



State of Ohio  
**Public Works Commission**  
*Application for Financial Assistance*

IMPORTANT: Please consult "Instructions for Financial Assistance for Capital Infrastructure Projects" for guidance in completion of this form.

**Applicant**

Applicant: Village of Bradner Subdivision Code: 173-08112  
 District Number: 5 County: Wood Date: 08/28/2019  
 Contact: Virgil Shull, Mayor Phone: (419) 288-2890  
(The individual who will be available during business hours and who can best answer or coordinate the response to questions)  
 Email: virgilshull@gmail.com FAX: (419) 288-0053

**Project**

Project Name: Caldwell Street Elevated Storage Tank Rehabilitation Zip Code: 43406

Subdivision Type	Project Type	Funding Request Summary
<small>(Select one)</small>	<small>(Select single largest component by \$)</small>	<small>(Automatically populates from page 2)</small>
<input type="checkbox"/> 1. County	<input type="checkbox"/> 1. Road	Total Project Cost: <u>129,070 .00</u>
<input type="checkbox"/> 2. City	<input type="checkbox"/> 2. Bridge/Culvert	1. Grant: <u>64,535 .00</u>
<input type="checkbox"/> 3. Township	<input checked="" type="checkbox"/> 3. Water Supply	2. Loan: <u>0 .00</u>
<input checked="" type="checkbox"/> 4. Village	<input type="checkbox"/> 4. Wastewater	3. Loan Assistance/ Credit Enhancement: <u>0 .00</u>
<input type="checkbox"/> 5. Water (6119 Water District)	<input type="checkbox"/> 5. Solid Waste	Funding Requested: <u>64,535 .00</u>
	<input type="checkbox"/> 6. Stormwater	

**District Recommendation** (To be completed by the District Committee)

<u>Funding Type Requested</u> <small>(Select one)</small>	SCIP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> State Capital Improvement Program	RLP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> Local Transportation Improvement Program	Grant:	Amount: _____ .00
<input type="checkbox"/> Revolving Loan Program	LTIP:	Amount: _____ .00
<input type="checkbox"/> Small Government Program	Loan Assistance / Credit Enhancement:	Amount: _____ .00
District SG Priority: _____		

**For OPWC Use Only**

<u>STATUS</u>	Grant Amount: _____ .00	Loan Type: <input type="checkbox"/> SCIP <input type="checkbox"/> RLP
Project Number: _____	Loan Amount: _____ .00	Date Construction End: _____
	Total Funding: _____ .00	Date Maturity: _____
Release Date: _____	Local Participation: _____ %	Rate: _____ %
OPWC Approval: _____	OPWC Participation: _____ %	Term: _____ Yrs

**1.0 Project Financial Information** (All Costs Rounded to Nearest Dollar)

**1.1 Project Estimated Costs**

Engineering Services

Preliminary Design:	_____	.00	
Final Design:	<u>8,600</u>	.00	
Construction Administration:	<u>16,000</u>	.00	
Total Engineering Services:	a.)	<u>24,600</u>	.00 <u>27</u> %
Right of Way:	b.)	_____	.00
Construction:	c.)	<u>90,420</u>	.00
Materials Purchased Directly:	d.)	_____	.00
Permits, Advertising, Legal:	e.)	<u>5,000</u>	.00
Construction Contingencies:	f.)	<u>9,050</u>	.00 <u>10</u> %
Total Estimated Costs:	g.)	<u>129,070</u>	.00

**1.2 Project Financial Resources**

Local Resources

Local In-Kind or Force Account:	a.)	_____	.00
Local Revenues:	b.)	<u>64,535</u>	.00
Other Public Revenues:	c.)	_____	.00
ODOT / FHWA PID: _____	d.)	_____	.00
USDA Rural Development:	e.)	_____	.00
OEPA / OWDA:	f.)	_____	.00
CDBG:	g.)	_____	.00
<input type="checkbox"/> County Entitlement or Community Dev. "Formula"			
<input type="checkbox"/> Department of Development			
Other: _____	h.)	_____	.00
Subtotal Local Resources:	i.)	<u>64,535</u>	.00 <u>50</u> %

OPWC Funds (Check all requested and enter Amount)

Grant: <u>100</u> % of OPWC Funds	j.)	<u>64,535</u>	.00
Loan: <u>0</u> % of OPWC Funds	k.)	_____	.00
Loan Assistance / Credit Enhancement:	l.)	<u>0</u>	.00
Subtotal OPWC Funds:	m.)	<u>64,535</u>	.00 <u>50</u> %
Total Financial Resources:	n.)	<u>129,070</u>	.00 <u>100</u> %

### 1.3 Availability of Local Funds

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local resources required for the project will be available on or before the earliest date listed in the Project Schedule section. The OPWC Agreement will not be released until the local resources are certified. Failure to meet local share may result in termination of the project. Applicant needs to provide written confirmation for funds coming from other funding sources.

### 2.0 Repair / Replacement or New / Expansion

2.1 Total Portion of Project Repair / Replacement:	_____ 129,070 .00	_____ 100 %
2.2 Total Portion of Project New / Expansion:	_____ 0 .00	_____ 0 %
2.3 Total Project:	_____ 129,070 .00	_____ 100 %

A Farmland Preservation letter is required for any impact to farmland

### 3.0 Project Schedule

3.1 Engineering / Design / Right of Way	Begin Date: <u>01/01/2020</u>	End Date: <u>06/01/2020</u>
3.2 Bid Advertisement and Award	Begin Date: <u>06/01/2020</u>	End Date: <u>07/01/2020</u>
3.3 Construction	Begin Date: <u>07/01/2020</u>	End Date: <u>07/01/2021</u>

Construction cannot begin prior to release of executed Project Agreement and issuance of Notice to Proceed.

Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by project official of record and approved by the Commission once the Project Agreement has been executed.

### 4.0 Project Information

If the project is multi-jurisdictional, information must be consolidated in this section.

#### 4.1 Useful Life / Cost Estimate / Age of Infrastructure

Project Useful Life: 40 Years      Age: 1991 (Year built or year of last major improvement)

*Attach Registered Professional Engineer's statement, with seal or stamp and signature confirming the project's useful life indicated above and detailed cost estimate.*

#### 4.2 User Information

Road or Bridge:      Current ADT \_\_\_\_\_ Year \_\_\_\_\_      Projected ADT \_\_\_\_\_ Year \_\_\_\_\_

Water / Wastewater: Based on monthly usage of 4,500 gallons per household; attach current ordinances.

Residential Water Rate      Current \$ 52.66      Proposed \$ \_\_\_\_\_

Number of households served: 232

Residential Wastewater Rate      Current \$ 14.25      Proposed \$ \_\_\_\_\_

Number of households served: 232

Stormwater:      Number of households served: 0

### 4.3 Project Description

- A: SPECIFIC LOCATION (Supply a written location description that includes the project termini; a map does not replace this requirement.) 500 character limit.

The Village's Elevated Storage Tank is located along Caldwell Street near the Water Treatment Plant.

- B: PROJECT COMPONENTS (Describe the specific work to be completed; the engineer's estimate does not replace this requirement) 1,000 character limit.

The Village's Elevated Storage Tank is located along Caldwell Street near the Water Treatment Plant. The Village is proposing to address coating deterioration with spot interior and exterior recoating of this 150,000 gallon elevated tank as well as replacement of the roof vent, installation of a mud valve, aluminum jacketing over the fill pipe insulation, a screened flap gate on the overflow pipe, a ladder extension at the condensate platform and replace the baseball door frame.

- C: PHYSICAL DIMENSIONS (Describe the physical dimensions of the existing facility and the proposed facility. Include length, width, quantity and sizes, mgd capacity, etc in detail.) 500 character limit.

1 LS Install new frost free pressure vacuum vent on roof  
1 LS Install a ladder extension at the condensate platform and handhold at wet interior roof hatch and access tube roof hatch  
1 LS Install aluminum jacketing over the fill pipe insulation  
1 LS Install a mud valve in wet interior  
1 LS Install flapper valve and screen on overflow pipe  
1 LS Replace Baseball Door Frame  
1 LS Pressure wash exterior and recoat with Polyurethane System Spot abrasive clear to top of platform and dry interior.

## 5.0 Project Officials

Changes in Project Officials must be submitted in writing from an officer of record.

### 5.1 Chief Executive Officer

(Person authorized in legislation to sign project agreements)

Name: Virgil Shull, Jr.

Title: Mayor

Address: 130 North Main Street

City: Bradner State: OH Zip: 43406

Phone: (419) 288-2890

FAX: (419) 288-0053

E-Mail: virgilshull@gmail.com

### 5.2 Chief Financial Officer

(Can not also serve as CEO)

Name: Krestan Kaminiski

Title: Fiscal Officer

Address: 130 North Main Street

City: Bradner State: OH Zip: 43406

Phone: (419) 288-2890

FAX: (419) 288-0053

E-Mail: bradnero@woh.rr.com

### 5.3 Project Manager

Name: Virgil Shull, Jr.

