



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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BRUCE RAUNER, GOVERNOR

LISA BONNETT, DIRECTOR

Project Summary and Preliminary Environmental Impacts Determination

Date: MAY 10 2016

Loan Applicant: Village of Frankfort, IEPA Loan Project Number: L175388

To all interested persons:

Section 365.530 of the Illinois Procedures for Issuing Loans from the Water Pollution Control Loan Program requires that the Illinois Environmental Protection Agency (IEPA) conduct an assessment of the environmental impacts of proposed wastewater projects to be funded with loans. This review is carried out in conjunction with the State's review of the applicant's facilities plan.

Prior to final approval of the facilities plan, the public's comments are sought regarding environmental impacts of the proposed project. Unless new information obtained through the public comment process causes reconsideration, the Agency will approve the facilities plan at the close of the public comment period.

The applicant will make the attached Project Summary and Preliminary Environmental Impacts Determination (PEID) available for public inspection. Within 60 days of receiving this letter, the applicant must conduct a public hearing regarding both the PEID and facilities planning. Advertisement of the hearing must be made at least 10 days in advance. The advertisement must include the purpose of the project along with the date, time, and location of the hearing. A comment period of at least 10 days shall be provided after the hearing in which written comments may be submitted to the loan applicant or to the IEPA contact person identified in the attached document.

For information purposes only, a copy of this document is being provided to your local newspaper.

Your participation in this process is appreciated.

Sincerely,

Heidi Allen
Pre-Construction Unit Manager
Infrastructure Financial Assistance Section
Bureau of Water

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Attachment

Project Summary and Preliminary Environmental Impacts Determination (PEID)

Information in this report was obtained, in part, from the following source: Village of Frankfort, Illinois Facilities Planning Report written by Baxter & Woodman dated March 2015 and a revised Village of Frankfort Facilities Planning Report dated September 10, 2015. Additional documentation was obtained from loan application documents and compiled by the Illinois Environmental Protection Agency.

Part I – Applicant and Project Information

Loan Applicant: Village of Frankfort

Project Name: Wastewater Treatment Plant (WWTP) Consolidation Project

County: Cook, Will

Project Loan Numbers: L175388

Current Population: 40,000

Future Population (20 years): 50,000

Project Description: Wastewater treatment operations at the City's three WWTP's will be consolidated at the Regional WWTP. Consolidation will be broken down into several projects. Projects 1 (North and West Pump Stations), 2 (WWTP Preliminary Treatment Building and Lab Building), 3A (Regional WWTP Excess Flow Storage Pond and Return Pump Station), 3B (West Excess Flow Force Main), 7A (North WWTP and West WWTP Abandonment), and 7B (North Excess Flow Storage Pond) were covered under a Categorical Exclusion for Project Loan Number L175363 dated March 2, 2016.

Project 4 involves the construction of the Hickory Creek Pump Station and Force Main. The North WWTP will be demolished as part of Project 7A. Due to the demolition of the North WWTP, the North Pump Station will need to pump the wastewater to the Regional WWTP via the updated Hickory Creek Pump Station. The existing Hickory Creek Pump Station is too small to handle this additional flow. A new, larger pump station will be constructed under this project to replace the existing station. The Hickory Creek Pump station will discharge into two force mains: an existing force main that runs to the Regional WWTP Headworks, and a new force main that will run to the Regional Excess Flow Storage Pond. The updated Hickory Creek Pump Station will be a submersible pump station. It will have a cast-in-place concrete wet well/valve vault, five submersible pumps, ductile iron discharge pipe and fittings, valves, standby generator and enclosure, and a new electric service.

Project 5 involves the construction of the Union Ditch Force Main (North PS Force Main) and interceptor sewer. This new force main and interceptor sewer will transport wastewater from the new North Pump Station's dry weather flow pumps. The force main will extend from the North Pump Station to the interceptor sewer. The interceptor sewer will discharge into an existing

interceptor sewer that is tributary to the Hickory Creek Pump Station. The Hickory Creek Pump Station pumps to the Regional WWTP.

Project 6 involves the expansion of the Regional WWTP. The Regional WWTP capacity will be expanded from 3.0 million gallons per day (MGD) to 4.67 MGD. The upgrades at the Regional WWTP will include adding a centrifuge for solids-handling redundancy, new RAS/WAS pumps, and a new dewatered sludge storage pad. There will be an additional tertiary filter installed for treatment. This project will also include replacing and adding aerators in the oxidation ditch, replacing the UV disinfection system, replacing aerobic digester diffusers and blowers, odor control system upgrades, non-potable water system upgrades, scum pump control modifications, hydraulic improvements, and replacing dated pipes, valves, and electrical. Frankfort plans to construct additional aerobic digesters as part of this project. An NPDES Modification is required to increase the treatment capacity of the Regional WWTP from 3.0 MGD to 4.67 MGD.

