

# FAIRBORN RAW WATER LINE PROJECT

DOUG MAYO

RESIDENT PROJECT REPRESENTATIVE

AECOM

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## Fairborn:

Population 32,352 (2010)

Located in Greene County

Dayton Metropolitan Area



Home to:  
Wright-Patterson Air Force Base  
Wright State University  
Calamityville

The AECOM logo is located in the bottom left corner. It consists of the word "AECOM" in a bold, black, sans-serif font. The letter "E" is stylized with a horizontal bar that is colored with a gradient from blue to green.

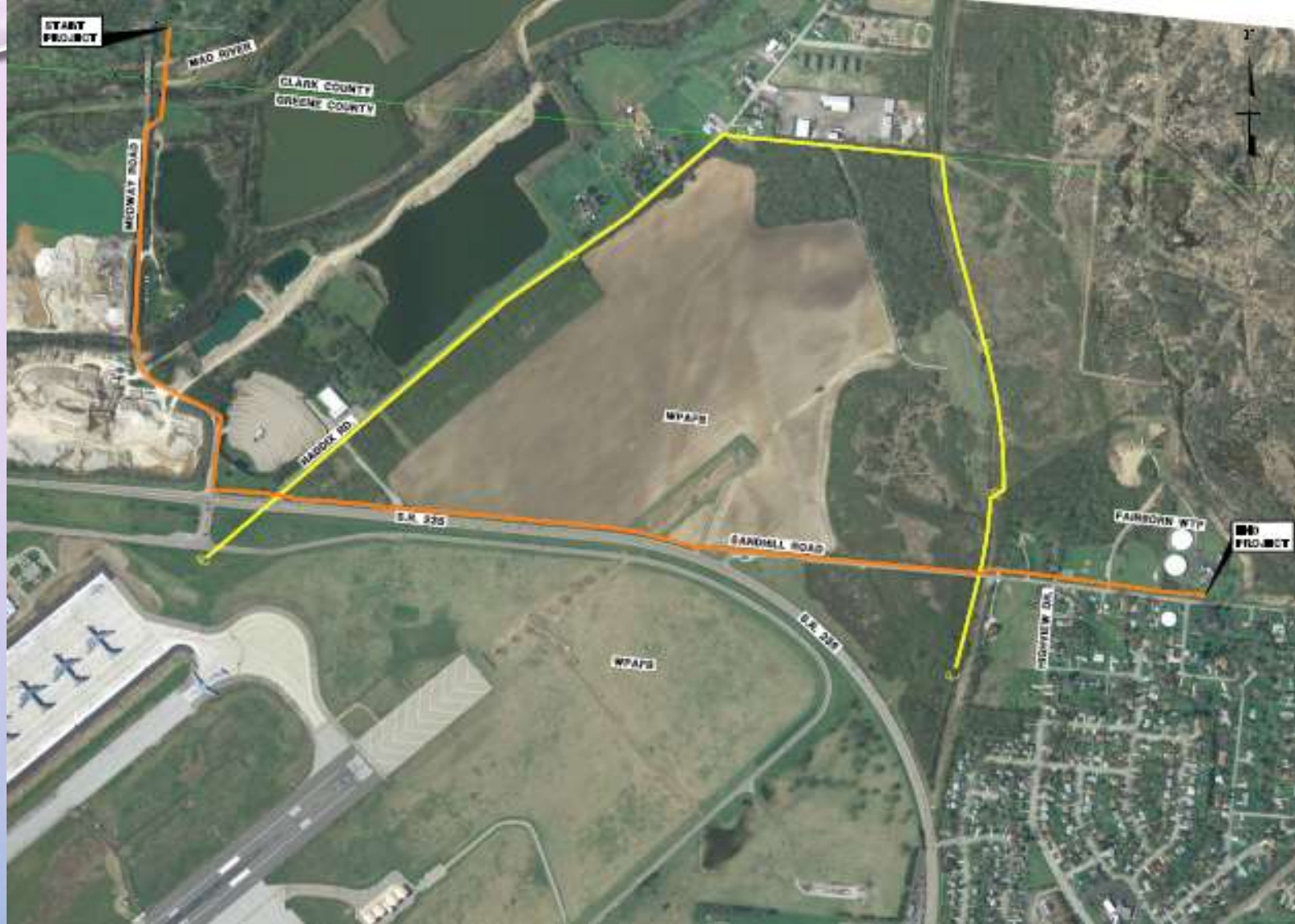


Water Treatment Plant:  
Groundwater  
Iron Removal  
Chlorine  
Fluoride

ADD = 2.5 to 3.0 MGD



- Wellfield almost 2 miles from WTP
- Only raw water line is 20-inch concrete
- City not equipped to repair concrete
- Concerns about disruption



## Proposed Project

- 9,700 feet 18 inch DI pipe
- Tribute Contracting and Consulting,  
South Point, OH
- Bid Price: \$1,885,506.00
- Engineers: AECOM Columbus Office



## Project Highlights:

- Wellfield is in Clark County
- Wellfield tie-in is 18-inch concrete
- 2 streams to bore under
- Crossing through WPAFB
- Cross existing 20-inch concrete 7 times
- Bath Township Roads to be restored
- Numerous utility crossings





Starting at the wellfield

**TIE-IN TO  
EXISTING  
CONCRETE PIPE  
AT THE  
WELLFIELD**







Worked at night

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Existing valve to be  
replaced





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Cutting Pipe at elbow

Cutting pipe at elbow







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Elbow removed, draining water



Un-bolted existing valve





Removed the pipe



Setting vault for  
new valve







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Concrete adaptors





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Concrete adaptor on existing concrete pipe





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Connecting to existing concrete









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Sealing concrete pipe joint



# Installing Tee between 3 valve vaults

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Pouring concrete for  
blocking