Title: Mayor

Address: 130 North Main Street

City: Bradner State: OH Zip: 43406

Phone: (419) 288-2890

FAX: (419) 288-0053

E-Mail: virgilshull@gmail.com

## 6.0 Attachments / Completeness review

Confirm in the boxes below that each item listed is attached (Check each box)

- A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- A certification signed by the applicant's chief financial officer stating the amount of all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (R/LP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's seal or stamp and signature.
- A cooperative agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- Farmland Preservation Review - The Governor's Executive Order 98-IV, "Ohio Farmland Protection Policy" requires the Commission to establish guidelines on how it will take protection of productive agricultural and grazing land into account in its funding decision making process. Please include a Farm Land Preservation statement for projects that have an impact on farmland.
- Capital Improvements Report, CIR Required by O.R.C. Chapter 164.06 on standard form.
- Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your local District Public Works Integrating Committee.

## 7.0 Applicant Certification

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

**Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.**

Virgil Shull, Jr., Mayor

Certifying Representative (Printed form, Type or Print Name and Title)

  
Original Signature / Date Signed

**RESOLUTION 03-2019**

A RESOLUTION AUTHORIZING THE MAYOR TO PREPARE AND SUBMIT AN APPLICATION TO PARTICIPATE IN THE OHIO PUBLIC WORKS COMMISSION STATE CAPITAL IMPROVEMENT AND / OR LOCAL TRANSPORTATION IMPROVEMENT PROGRAM(S) AND TO EXECUTE CONTRACTS AS REQUIRED AND DECLARING AN EMERGENCY

WHEREAS, the State Capital Improvement Program and the Local Transportation Improvement Program both provide financial assistance to political subdivisions for capital improvements to public infrastructure, and

WHEREAS, the Village of Bradner is planning to make capital improvements to Water Tower Rehabilitation and

WHEREAS, the infrastructure improvement herein above described is considered to be a priority need for the community and is a qualified project under the OPWC programs,

NOW THEREFORE, BE IT RESOLVED by Village of Bradner:

Section 1: The *Mayor* is hereby authorized to apply to the OPWC for funds as described above.

Section 2: *The Mayor* is authorized to enter into any agreements as may be necessary and appropriate for obtaining this financial assistance.

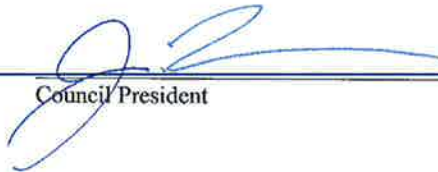
Section 3: That this Resolution is an emergency measure and shall go into immediate effect on its passage. The reason for the emergency is that the deadline for submitting this Ohio Public Works Grant Application is September 6, 2019.

Passed: September 5, 2019

ATTEST:



Village Fiscal Officer



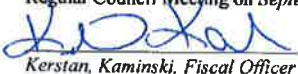
Council President

APPROVED:



Mayor

I, *Kerstan Kaminski*, Fiscal Officer of Council for the Village of Bradner, hereby certify that the foregoing is a true and accurate copy of Resolution 03-2019 duly passed by the Council for the Village of Bradner at our Regular Council Meeting on September 5, 2019



*Kerstan Kaminski*, Fiscal Officer

# Village of Bradner

130 North Main Street - Box 599  
Bradner, Ohio 43406  
Telephone (419) 288-2890  
Fax (419) 288-0053

September 6, 2019

I, Kerstan Kaminski, Fiscal Officer of the Village of Bradner, hereby certify that Village of Bradner has the amount of \$64,535 in the Water Capital fund and that this amount will be used to pay the local for the Water Tower Rehabilitation when it is required.

  
\_\_\_\_\_  
Kerstan Kaminski, Fiscal Officer



1899-1999

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**Poggemeyer Design Group, Inc.**  
**Caldwell Street Elevated Storage Tank Rehabilitation**  
**Bradner, Ohio**  
**27-Aug-19**

Ref. No.	Description	Probable Quantity	Unit	Total Cost
<b>REHABILITATION</b>				
1	Install new frost free pressure vacuum vent on roof	1	LS	\$6,250.00
2	Install a ladder extension at the condensate platform and handhold at wet interior roof hatch and access tube roof hatch	1	LS	\$1,000.00
3	Install aluminum jacketing over the fill pipe insulation	1	LS	\$3,150.00
4	Install a mud valve in wet interior	1	LS	\$4,160.00
5	Install flapper valve and screen on Overflow Pipe	1	LS	\$2,080.00
6	Replace Baseball Door Frame	1	LS	\$2,080.00
7	Install braces at painters rail butt joints	1	LS	\$1,050.00
8	Pressure wash exterior and recoat with Polyurethane System	1	LS	\$52,000.00
9	Spot abrasive clean to top of platform and dry interior. Apply spot epoxy coating system			\$15,500.00
10	Blast clean pit piping and apply epoxy system			\$3,150.00
Subtotal Probable Construction Cost				\$90,420.00
Contingency (10%)				\$9,050.00
<b>Total Probable Construction Cost</b>				<b>\$99,470.00</b>
<b>Technical Services:</b>				
Final Engineering				\$6,400.00
Bidding				\$2,200.00
Construction Eng./Adm.				\$2,500.00
Construction Observation (part-time)				\$3,500.00
				\$14,600.00
<b>Other Expenses:</b>				
Advertising, Legal, etc.				\$5,000.00
Inspection (Specialty Tank)				\$10,000.00
Subtotal Other				\$15,000.00
Subtotal Technical Services				
<b>Total Preliminary Probable Project Costs</b>				<b>\$129,070.00</b>

The probable weighted useful life of the Elevated Storage Tank project is 40 years

  
 \_\_\_\_\_  
 Denise M. Plummer, P.E.,





Note: This estimate does not include interest during construction, finance fees, bond counsel, assessment fees, bond insurance, or other miscellaneous expenses which can add up to 5% to 10% of the total cost once actual financing sources are finalized.