Project Location: See attached map.

Project Justification: There are major operational concerns with equipment failure at the North WWTP. This is due to the age of the plant. Electrical components are antiquated and replacement of many electrical parts is needed. There have also been issues in the past with meeting required ammonia limits. In addition, the raw sewage pump station located at the North WWTP is corroded and leaking. The West WWTP also has major operational issues. The West WWTP struggles to maintain its ammonia limits and has had exceedances of its chloride limits. Many electrical components at the West WWTP are antiquated and replacement is recommended. The Regional WWTP has consistently met effluent limits. The only concern at the Regional WWTP is related to grit accumulation in tanks, hydraulic challenges, and sludge thickening equipment. These will all be addressed within project 6. By abandoning the North and West WWTP and combining them at the Regional WWTP, the treatment process will be improved and more efficient.

Estimated Construction Start/Completion Dates:

Project	Project Name	Start Construction	Complete Construction
4	Hickory Creek Pump Station and Force Main	May 2017	December 2018
5	Union Ditch Force Main and Interceptor Sewer	May 2017	May 2018
6	Regional WWTP Improvements	May 2017	December 2018

Project Cost Estimate: All 3 projects \$32,935,250.00

Part II – Project Affordability for Residents and Utility Customers

The applicant is proposing to finance the project costs with a loan from the Water Pollution Control Loan Program (WPCLP). The current interest rate for fiscal year 2016 is 1.86%. Three different projects are proposed. Some projects are anticipated to receive funding in fiscal year 2017 which would have a slightly different interest rate from that of 2016. Annual repayments, based on the fiscal year 2016 interest rate of 1.86%, on a WPCLP loan in the amount of \$32,935,250.00 for the three projects (Project 4, 5, and 6) for a term of twenty (20) years would be approximately \$1,973,268.00. Future loans would be subject to the interest rate in effect at time of loan issuance.

Source of Loan Repayment:

A rate increase to monthly user fees of varying percentages ranging from 10% to 20% is proposed through 2020. For FY2016/2017, a 10% rate increase was approved in February 2016. Beyond FY2019/2020, only inflationary rate increases should be necessary each year to adjust for increases in the costs of labor, commodities and contractual services. See table below for proposed rate increases.

Fiscal Year	2016/2017	2017/2018	2018/2019	2019/2020	2020/2021
% Rate Change	10%	15%	20%	20%	3%
Sewer per 1,000 gallons	\$4.72	\$5.43	\$6.51	\$7.81	\$8.05
Average Residential Sewer Bill for 7,429 gallons	\$35.06	\$40.34	\$48.36	\$58.02	\$59.80

Current Average Monthly Residential Cost of Service: \$31.87

Projected Average Monthly Residential Cost of Service: See above table

Average Monthly Residential Water Use: 7,429 gallons

Number of Customers or Service Connections: 11,943 customers

How is the monthly residential rate/cost of service calculated? Current monthly charges include: \$4.29 per 1,000 gallons x 7.429 (average use of sewer) = \$31.87 per month average use

Proposed monthly charges include: FY2016/2017: \$4.72 per 1,000 gallons x 7.429 (average use of water) = \$35.06 (Proposed rate increases from above table can be added into this formula to determine how future year's rates are determined)

Median Household Income (MHI): \$99,227

Percentage of MHI needed to pay the projected average annual residential cost of service:

0.42%

Annual Cost of Service/MHI is an affordability ratio used by IEPA. If less than 2% of the median household income is required to pay the average, annual residential user rate, the project is considered affordable by IEPA standards.

Part III – Environmental Review and Impacts

The project has been reviewed by the IL Historic Preservation Agency (IHPA) for compliance with the National Historic Preservation Act, Section 106. IHPA's review indicated that negative impacts to historical or archaeological resources are not expected as a result of this project. The project was also reviewed by the Illinois Department of Natural Resources (IDNR) to determine compliance with the IL Endangered Species Act, IL Natural Areas Preservation Act, and the IL Wetlands Act. IDNR's review found that adverse impact to rare or endangered species of animals and plants; natural areas; nature preserves; or wetlands are unlikely.