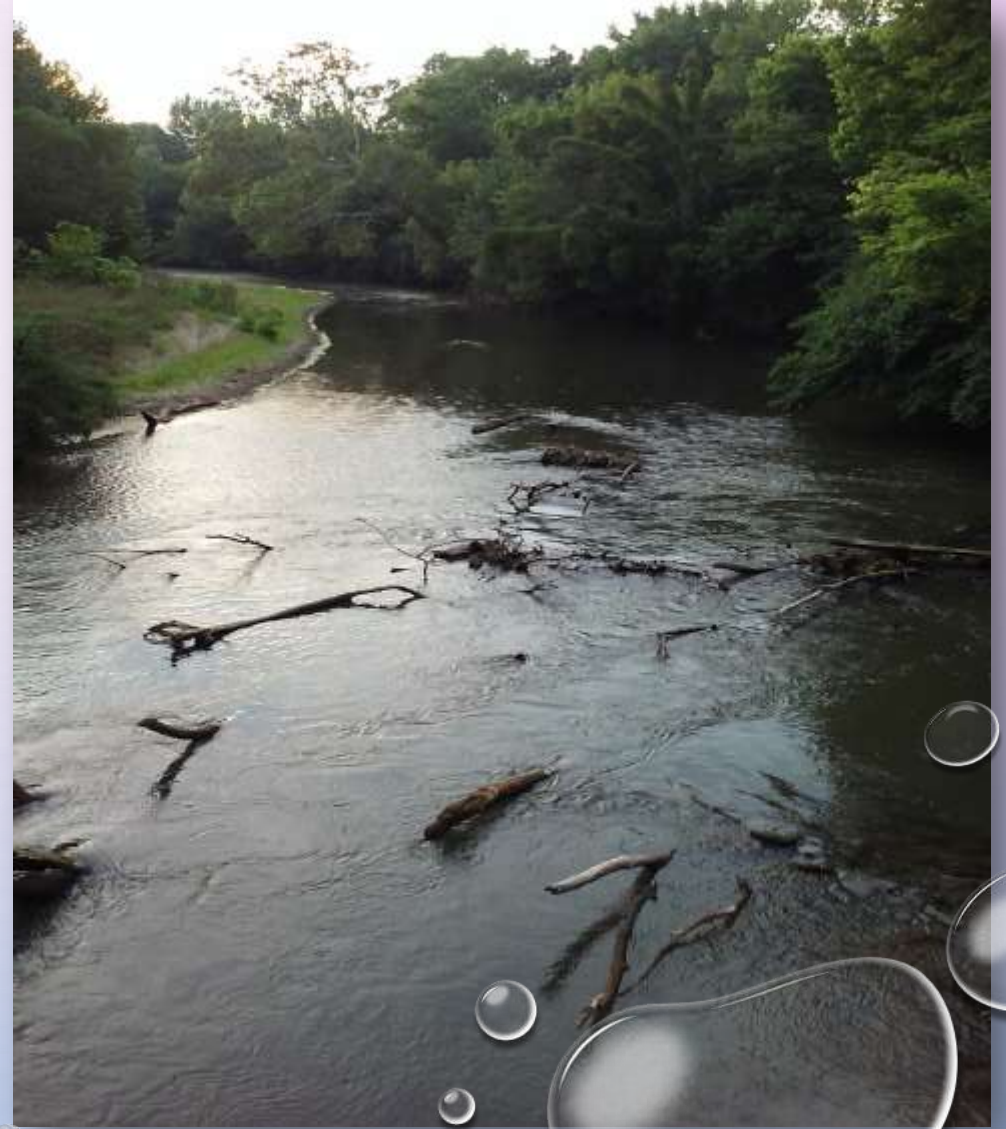


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Finished Grade



# BORING UNDER MAD RIVER



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PRECISE BORING  
OF OHIO

LANCASTER







## Locating Marathon Pipeline





Directional Boring machine



Bore length was specified  
for 489 feet







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4 sizes of reamers





Start with 16 inches

16-inch hole with vac







32 inches



30 inches



# Larger Boring Machine







Segments and Retainers to hold pipe together

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Pipe joints connected with Segments  
and Retainers



Starting to pull pipe





Pulling pipe







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Helping push pipe through



Pulling with boring machine





Pipe is pulled all the way  
through





Connect to another valve  
vault





# MEDWAY ROAD



Moving toward Medway Rd.  
through gate at Rod & Gun  
Club







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Crossing existing 20-inch concrete pipe



On Medway Rd.

Continued for about  
1,300 feet to next stream  
crossing

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Setting up bore for Mud Run





Mud Run Bore was 103 feet

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Only needed 18 and 26 inch reams on this bore





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Connecting pipe





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Pulling pipe



Pulling pipe





Connected to pipe  
in Medway Rd.





Crossing Medway  
Rd. underneath of  
20-inch concrete  
pipe







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Continuing on Medway Rd.





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Medway Rd.



**AT SR 235**





Crossing under  
20-inch concrete  
pipe at SR 235







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Installed manual ARV



Passing the drive-  
in theater







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Between a sign and power pole



Crossing Haddix Rd.