# BRADNER, OHIO

Caldwell Street Water Tower

## Legend

-  Bradner
-  PROJECT LOCATION

PROJECT LOCATION

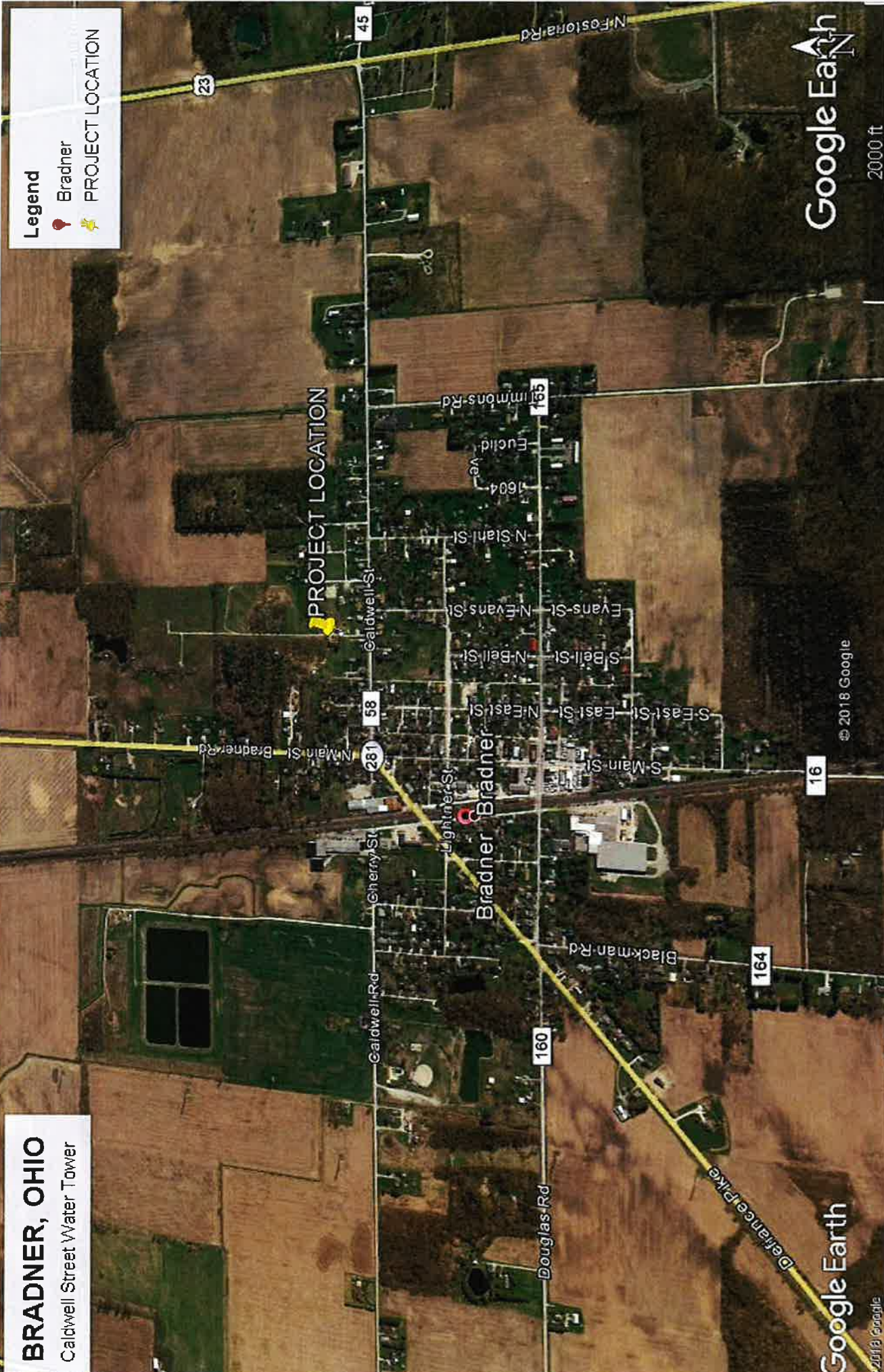
Google Earth

2000 ft

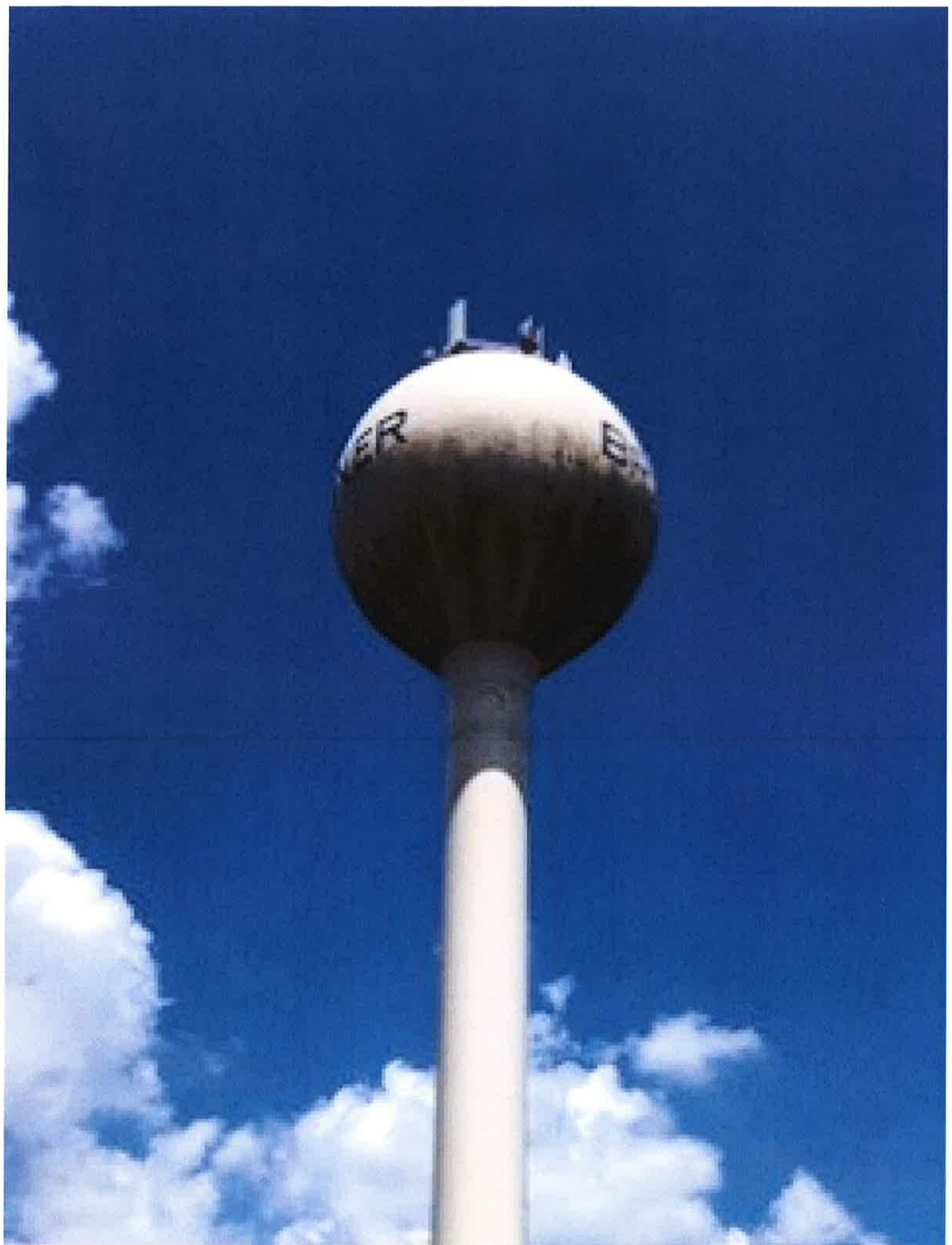
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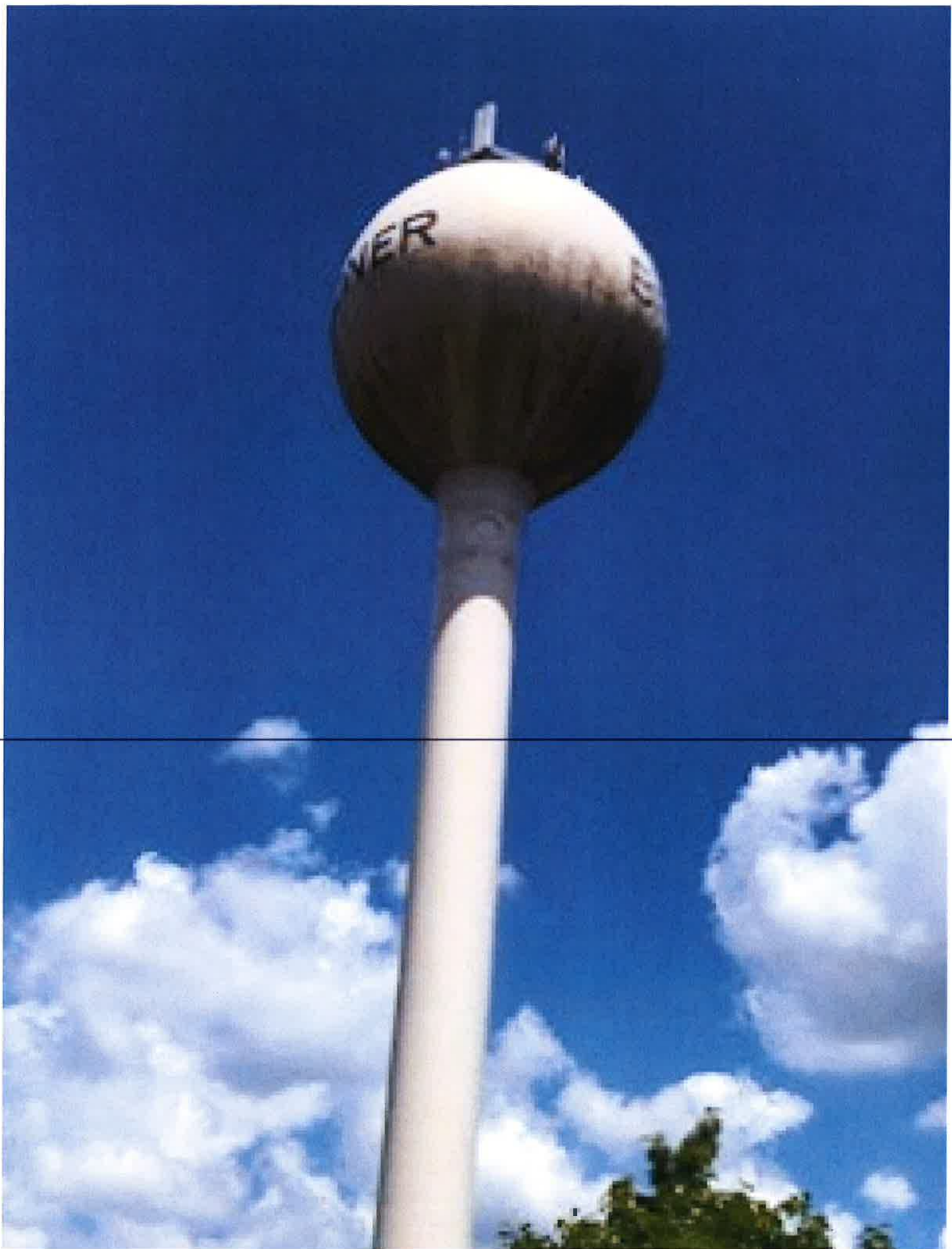
Google Earth

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**VILLAGE OF BRADNER  
CALDWELL STREET ELEVATED STORAGE TANK REHABILITATION  
PROJECT NARRATIVE**

The Village of Bradner in Wood County is applying for OPWC assistance for the rehabilitation of its elevated water storage tank serving the community.

With the size and age of some of the Village's Water Distribution System facilities, there are continuous projects undertaken and planned by the Village to address waterline replacement, eliminating dead end waterlines to improve water quality and fire protection, and improvements to water storage facilities.

The Village's Elevated Storage Tank is located along Caldwell Street near the Water Treatment Plant. The Village is proposing to address coating deterioration with spot interior and exterior recoating of this 150,000 gallon elevated tank as well as replacement of the roof vent, installation of a mud valve, aluminum jacketing over the fill pipe insulation, a screened flap gate on the overflow pipe, a ladder extension at the condensate platform and replace the baseball door frame. The existing tank was constructed in 1991 by Chicago Bridge and Iron. The exterior was last coated in 2004 and spot repaired in 2009. The dry interior was last coated in 2011 and the wet interior was last coated in 2004. The Village has determined that in order to preserve and prolong tank life it would be most beneficial to address the current corrosion and coating issues as soon as possible. There are no known structural or process deficiencies with this tank but the tank is need of repairs.

A tank inspection report of the tank was completed in 2018 by Dixon Engineering, Inc and is included herewith for reference and further identifies/details needed tank improvements.

