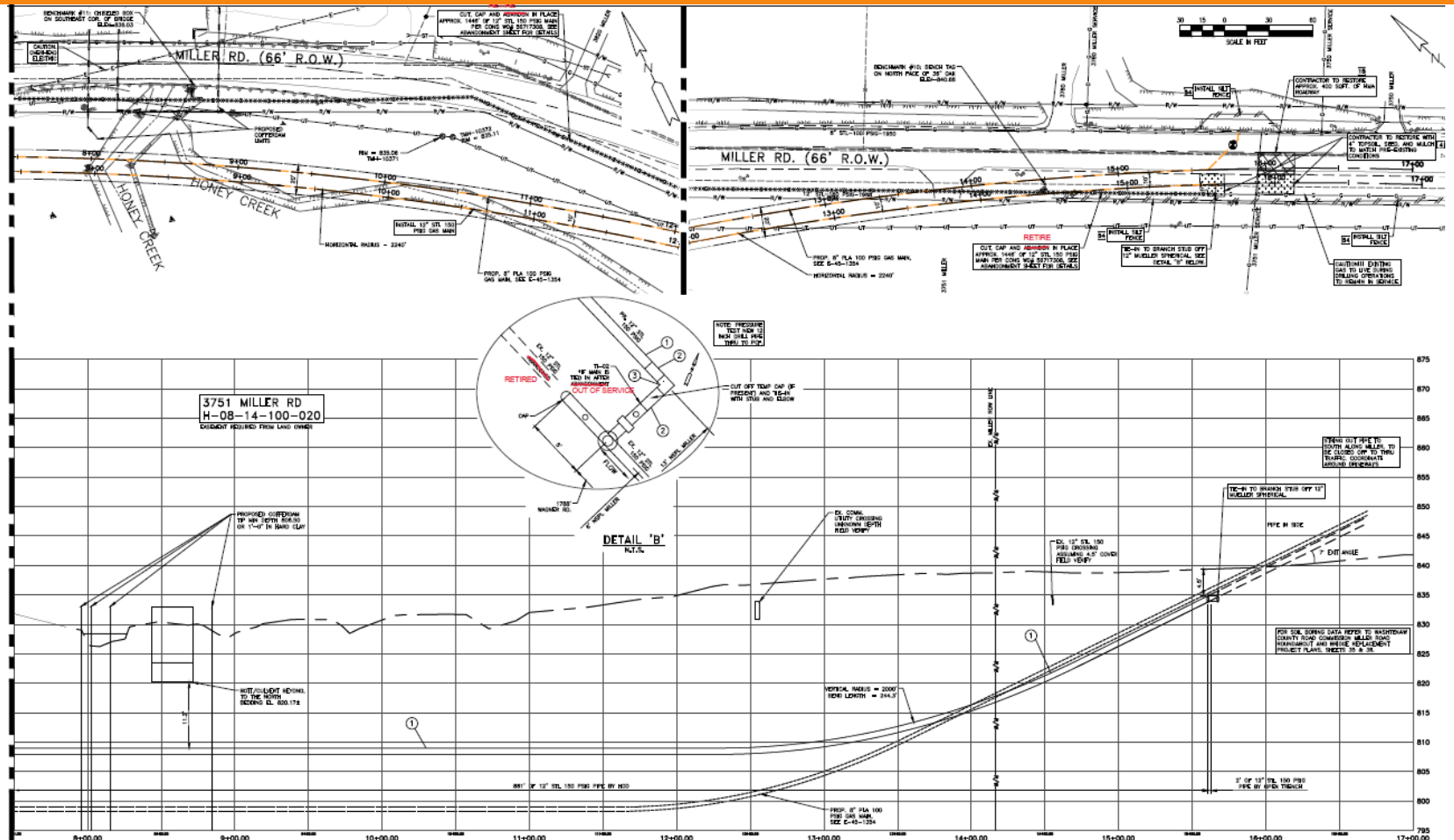
Utility Owner and/or Contact Name	Conflict ID	Drawing or Sheet No.	Utility Type	Utility Conflict Description	Start Offset	End Offset	Notes	Utility Action Needed	Test Hole	Resolution Status
DTE Gas	2	12	Buried Gas	N side of Miller Road, west and east of Honey creek	45' from N ROW	18' from N ROW	Conflict with bridge construction. Potential conflict with new roadway grading/ditching, road reconstruction, and driveway culverts.	Relocate utility	1,3,5	Utility conflict resolution strategy selected
DTE Gas	3	12	Buried Gas	S side of Miller Road, west and east of Honey creek	9' from S ROW	10' from S ROW	Conflict with bridge construction. Potential conflict with new roadway grading/ditching and road reconstruction.	Relocate utility	2,4,6	Utility conflict resolution strategy selected
Comcast CATV/AT&T	4	12	Buried Fiber Optic	S side of Miller Road, east of Honey creek	3' from S ROW	8' from S ROW	Potential conflict with roadway grading/embankment	Provide depth information	-	Utility owner informed of utility conflict
DTE Gas	20	16	Buried Gas	N side of Miller road	9' from N ROW	39' from N ROW	Potential conflict with infiltration swale on W leg (2 ft depth). During construction, excavation for trench will be ~0.75' from top of pipe. After construction, finished grade will be 2.75' to 3' above top of pipe; this may change after discrepancy of ex grades is resolved.	Advise if this is acceptable or relocate utility	-	Utility owner informed of utility conflict
DTE Electric	23	15	Overhead Electric	N Side of Miller road	7' from N ROW		Relocate existing pole	Relocate utility	-	Utility conflict resolution strategy selected
WCRC	24	15	Tornado Alert System	N Side of Miller road	5' from N ROW		Relocate pole and tornado alert system	Relocate utility	-	Utility conflict resolution strategy selected
AT&T	25	15	Electric Meter	S side of Miller road	13' from S ROW		Relocate electrical cabinet; AT&T easement is being investigated	Relocate utility	-	Utility conflict resolution strategy selected