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Crossing under 20-inch concrete again





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Closed one lane of traffic; across from WPAFB







# Petroleum pipeline to WPAFB







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Crossing under BPL



Parallel to sanitary sewer







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Near the runway lights





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Crossing under electric for runway lights





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Starting on Sandhill Rd.





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Tee for Automatic ARV



# Automatic ARV





## Automatic ARV manhole







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Crossing under 20-inch concrete pipe again



Continuing on Sandhill Rd. in  
front of 3 houses





# SANDHILL PARK







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Trees needed to be trimmed at Sandhill Park



Finished grade at  
Sandhill Park







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Almost to the Water Treatment Plant



Crossing under electric for  
WTP and BPS





Struck 24-inch concrete line







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24-inch concrete repair



Crossing under 24-inch  
concrete







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Moving inside fence of WTP



Lots of rocks!





# Manhole for Chlorine Injector





WTP tie-in at night









Existing 16-inch  
valve and plug





# Connecting New line to Existing line





Fire Hydrant for flushing







Pressure Test



# RESTORATIONS





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Rod & Gun Club





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Rod & Gun Club



Medway Rd. with a new chip  
and seal finish







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Hydroseed Company



Hydroseed along SR 235





New pavement on Sandhill Rd.







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Rock hound at Sandhill Park



## Seed and Mulch





Field Office is For Sale





Any  
Questions?

