FY2022 Drinking Water Revolving Fund Public Meeting June 23, 2021

Ypsilanti Pump Station Improvements Project





Topics

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 - b) Site Location
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Project Overview

Ypsilanti Pump Station (YPS) System

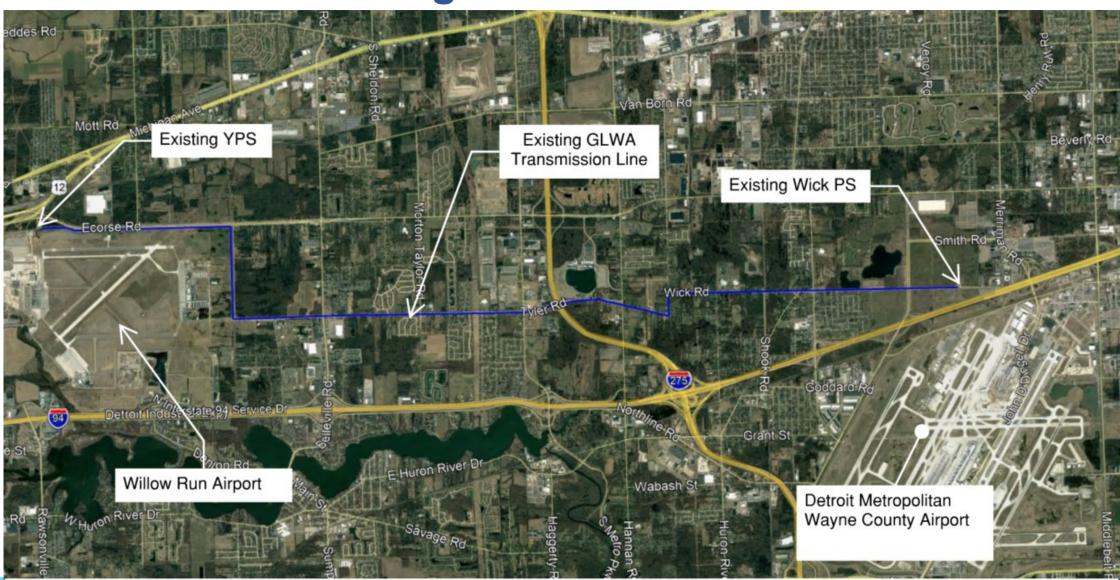
- YPS boosts the water pressure from the Wick Road PS in the southwest portion of the GLWA system
- YPS Capacity:
 - Firm: 36 million gallons per day (mgd)
 - Installed: 56 mgd
- Construction in mid 1980's to replace older temporary PS
- Mid-1990's connection to Joy Road PS was added
- The YPS pumps and associated equipment have reached the end of their useful lives

Ypsilanti Study Area

- YPS provides water to the Ypsilanti Community Utilities Authority (YCUA) who services customers in southwest area of GLWAs system
 - City of Ypsilanti
 - Ypsilanti Township
 - Augusta Township
 - Pittsfield Township
 - Superior Township
- Other communities in the study area not served by YPS
 - York Township
 - Willow Run Airport
 - Cape Apartment in Van Buren Township
 - City of Ann Arbor
- Total Potential Service Area Population 290K



Existing YPS Site Location



Improvement Alternatives

- Alternative 1 No Action: This alternative would not rehabilitate or improve the existing YPS
- *Alternative 2 Preplace the existing PS on the current site*
- Alternative 3 Replace the existing PS near the Wick Road PS This alternative would replace both the YPS and Wick Road PS.
- Alternative 4 Replace the existing PS on a new site on a portion of the Willow Run Airport





Alternatives Evaluation

Functional Requirement	Alternative 1: No Action	Alternative 2: New YPS Within The Current Property Boundary	Alternative 3: New Combined PS To Replace Existing Wick Road PS and Ypsilanti PS	Alternative 4: New YPS Northwest Corner of Beck Road and D Street
No. 1 Property Acquisition	•		•	
No. 4 Hydraulics/System Operations	0			•
No. 5 Sewer/Utilities Access				
No. 6 Constructability	0		•	
No. 9 Wetlands Issues	•	•		
No. 10 Environmental Issues	•	•	•	
No. 11 JHA Items		•	•	
No. 12 Expandability	•	•	•	•
Average Score	3.25	3.4	3.5	4.0
Scale	= 1		= 2	= 3

Selected Alternative – Alternative 4

Alternative 4 was the selected alternative because it meets each functional requirement for GLWA now and in the future.

Alternative 3 can provide flow and pressure under existing conditions and combines two stations into one. However, this combined station is limited by the transmission system which would limit future expansion requiring a new PS near the current YPS location at some future time.



Estimate Project Costs

Summary of Cost			
	Alternative 4:		
Cost Item	Construct New YPS at D Street and Beck Road		
Construction Cost*	\$35 Million		
Estimate Range*	\$17.5 - \$70 Million		
Design/Planning Cost	\$3,000,000		
Construction Administration	\$700,000		

^{*}Based on an AACE Class 5 Estimate with an accuracy range of -50% to +100%

Implementation Schedule

Project Activity	Project Milestone	
Post Draft DWRF Project Plan and Public Hearing Notice	May 17, 2021	
(Start of 30-Notice Period)		
Public Hearing	June 23, 2021	
Submit Project Plan to EGLE	July 1, 2021	
Design Complete and Bidding Begins	March 2022	
Start of Construction Phase 1	November 2022	
Complete Construction	April 2025	