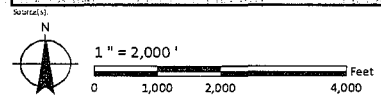
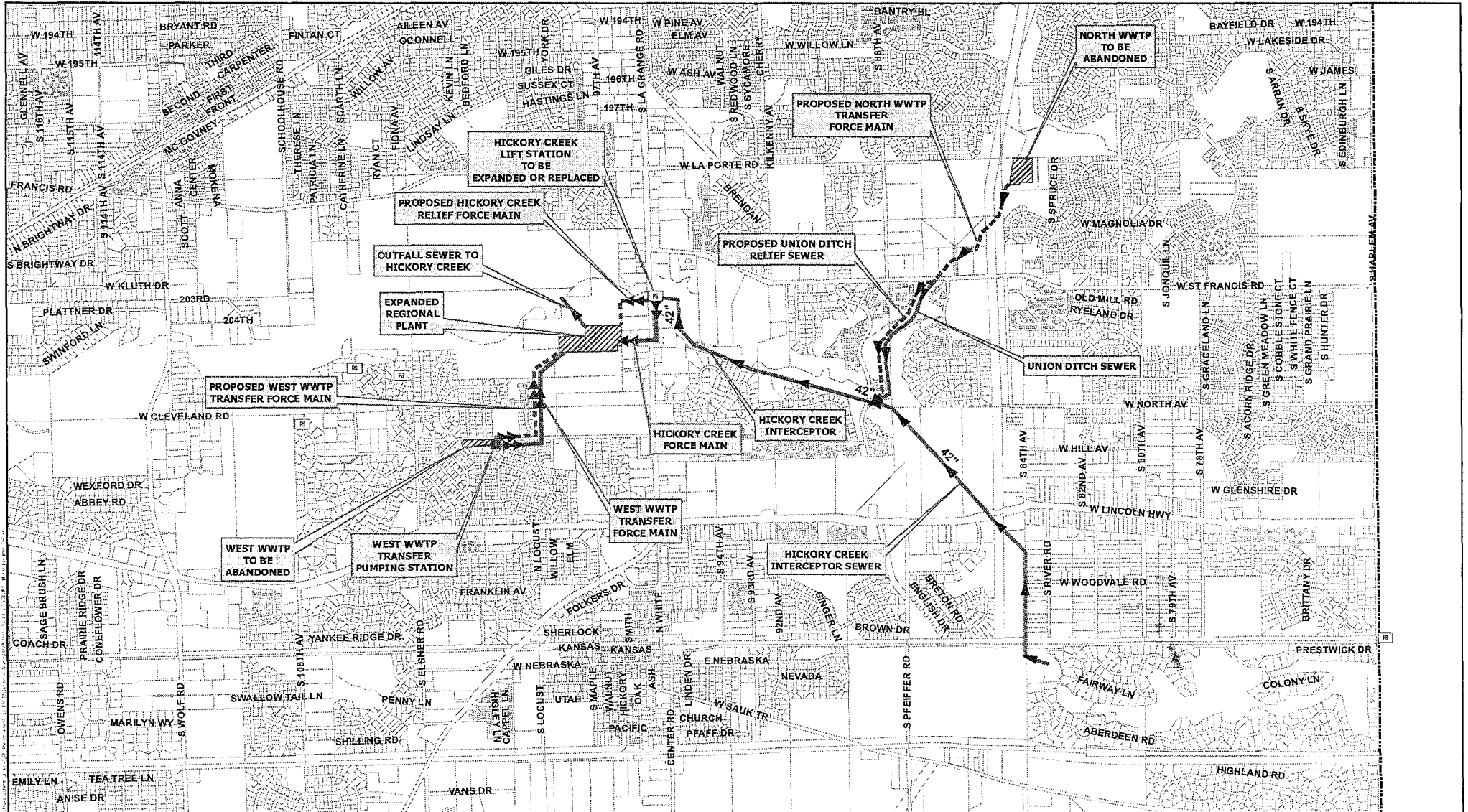
Some construction will occur at or near a body of water that will require a review/sign-off from the U.S. Army Corps of Engineers (ACOE). Detailed plans and specifications for Projects 4, 5, and 6 will be submitted to ACOE when the design is complete. Any required protective measures that need to be implemented and maintained throughout the process of the project will be completed. Planning approval for this project cannot be obtained until a sign-off is received from the ACOE.

Public comments are invited on the proposed project. For further information contact:

Lanina Clark, Project Manager
Infrastructure Financial Assistance Section
Illinois Environmental Protection Agency
Bureau of Water
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-2027

NORTH & WEST WWTP ROUTING STUDY

COLLECTION SYSTEM IMPROVEMENTS TO CONSOLIDATE ALL WASTEWATER TREATMENT AT THE REGIONAL WWTP VILLAGE OF FRANKFORT, ILLINOIS



- | | | | |
|----------------|---------------------|---------------------|---------------|
| Existing Sewer | Existing Force Main | Lift Station | Existing WWTP |
| Proposed Sewer | Proposed Force Main | Proposed Structures | Proposed WWTP |