Project Timeline



Project Timeline

Gas Relocation Plan



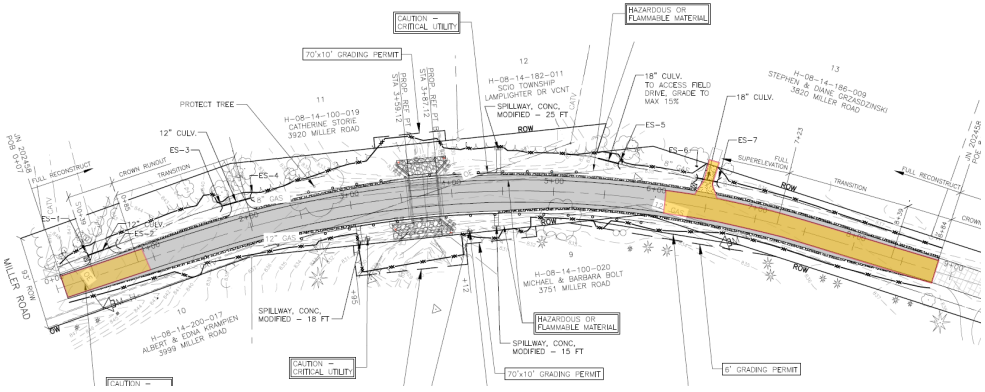
Gas Relocation: West bore pit location.

Gas Relocation: Stockpiled materials

Gas Relocation: Drill shaft for test bore.

Gas Relocation: Welding new gas lines.

Project Delayed to Following Year



Placement of Temporary Pavement

Spring 2021 Work and Completion

Lessons Learned

- Start earlier. Communicate often.
- Understand the utility design constraints.
- Determine complicating factors.
- Planning and communication can diffuse adversarial situations.

Questions

What do you tell the public when your project runs into utility delays?

COUNTY ROAD
WASHTENAW
COMMISSION