Elevated storage tanks play a very critical role in the community's water distribution system, providing storage for the system in the event of water main failures as well as to protect the residents during fires. Elevated tanks represent a significant financial investment by the community and as such should be protected to the greatest extent possible.

Failing or failed coating systems on tanks pose a significant risk and liability to the community due to the accelerated deterioration, which can lead to shortened life spans of the infrastructure. Elevated tanks typically have a design life of 100 years and for a community to utilize this service life, a routine improvement program must be implemented and strictly followed. Over-coating of the paint systems must be performed multiple times throughout the design life with this tank now being due for new interior and exterior coating system improvements.

The Village supplies potable water to 232 Village customers. The Village also owns and operates the Water Treatment Plant supplying the distribution system and elevated storage tank.

Without this grant assistance this project would place excessive financial hardship on the residents of the Village. Because this project is so vital to the health and safety of the Village residents, the Village is seeking 50% in OPWC funding. The Village is able to commit 50% of the total project cost toward the project.

Revised: April 23, 2019

## Supplemental Application Instructions

### Prerequisites for Project Consideration

Manner of submittal items:

- 1) Must be one-sided, 8.5" x 11".
- 2) No dividers or cover sheets (a summary sheet may be submitted with "other documentation").
- 3) No Binding. A binder clip, folder, punch-less binder (has a clamp that holds papers together) are OK. No staples.

Format of application:

- 1) All must be in whole dollars (no cents).
- 2) Cannot use all caps.  
Page 4 of application must contain relevant information about project and not "see attached". If it will not fit in space provided, list what will fit and attach one supplement document to complete the information.
- 3) Page 3 must designate households or ADT ONLY for the direct area of the infrastructure. (Cannot count downstream or system users). Majority infrastructure type determines how project is scored when there are multiple components.

Order and completeness of items:

- 1)  OPWC six page application
- 2)  Authorizing Legislation authorizing CEO to enter into agreements with OPWC.
- 3)  Certification of funds/Loan Repayment following sample provided.
- 4)  A registered professional engineer's detailed cost estimate and useful life statement with seal or stamp and signature
- 5) N/A Co-operative Agreement (if applicable)
- 6) N/A Farmland Preservation Review (or statement that there is no impact to farmland such as that on questionnaire).
- 7)  Findings and Orders, Traffic Count, Job Creation or Retention and any other items to support scoring.
- 8) Other items
  - a. Maps
  - b. Pictures
  - c. Summary Sheet
  - d. Letters supporting project
  - e. Any other items deemed relevant to the project.
- 9)  Completed District 5 Capital Improvements Project questionnaire and completed priority rating sheet.

### Project Cost Overruns/Changes in Scope Procedure

- 1) The applicant will prepare an amended application including a revised budget, revised engineering estimate, and a detailed explanation of the change(s) requested.
- 2) The amendment is due to the District 5 Liaison thirty days in advance of the date of the scheduled District 5 Executive Committee Meeting.

### Revolving Loan Prioritization

- 1) RLP funds are funds repaid from previous loans. The money can only be used for loans. No grants may be made with the funds.
- 2) The interest rate for RLP Loans is established by the Executive committee at zero percent per year for the useful life of the improvement.



- 3) RLP Loans will be offered to projects based on the ranking of projects on the SCIP Slate. Consideration will be given to projects in order until the RLP funds are expended.

**Evaluation Questionnaire and Priority Rating Sheet**

- 1) Each application to District 5 shall be rated using the District 5 Capital Improvements Project Questionnaire and Priority Rating Sheet as adopted by the District 5 Executive Committee.
- 2) For Villages and Township with populations less than 5,000 special attention is called to the potential eligibility for Small Government Funding consideration. The scoring for the Small Government Program is established and implemented by the Ohio Public Works Commission. This program has an additional set of Evaluation Methodology. Each applicant should familiarize themselves with this methodology when planning your project funding request. If your project is not selected for District Funding each applicant under 5,000 in population will be considered for selection as a potential Small Government Project.

District 5  
 Capital Improvement Project  
 Priority Rating Sheet, Round 34

Revised 04/23/19  
 PROJECT NUMBER

COUNTY: Wood																
PROJECT: Caldwell Elevated Storage Tank																
EST. COST: \$129,070																
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS						"A"x"B"	Priority Factors						No.
			0	2	4	6	8	10		0	2	4	6	8	10	
1	1	(Repair or Replace) vs. (New or Expansion)	0	2	4	6	8	10	10	0% + Repair or Replacement	20% + Repair or Replacement	40% + Repair or Replacement	60% Repair or Replacement	80% + Repair or Replacement	100% + Repair or Replacement	1
2	1.5	Existing Physical Condition:  Must submit substantiating documentation and CIR (100% New or Expansion = 0 Points)	0	2	4	6	8	10	9	Excellent	Good	Fair	Poor	Critical	Closed or Not Operating	2
3	2	Public Health and/or Public Safety Concerns  Submittals without supporting documentation will receive 0 points for this question	0	2	4	6	8	10	16	No Impact	Minimal	Moderate	Major	Critical	Extremely Critical	3
4	2	Percentage of Local Share (Local funds are funds derived from the applicant budget or a loan to be paid back through the applicant budget assessments, rates or tax revenues)*	0	2	4	6	8	10	20	0%+	10%+	20%+	30%+	40%+	50%+	4
5	1	OTHER FUNDING SOURCES  (Excluding Issue II Funds)  (Grants and other revenues not contributed or collected through taxes by the applicant, including Gifts, Contributions, etc. - must submit copy of award or status letter)	0	2	4	6	8	10		0%+	10%+	20%+	30%+	40%+	50%+	5
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS						"A"x"B"	Priority Factors						No.
										-9	-8	0	8	9	10	
										Grant or Loan Only						
6	2	OPWC Grant and Loan Funding Requested; Please refer to Item 6 on Questionnaire for Clarification	-9	-8	0	8	9	10	20	\$500,001 or more	\$400,001 to \$500,000	\$325,001 to \$400,000	\$275,001 to \$325,000	\$175,001 to \$275,000	\$175,000 or less	6
	2									Grant/Loan Combination						
										\$750,000 or more	\$600,001 to \$750,000	\$487,501 to \$600,000	\$412,501 to \$487,500	\$262,501 to \$412,500	\$262,500 or less	
When scoring a project that is only grant or only loan. Please use the chart labeled "Grant or Loan Only". When scoring a grant/loan combination, score the project for the grant in the first chart, then use the second chart labeled "Grant/Loan Combination" to score the total (grant and loan combined). Use the lower of the two as the score.																
No.	"A" WEIGHT FACTOR	CRITERIA TO BE CONSIDERED	"B" PRIORITY FACTORS						"A"x"B"	Priority Factors						No.
										0	2	4	6	8	10	
7	1	Will the Proposed Project Create Permanent jobs or retain jobs that would otherwise be permanently lost (Written Documentation Required)	0	2	4	6	8	10		0+ jobs	7+ jobs	15+ jobs	25+ jobs	50+ jobs	100+ jobs	8
8	1	Benefits to Existing User such as households, (Equivalent dwelling units), Traffic Counts, etc.	0	2	4	6	8	10	2	0+	100+	350+	500+	750+	1000+	9
9		SUBTOTAL RANKING POINTS (MAX. = 115)							77	Other Info: Does this project have a significant impact on productive farmland? YES NO X Attach impact statement if yes. Is the Applicant ready to proceed to bids after State Approval within 6 months? YES X NO						
10		COUNTY PRIORITY POINTS (25-20 -15)														
11		DISCRETIONARY POINTS (BY DISTRICT ONLY) (MAX=12)														
12		GRAND TOTAL RANKING POINTS														

\* Applicants must certify local share contribution. Specify, all funding sources to be utilized as local share at the time of application submittal.

**DISTRICT 5  
CAPITAL IMPROVEMENT PROJECTS  
QUESTIONNAIRE  
ROUND 34**

Name of Applicant: Village of Bradner  
Project Title: Caldwell Street Elevated Storage Tank Rehabilitation

The following questions are to be answered for each application submitted for State Issue II SCIP, LTIP and Loan Projects. Please provide specific information using the best documentation available to you. Justification of your responses to these questions will be required if your project is selected for funding, so please provide correct and accurate responses. **Communities and Townships under 5,000 in population should also complete Small Government Criteria.**

1. What percentage of the project in repair A= 100 %, replacement B= \_\_\_%, expansion C= \_\_\_%, and new D= \_\_\_%? (Use dollar amounts of project to figure percentages and make sure the total equals one hundred (100) percent) A+B= 100 % C+D= \_\_\_%

Repair/Replacement = Repair or Replacement of public facilities owned by the government (any subdivision of the state).

New/Expansion = Replacement of privately owned wells, septic systems, private water or wastewater systems, etc.

2. Give the physical condition rating : Poor

Closed or Not Operating: The condition is unusable, dangerous and unsafe. The primary components have failed. The infrastructure is not functioning at all.

Critical: The condition is causing or contributing to a serious non-compliance situation and is threatening the intended design level of service. The infrastructure is functioning at seriously diminished capacity. Imminent failure is anticipated within 18 months. Repair and/or replacement is required to eliminate the critical condition and meet current design standards. **(For Road Projects structural repair items would represent a minimum of 25% of the total Project Cost).**

Poor: The condition is substandard and requires repair/replacement in order to return to the intended level of service and comply with current design standards. Infrastructure contains a major deficiency and is functioning at a diminished capacity.

Fair: The condition is average, not good or poor. The infrastructure is still functioning as originally intended. Minor deficiencies exist requiring repair to continue to function as originally intended and/or to meet current design standards.

Good: The condition is safe and suitable to purpose. Infrastructure is functioning as originally intended, but requires minor repairs and/or upgrades to meet current design standards.

Excellent: The condition is new, or requires no repair. Or, no supporting documentation has been submitted.

- **In order to receive points provide supporting documentation (e.g. photos, a narrative, maintenance history, or third party findings) to justify the rating.**

3. If the proposed project is not approved what category would best represent the impact on the general health and/or public safety?

## ROADS

Extremely Critical: Resurfacing, Restoration, Rehabilitation and Reconstruction (4R) of a Major Access Road.\*

Critical: Resurfacing, Restoration and Rehabilitation (3R) of a Major Access Road.\*

Major: Resurfacing, Restoration, Rehabilitation and Reconstruction (4R) of a Minor Access Road.\*

Moderate: Resurfacing, Restoration and Rehabilitation (3R) of a Minor Access Road.\*

Minimal: Preventative Maintenance of a Major Access Road.

No Impact: Preventative Maintenance of a Minor Access Road.

**Projects that have a variety of work will be scored in the LOWEST category of work contained in the Construction Estimate.**

### ***Road/Street Classifications:***

*Major Access Road:* Roads or streets that have a dual function of providing access to adjacent properties and providing through or connecting service between other roads.

*Minor Access Road:* Roads or streets that primarily provide access to adjacent properties without through continuity, such as cul-de-sacs or loop roads or streets.

*Preventative Maintenance:* Non Structural Pavement work such as chip sealing, cape sealing, microsurfacing, crack sealing, etc.

\* (3R) Resurfacing, Restoration and Rehabilitation - Improvements to existing roadways, which have as their main purpose, the restoration of the physical features (pavement, curb, guardrail, etc.) without altering the original design elements. **(Surface and Intermediate layer Mill and Fills, overlays with less than or equal to 3" additional pavement, ect...)**

\* (4R) Resurfacing, Restoration, Rehabilitation and Reconstruction - Much like 3R, except that 4R allows for the complete reconstruction of the roadway and alteration of certain design elements (i.e., lane widths, shoulder width, SSD, **overlays with greater than 3" additional pavement**, etc.).

## BRIDGES SUFFICIENCY RATING

Extremely Critical:	0-25, or a General Appraisal rating of 3 or less.
Critical:	27-50, or a General Appraisal rating of 4.
Major:	51-65 or a General Appraisal rating of 5 or 6.
Moderate:	66-80 or a General Appraisal rating of 7.
Minimal:	81-100 or a General Appraisal rating of more than 7.
No Impact:	Bridge on a new roadway.

## WASTEWATER TREATMENT PLANTS

Extremely Critical:	Environmental Protection Agency (EPA) orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
Critical:	Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
Major:	Replace deficient appurtenances. Update existing processes due to EPA recommendations.
Moderate:	Increase capacity to meet current needs or update processes to improve effluent quality.
Minimal:	New/Expansion project to meet a specific development proposal.
No Impact:	New/Expansion to meet future or projected needs.

## WATER TREATMENT PLANT

Extremely Critical:	EPA orders in the form of a consent decree, findings and orders or court order.
Critical:	Improvements to meet Environmental Protection Agency (EPA) Safe Drinking Water Regulations and/or NPDES Orders.
Major:	Replace deficient appurtenances. Update existing processes due to EPA recommendations.
Moderate:	Increase capacity to meet current needs or update processes to improve water quality.
Minimal:	New/Expansion project to meet a specific development proposal.
No Impact:	New/Expansion to meet future or projected needs.

COMBINED SEWER SEPARATIONS (May be construction of either new storm or sanitary sewer as long as the result is two separate sewer systems.)

- Extremely Critical: EPA orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
- Critical: Separate, due to chronic backup or flooding in basements.
- Major: Separate, due to documented water quality impairment, or due to EPA recommendations.
- Moderate: Separate, due to specific development proposal within or upstream of the combined system area.
- Minimal: Separate, to conform to current design standards.
- No Impact: No positive health effect.

STORM SEWERS

- Extremely Critical: EPA orders in the form of a consent decree, findings and orders or court order.
- Critical: Chronic flooding (structure damage).
- Major: Inadequate capacity (land damage).
- Moderate: Inadequate capacity with no associated damage.
- Minimal: New/Expansion to meet current needs.
- 
- No Impact: New/Expansion to meet future or project needs.

CULVERTS

- Extremely Critical: Structurally deficient or functionally obsolete. Deterioration has already caused a safety Critical: hazard to the public.
- Critical: Inadequate capacity with land damage and the existing or high probability of property damage.
- Major: Inadequate capacity (land damage).
- Moderate: Inadequate capacity with no associated damage.
- Minimal: New/Expansion to meet current needs.
- No Impact: New/Expansion to meet future or projected needs.

## SANITARY SEWERS

- Extremely Critical: EPA orders in the form of a consent decree, findings and orders or court order. Health Department Construction Ban.
- Critical: Replace, due to chronic pipe failure, chronic backup or flooding in basements. Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
- Major: Replace, due to inadequate capacity or infiltration, or due to EPA recommendations.
- Moderate: Rehabilitate to increase capacity to meet current needs or to reduce inflow and infiltration.
- Minimal: New/Expansion project to meet a specific development proposal.
- No Impact: New/Expansion to meet future or projected needs.

## SANITARY LIFT STATIONS AND FORCE MAINS

- Extremely Critical: Structurally deficient. Deterioration has already caused a safety/health hazard to the public, or, EPA orders in the form of a consent decree, findings and orders or court order.
- Critical: Inadequate capacity with actual or a high probability of property damage. Improvements ordered by the Environmental Protection Agency (EPA) in the form of NPDES Orders.
- Major: EPA recommendations, or, reduces a probable health and/or safety problem.
- Moderate: Rehabilitate to increase capacity to meet current needs.
- Minimal: New/Expansion to meet a specific development proposal.
- No Impact: New/Expansion to meet future or projected needs.

## WATER PUMP STATIONS

- Extremely Critical: Structurally deficient. Deterioration has already caused a safety hazard to the public, or, EPA orders in the form of a consent decree, findings and orders or court order.
- Critical: Inadequate capacity with the inability to maintain pressure required for fire flows.
- Major: Replace due to inadequate capacity or EPA recommendations.
- Moderate: Rehabilitate to increase capacity to meet current needs.
- Minimal: New/Expansion to meet a specific development proposal.
- No Impact: New/Expansion to meet future or projected needs.

WATER LINES/WATER TOWERS

- Extremely Critical: Solve low water pressure or excessive incidents of main breaks in project area.
- Critical: Replace, due to deficiency such as excessive corrosion, etc.
- Major: Replace undersized water lines as upgrading process.
- Moderate: Increase capacity to meet current needs.
- Minimal: New/Expansion project to meet a specific development proposal.
- No Impact: New/Expansion to meet future or projected needs.

OTHER

- Extremely Critical: There is a present health and/or safety threat.
- Critical: The project will provide immediate health and/or safety benefit.
- Major: The project will reduce a probable health and/or safety problem.
- Moderate: The project will delay a health and/or safety problem.
- Minimal: A possible future health and/or safety problem mitigation.
- No Impact: No health and/or safety effect.

*NOTE: Combined projects that can be rated in more than one subset may be rated in the other category at the discretion of the District 5 Executive Committee. In general, the majority of the cost or scope of the project shall determine the category under which the project will be scored.*

(Submittals without supporting documentation will receive 0 Points for this question.)

Extremely Critical \_\_\_\_, Critical  X , Major \_\_\_\_, Moderate \_\_\_\_, Minimal \_\_\_\_, No Impact \_\_\_\_. Explain your answer.  Excessive Corrosion

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(Additional narrative, charts and/or pictures should be attached to questionnaire)



4. Identify the amount of local funds that will be used on the project as a percentage of the total project cost.

A.) Amount of Local Funds = \$ 64,535

B.) Total Project Cost = \$ 129,070

RATIO OF LOCAL FUNDS DIVIDED by TOTAL PROJECT COSTS (A/B)= 50 %

Note: Local funds should be considered funds derived from the applicant budget or loans funds to be paid back through local budget, assessments, rates or tax revenues collected by the applicant.

5. Identify the amount of other funding sources to be used on the project, excluding State Issue II or LTIP Funds, as a percentage of the total project cost.

Grants \_\_\_% Gifts \_\_\_%, Contributions \_\_\_%

Other \_\_\_% (explain) \_\_\_\_\_, Total \_\_\_%

Note: Grant funds and other revenues not contributed or collected through taxes by the applicant should be considered other funds. The Scope of Work for each Funding Source must be the same.

6. Total Amount of SCIP and Loan Funding Requested- An Applicant can request a grant per the categories below for points as indicated on the Priority Rating Sheet. If the Applicant is including a loan request equal to, but not exceeding 50% of the OPWC funding amounts listed below, there will be no point penalty. If loan funds requested are more than 50%, points as listed in the Priority Rating Sheet will apply.

- \$500,001 or More
- \$400,001-\$500,000
- \$325,001-\$400,000
- \$275,001-\$325,000
- \$175,001-\$275,000
- \$175,000 or Less

There are times when the District spends all of the grant money and has loan money remaining. When this happens, the district makes a loan offer in the amount of the requested grant to the communities that were not funded. The offers are made in the order of scoring. We need to know if you are not successful in obtaining grant dollars for your project if you would be interested in loan money:

YES \_\_\_ NO X

(This will only be considered if you are not funded with grant money and there is remaining loan money.) **Please note: if you answer “no” you will not be contacted, only if you answer “yes” will an offer be made in the event that there is loan money remaining.**

7. If the proposed project is funded, will its completion directly result in the creation of permanent full-time equivalent (FTE) jobs (FTE jobs shall be defined as 35 hours/week)? Yes \_\_\_ No X. If yes, how many jobs within eighteen months? \_\_\_ Will the completed project retain jobs that would otherwise be permanently lost? Yes \_\_\_ No X. If yes, how many jobs will be created/retrained within 18

months **following the completion of the improvements?**

(Supporting documentation in the form of letter from affected industrial or commercial enterprises that specify full time equivalent jobs that will be retained or created directly by the installation or improvement of Public infrastructure. Additional items such as; 1) newspaper articles or other media news accounts, 2) public meeting minutes, and/or 3) a letter from the County Economic Development Director or State of Ohio Economic Development Professional that alludes to the requirement for the infrastructure improvement to support the business. Submittals without supporting documentation will receive 0 points for this question.)

8. What is the total number of existing users that will directly benefit from the proposed project if completed? 232 (Use households served, traffic counts, etc. and explain the basis by which you arrived at your number.)

9. Is subdivision's population less than 5,000 Yes X No    

If yes, continue. You may want to design your project per Small Government Project Evaluation Criteria, released for the current OPWC Round to assist in evaluating your project for potential Small Government Funding. The Small Government Criteria is available on the OPWC website at <http://www.pwc.state.oh.us/Meth.SG.PDF> If No, skip to Question 11.

10. **OHIO PUBLIC WORKS COMMISSION SMALL GOVERNMENT PROGRAM GUIDELINES**

All projects that are sponsored by a subdivision with a population of 5,000 or less, and not earning enough points for District Funding from SCIP or LTIP Funds, are then rated using the Small Government Program Rating Criteria for the corresponding funding round. In order to be rated the entity must submit the Small Government Supplement and their required budgets with their application.

**Only infrastructure that is village- or township- owned is eligible for assistance.** The following policies have been adopted by the Small Government Commission:

- District Integrating Committees may submit up to seven (7) applications for consideration by the Commission. All 7 must be ranked, however, only the top five (5) will be scored. The remaining two (2) will be held as contingency projects should an application be withdrawn.
- Grants are limited to \$500,000. Any assistance above that amount must be in the form of a loan.
  - Grants for new or expanded infrastructure cannot exceed 50% of the project estimate.
- The Commission may deny funding for water and sewer systems that are deemed to be more cost-effective if regionalized.
- If a water or sewer project is determined to be affordable, the project will be offered a loan rather than a grant. Pay special attention to the **Water & Wastewater Affordability Supplemental and the Small**

**Government Water & Wastewater Affordability Calculation Worksheet. Both are available on the Small Government Program Tab at <http://www.pwc.state.oh.us/SmallGovernment.html>**

- Should there be more projects that meet the “annual score” than there is funding, the tie breaker is those projects which scored highest under Health & Safety, with the second tie breaker being Condition. If multiple projects have equivalent Health & Safety and Condition scores they are arranged according to the amount of assistance from low to high. Once the funded projects are announced, “contingency projects” may be funded from project under-runs by continuing down the approved project list.
- Supplemental assistance is not provided to projects previously funded by the Commission.
- Applicants have 30 days from receipt of application by OPWC without exception to provide additional documentation to make the application more competitive under the Small Government criteria. Applications will be scored after the 30-day period has expired. The applicants for each District's two (2) contingency projects will have the same 30-day period to submit supplemental information but these applications will not be scored unless necessary to do so. **It is each applicant’s responsibility for determining the need for supplemental material. The applicant will not be asked for or notified of missing information unless the Commission has changed the project type and it affects the documentation required. Important information may include, but is not limited to: age of infrastructure, traffic counts or utility users, median income information, user rates ordinances, and the Auditor’s Certificate of Estimated Revenues or documentation from the Auditor of State that subdivision is in a state of fiscal emergency.**

If you desire to have your Round 34 project considered for Small Government Funding please download the Small Government Evaluation Criteria applicable to Round 33 by accessing the OPWC Website at <http://www.pwc.state.oh.us/Meth.SG.PDF>. Please complete the Small Government Evaluation Criteria and attach all required supporting documentation and attach it to the District 5 Questionnaire for Round 34.

**11. MANDATORY INFORMATION, DISTRICT 5, DISCRETIONARY RANKING POINTS**

List all specific user fees: Amount or ROAD & BRIDGE PROJECTS:(OHIO REVISED CODE) Percentage

Permissive license fee                      4504.02 or 4504.06 \_\_\_\_\_  
    4504.15 or 4504.17 \_\_\_\_\_  
    4504.16 or 4504.171 \_\_\_\_\_  
    4504.172 \_\_\_\_\_  
    4504.18 \_\_\_\_\_

Special property taxes                      5555.48 \_\_\_\_\_  
    5555.49 \_\_\_\_\_

Municipal Income Tax \_\_\_\_\_

County Sales Tax \_\_\_\_\_

Others \_\_\_\_\_  
 \_\_\_\_\_

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(DO NOT INCLUDE SCHOOL TAXES)

SPECIFIC PROJECT AREA INFORMATION.

Median household income \$46,429

Monthly utility rate: Water 52.66

Sewer 14.25

Other \_\_\_\_\_

List any special user fees or assessment (be specific)

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POLITICAL SUBDIVISION= Village of Bradner

COUNTY= Wood

DISCRETIONARY POINTS (BY DISTRICT COMMITTEE ONLY)= \_\_\_\_\_

(25-20-15)

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Date: 9/10/19

Signature: Nichole Hister

Title: Project Administration Assistant

Address: 1168 North Main Street, Bowling Green, Ohio 43402

Phone: 419-352-7537

FAX: 419-353-0187

Email: histerm@poggemeyer.com

# **Dixon Engineering, Inc.**

Maintenance Inspection

150,000 Gallon Sphere

Bradner, Ohio

Inspection Performed: April 10, 2018

Report Prepared: May 25, 2018

Reviewed by Joseph T. Hoban, P.E.: June 19, 2018

Phone (330) 983-0062

Fax (330) 725-0512

<http://www.dixonengineering.net>

[ohio@dixonengineering.net](mailto:ohio@dixonengineering.net)

**Dixon Engineering Inc.**

815 W. Liberty St., Suite 1, Medina, OH 44256

## **CONCLUSIONS:**

1. The exterior coating is an epoxy urethane overcoat system that is in good condition overall. The coating is slightly faded and some touch-ups are visible. Coating deterioration includes spot failures to the substrate with rust undercutting with only a few failures on the basebell and roof.
2. The dry interior coating is an epoxy overcoat system that is in good condition overall. Coating deterioration includes spot failures to the substrate with rust undercutting and rust bleedthrough. Most of the failures are on the tops of the platforms, riser stiffeners, baseplate, bowl, and access tube.
3. The wet interior coating is an epoxy system that is in good condition overall. There are no significant failures below the high water line. Above the high-water line the coating is deteriorating at the previous spot repairs.

## **RECOMMENDATIONS:**

1. Complete the recommended work in one to two years. The coating work is the greatest cost and largest part of the recommendations. The repairs and upgrades should be completed during the next major tank rehabilitation project when coating work is completed.
2. High pressure water clean (5,000-10,000 psi), spot power tool clean, and recoat the exterior with a polyurethane system. The estimated cost is \$50,000.
3. Spot abrasive blast clean to a commercial (SSPC-SP6) condition the top sides of the platform and the other areas of failed coating in the dry interior. Apply a spot epoxy coating system to all prepared surfaces. The estimated cost is \$15,000.
4. Abrasive blast clean the pit piping to a commercial (SSPC-SP6) condition and apply an epoxy system. The estimated cost is \$3,000.
5. Recoat the foundation to help prevent deterioration. Cost would be incidental to exterior coating.
6. Install rigging couplings on the roof at the existing painter's rigging rail for temporary fall prevention of workers in the wet interior. Cost would be incidental to the next coating project.

7. Install braces at the painter's rail butt joints that are not currently located at a brace. The estimated cost is \$1,000.
8. Install a screened flap gate on the overflow pipe discharge. The estimated cost is \$2,000.
9. Replace the basebell door frame. The estimated cost is \$2,000.
10. Install a ladder extension at the condensate platform and a handhold at the wet interior roof hatch and access tube roof hatch to assist entering and exiting. Cost would be incidental to the next coating project.
11. Replace the roof vent with a new frost-free pressure vacuum vent. The estimated cost is \$6,000.
12. Install a neoprene cover over the access tube air gap to eliminate it as a point of possible contamination. Cost would be incidental to exterior recoating.
13. Install an aluminum jacketing over the fill pipe insulation. The estimated cost is \$3,000.
14. Install a mud valve in the wet interior to aid with removal of sediment and draining of the tank. The estimated cost is \$4,000.

## **A DISCUSSION ON RESCUE AND RETRIEVAL OPERATIONS FROM ELEVATED PEDESTAL STORAGE TANKS**

A series of accidents involving falls from or in water tanks has highlighted inadequacies in water tower design and a potentially greater problem. The rescue may be more dangerous, with potential for more loss of life or injury, than the original accident. Contractors and engineers are responsible for their own employees, but even with safety training and proper equipment, accidents can occur. Most rescue squads are local or neighboring fire departments, with some departments having more experience than others. Water storage tanks are designed to store water and are not suited for rescue or retrieval convenience. This discussion is offered as a starting point. We recommend that you meet with your rescue personnel and draft a rescue plan. A copy of the plan should be kept at the tank and with the rescue crew.

OSHA may soon require 30 inch manways and hatches with fall prevention on all ladders. DIXON has always objected to replacement of ladders especially on retrofit of existing tanks as new regulations are passed on a relatively frequent basis. We recommend the changes for the convenience and safety of your employees, rescue personnel, and others working on the structure. As far as we know, none of these conversion items recommended are required or mandated by any government agency for retrofits.

DIXON recommends these changes be made during the next major tank coating project.

### RETRIEVAL FROM WET INTERIOR:

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#### Current Access:

Access to the roof is from the dry interior ladders located in the basebell, riser, and access tube. There is a ladder in the wet interior from the roof hatch to the bowl area. All ladders are equipped with fall prevention devices. There is a 12 x 18 inch manway in the access tube for access into the bottom of the wet interior. The roof has a 30 inch hatch for the dry interior and a 30 inch hatch for the wet interior. There is a handrail on the roof. The area within the handrail is cluttered.

There is a full platform under the bowl and a condensate ceiling at approximately 20 feet above the ground in the dry interior. Ladder openings in platforms are 30 inch diameter.



Procedure:

1. It is not practical to install a 30 inch manway in the bottom of the tank or in the access tube. Retrieval must be through the roof hatch or roof vent opening by use of a winch and tripod. Rescue personnel would gain access to the roof using the existing ladders attached to fall prevention devices. Rescue personnel would enter the tank through the 30 inch roof hatch or the existing bottom manway.
2. Inside the roof handrail, the rescue crew raises the basket to the roof using a tripod and a winch. Place the basket on the roof while the tripod is moved over the access tube hatch.
3. Lower the basket down the access tube to the top platform. From the top platform, lower the basket to ground level through the new 30 inch platform hatches with a pulley or winch connected to an attachment lug on the tank's bowl.

From the roof, it is possible to lower the basket over the side to ground level, but that would require a very large winch and increased loading on the attachment point. On a rainy, windy, or snowy day, the objective would be to get rescue personnel off the roof as soon as possible, so lowering through the dry interior is preferred. If it is not possible to lower the basket down the dry interior, a helicopter rescue will be required.

Modifications Necessary (As stated in the recommendations):

1. Weld an attachment lug to the tank's bowl. Cost would be incidental to the next painting project.

Equipment:

Winch or pulley system and tripod  
Tag line  
Basket

**COST SUMMARY:**

Exterior overcoat	\$50,000
Dry interior partial recoat	15,000
Pit piping paint	3,000
Painter's rail supports	1,000
Overflow flap gate	2,000
Basebell door frame	2,000
Frost-free vacuum vent	6,000
Insulation jacketing	3,000
Mud valve	<u>4,000</u>
Subtotal	\$86,000
Engineering and Contingencies	<u>\$18,000</u>
Total	\$104,000

## **INSPECTION:**

On April 10, 2018 Dixon Engineering Inc. performed a maintenance inspection on the 150,000 gallon sphere elevated water storage tank owned by the Village of Bradner, Ohio. Purposes of the inspection were to evaluate the interior and exterior coating's performance and life expectancy, assess the condition of metal surfaces and appurtenances, review safety and health aspects, and make budgetary recommendations for continued maintenance of the tank. All recommendations with budgeting estimates for repairs are incorporated in this report. The inspection was performed by Kyle Lay, Engineering Technician. The inspector was assisted by Dustin Houghton, Trevor Jessup, and Larry Houck, Staff Technicians. Following the inspection, chlorine was added to disinfect the tank per AWWA Standard C652-11 Method No. 3.

## **TANK INFORMATION:**

The tank was built in 1991 by Chicago Bridge and Iron with a height to low water line of 97.5 feet. The tank is welded construction. The exterior was last coated in 2004 by P & W with spot repair performed in 2009. The dry interior was last coated in 2011 by Kessler. The wet interior was last coated in 2004 by P & W.

## **CONDITIONS AND RECOMMENDATIONS:**

### **EXTERIOR COATING CONDITIONS:**

The exterior coating is an epoxy urethane overcoat system.

Information provided to DIXON indicated the exterior was pressure washed, spot power tool cleaned and spot recoated in 2009.

The coating is in good condition overall. The coating is beginning to chalk and fade and there is loss of gloss. Surfaces have faded due to exposure to ultraviolet light, which is a normal occurrence for an exterior coating system.

The basebell coating is in good condition with a few small spot failures. Primary methods of deterioration are spot failures to the substrate and rock nicks.

The riser, bowl, and sidewall coating is in good condition with no significant failures.

The roof coating is in fair condition with a few minor failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting with most located inside the roof handrail.

Adhesion testing was not performed due to cold temperatures. Testing in cold temperatures on the surface could result in inaccurate results. An adhesion test should be performed before overcoating.

Lettering on the tank consists of "BRADNER" in two locations.

#### **EXTERIOR COATING RECOMMENDATIONS:**

Plan and budget for overcoating in one to two years. The typical recoat frequency for modern urethane systems is 15 years.

The recommended procedure is to high pressure water clean (5,000-10,000 psi) the exterior to remove any delamination or flaking coating and any contaminants. Then any coating failures would be spot power tool cleaned to bare metal (SSPC-SP11) condition with vacuum attachments.

The coating system would consist of a spot prime coat on the bare metal, a full coat of epoxy, and followed by two full coats of polyurethane. The polyurethane system offers excellent abrasion resistance with high gloss and sheen retention. The expected life of this system is fifteen years. The tank would be removed from service during the coating project. This is necessary to reduce condensation on the tank's surface. Polyurethane coatings have a minimum temperature requirement for application and are sensitive to moisture during the curing process. If moisture is present during the curing process, the appearance will become cloudy with little or no gloss. The estimated cost to spot power tool clean and overcoat the existing system with an epoxy polyurethane system is \$50,000.

#### **DRY INTERIOR COATING CONDITIONS:**

Information provided to DIXON indicated the dry interior was spot power tool cleaned to a SSPC-SP11 condition in 2011. Bare metal surfaces were then primed, followed by application of a full coat of epoxy.

The basebell coating is in good condition with only a few minor failures. Primary methods of deterioration are spot failures to the substrate and rust bleedthrough on the baseplate.

The riser coating is in good condition with only a few failures. Primary methods of deterioration are spot failures to the substrate and rust bleedthrough on the stiffeners.

The coating on the top of the platforms is in fair to poor condition with numerous failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting and delaminated topcoat.

The bowl coating is in good condition with rust bleedthrough at the riser transition.

The access tube coating is in fair condition with several failures. Primary methods of deterioration are spot failures to the substrate with rust undercutting. Most of the coating failures are on the bottom half.

#### **DRY INTERIOR COATING RECOMMENDATIONS:**

Spot abrasive blast clean to a commercial (SSPC-SP6) condition the topside of the platforms including one foot up the riser walls and the other areas of failed coating. The bare metal would be coated with an epoxy system. The estimated cost of spot recoating is \$15,000.

#### **WET INTERIOR COATING CONDITIONS:**

Information on file with DIXON indicated the wet interior was abrasive blast cleaned to a SSPC-SP10 near-white metal condition in 2004. Bare metal surfaces were coated with a zinc epoxy system.

The roof coating is in fair condition overall, with the primary areas of deterioration at previous coating repairs from weld burns caused by the installation of the antenna railing.

The sidewall access tube and bowl coating is in good condition with no significant failures. The bowl was covered with approximately one to two inches of sediment that was flushed from the interior.

The surfaces below the normal operating water level are covered with mineral staining, which does not affect the integrity of the coating system.

Overall adhesion of the coating is good. Adhesion was tested using a low-pressure power washer. With poor adhesion, it would be possible to notice the coating fluctuate and loose coating could be completely removed during cleaning. This is a crude form of testing, yet the least destructive. A destructive test involves cutting the coating to the substrate, the test area is then susceptible to corrosion.

**WET INTERIOR COATING RECOMMENDATIONS:**

The existing coating system has not deteriorated to the point where replacement is warranted. Reinspect in five years to update conditions and recommendations. Long term budget to repaint in approximately ten years. The estimated cost is \$50,000.

**CATHODIC PROTECTION CONDITIONS:**

The tank does not contain a cathodic protection system and has clips installed for a future cathodic protection installation. The clips are located on the bowl. There is no pressure fitting installed.

**PIT AND PIT PIPING CONDITIONS:**

There is a pit below the tank that contains piping. There is a wooden cover over the pit that is in good condition.

The piping is in good condition. Coating on the piping is in poor condition with delamination and rust bleedthrough.

**PIT AND PIPING RECOMMENDATIONS:**

Abrasive blast clean the piping to a commercial (SSPC-SP6) condition and apply an epoxy system. The estimated cost is \$3,000.

**SITE CONDITIONS:**

The tank is located on a large site that is not fenced. The site is adjacent to residential development. There is one antenna control building adjacent to the tank.

**FOUNDATION CONDITIONS:**

The top one to six inches of the foundation are exposed. The exposed concrete foundation is in good condition with no significant deterioration.

The top of the foundation is coated and is in poor condition with erosion and delamination of the system.

There are fourteen anchor bolts evenly spaced on the baseplate around the basebell. The anchor bolts are in good condition with no deterioration of the nuts or bolts.

**FOUNDATION RECOMMENDATIONS:**

Pressure wash and recoat the exposed concrete with an epoxy coating system to help prevent deterioration. The cost would be incidental to exterior coating.

**GROUT CONDITIONS:**

The grout between the baseplate and the foundation is in good condition with none damaged or missing.

**ROOF HANDRAIL AND PAINTER'S RAIL CONDITIONS:**

The handrail located on the roof surrounding the roof hatches and the vent is in good condition. The handrail is being used for antenna mounts.

A painter's rail for rigging surrounds the roof handrail and is in good condition. During construction the painter's rail was butt welded to create the full ring. Four of the butt welds are not located at a brace and this creates a possible weak point if the weld was not a full penetrating weld.

There are not enough roof rigging couplings for safety and staging lines during wet interior coating work.

**ROOF HANDRAIL AND PAINTER'S RAIL RECOMMENDATIONS:**

Install rigging couplings on the roof under the painter's rail for fall prevention of workers in the wet interior. The couplings would allow a contractor working in the wet interior to be tied off to a fall prevention device at all times. The cost would be incidental to the recoating.

Install a brace at the painter's rail butt joints not currently located at a brace. The estimated cost is \$1,000.

**AVIATION LIGHTS AND ELECTRICAL CONDITIONS:**

The tank has a double aviation light on the roof that is in good condition. The light appears to be operating properly.

There are light fixtures located in the dry interior. One of the lights is broken.

**ANTENNA CONDITIONS:**

The roof contains six antennas attached to the roof handrail. The antenna cables are routed through openings in the access tube to the dry interior that are sealed.

**OVERFLOW PIPE CONDITIONS:**

The tank has a six inch diameter overflow pipe that extends along the access tube in the dry interior, down through the dry riser, and exits near the bottom of the basebell. The discharge end of the overflow pipe is screened and is in good condition.

The pipe discharges to a storm drain with the required air gap. The discharge area is in good condition.

**OVERFLOW PIPE RECOMMENDATIONS:**

Install a screened flap gate on the overflow pipe discharge. The flap gate would allow water to discharge even if the screen becomes covered with debris or frosted over. It is designed to stay closed to prevent rodents or birds from entering the pipe. The estimated cost is \$2,000.

**HATCH AND MANWAY CONDITIONS:**

There is a 30 inch diameter, flip top roof hatch to the wet interior that is in good condition. There is no safety handhold next to the hatch to aid in entering and exiting the opening. The wet interior roof hatch was not secured with a padlock.

There is a 30 inch diameter, flip top roof hatch into the dry interior that is in good condition. There is no safety handhold next to the hatch.

The roof contains a 24 inch diameter painter's hatch with a bolted cover that is in good condition. The hatch is used for ventilation and lighting during maintenance or a rescue. There is a 12 x 18 inch elliptical manway in the access tube that is in good condition. The manway is hinged and the gasket showed no signs of leakage. The bolts are in good condition.

There is a 36 x 80 inch door in the basebell that is in good condition and operated properly during the inspection. The door frame is in poor condition with deterioration on the bottom four inches.



There is a 24 inch diameter painter's hatch (bird hatch) at the top of the riser that is in good condition. There is a safety handhold over to the hatch.

The ladder openings in the dry interior platforms are 30 inch diameter with hinged covers. There is no safety handhold next to the condensate platform opening.

#### **HATCH AND MANWAY RECOMMENDATIONS:**

Install a ladder extension at the condensate platform and a handhold at the wet interior roof hatch and access tube roof hatch to assist entering and exiting. Cost would be incidental to the next coating project.

Replace the basebell door frame. The estimated cost is \$2,000.

#### **VENT CONDITIONS:**

The roof vent is a 12 inch pressure vacuum design. The vent is not properly screened. The screen has deteriorated and left gaps. Gaps are large enough to allow birds and insects to enter the wet interior.

The roof contains an access tube air gap that is screened. The screen is in poor condition. The screen is deteriorated and does not cover the complete air gap area. This is a possible source for contamination of the water supply.

#### **VENT RECOMMENDATIONS:**

Install a frost-free roof vent. The new vent has a movable plate that would allow air to flow in and out of the tank even if the screens become covered with debris or frosted over. The vent can be removed during coating or rescue operation for additional light and ventilation. The estimated cost is \$6,000.

Install a neoprene cover over the access tube air gap to eliminate it as a point of possible contamination. Cost would be incidental to exterior recoating.

Annually inspect the roof vent for tears and gaps in the screen and to ensure the pressure plate is free to move.

**LADDER CONDITIONS:**

The dry interior ladders are located in the basebell, riser, and access tube and are in good condition. The ladders meet current OSHA size requirements. The ladders are equipped with rail type fall prevention devices that are in good condition.

The wet interior contains a ladder from the roof to the bowl that is in good condition. The ladder is equipped with a rail type fall prevention device that is in good condition.

**FILL/DRAW PIPE CONDITIONS:**

There is a single pipe that fills and draws from the tank. The fill pipe runs through the dry interior into the bottom of the bowl and extends eight inches into the bottom of the tank. There is a deflector bar over top of the pipe in the wet interior.

**EXPANSION JOINT CONDITIONS:**

The expansion joint on the fill pipe is located below the bowl. This expansion joint is covered in insulation and is not accessible for inspection.

**INSULATION CONDITIONS:**

The fill pipe is covered with rigid foam insulation that is in good condition.

**INSULATION RECOMMENDATIONS:**

Install an aluminum jacketing over the fill pipe insulation. The estimated cost is \$3,000.

**MUD VALVE CONDITIONS:**

The tank does not have a mud valve.

**MUD VALVE RECOMMENDATIONS:**

Install a mud valve to aid with removal of built-up sediment while the tank is in service and aid with cleaning the tank during regular maintenance inspections. The estimated cost is \$4,000.

**CONDENSATE DRAIN CONDITIONS:**

The condensate drain line runs from the condensate platform to the overflow pipe and is constructed of steel pipe. There is a check valve on the line to stop backflow during overflow conditions. The line is in good condition. The drain in the platform appeared to be operational.

**WET INTERIOR METAL CONDITIONS:**

The steel structure is in good condition above the high-water line and in good condition below it. No active pitting was observed at the coating failures on the roof.

**DIXON ENGINEERING, INC.**  
**STEEL TANK FIELD INSPECTION REPORT**  
**PEDESTAL TANK**

DATE: April 10, 2018

OWNER: Village of Bradner  
 CLIENT CODE: 35-87-01-01  
 TANK NAME: Bradner Tank  
 LOCATION: Street: Caldwell Rd.  
                   City: Bradner  
                   State: Ohio

TANK SIZE: Capacity: 150,000 gallons  
                   Tank Diameter: 33 feet (estimated)  
                   Height to bottom (LWL): 97.5 feet (estimated)  
                   Height to overflow (HWL): 132 feet (from nameplate)  
                   Head range: 34.5 feet (estimated)

CONSTRUCTION:  
                   Type: Sphere  
                   Type of roof: Hemisphere  
                   Type of bowl: Hemisphere

DATE CONSTRUCTED: 1991  
 MANUFACTURER: CB&I (Horton)  
 CONTRACT NUMBER: T10709

COATING HISTORY	EXTERIOR	WET INTERIOR	DRY INTERIOR
DATE LAST COATED	<u>2004(spot repair 2009)</u>	<u>2004</u>	<u>2011</u>
CONTRACTOR	<u>P &amp; W (2004)</u>	<u>P &amp; W</u>	<u>Kessler</u>
COATING SYSTEM	<u>Epoxy urethane</u>	<u>Zinc/epoxy</u>	<u>Epoxy</u>
SURFACE PREPARATION	<u>SSPC-SP11</u>	<u>SSPC-SP10</u>	<u>SSPC-SP3 &amp; 11</u>
COATING MANUFACTURER	<u>Tnemec</u>	<u>Tnemec</u>	<u>Tnemec</u>
HEAVY METAL COATING SAMPLES	<u>No</u>	<u>No</u>	<u>No</u>
HEAVY METAL BEARING	<u>No</u>	<u>No</u>	<u>No</u>

PERSONNEL: Inspector Kyle Lay, Top person Dustin Houghton and Trevor Jessup, Ground person Larry Houck  
TYPE OF INSPECTION: Maintenance  
METHOD OF INSPECTION: Dry  
DATE LAST INSPECTED: May 29, 2013 Maintenance

### SITE CONDITIONS

Fenced: No  
Site large enough for contractor's equipment: Yes-very tight  
Control building: No  
Antenna control site: Yes  
    Number: 1  
    Location: Adjacent to tank  
    Would antenna sites interfere with containment: No  
Neighborhood: Residence  
Power lines within 50 feet: Yes  
    Are power lines attached to the structure: No  
    Would power lines interfere with containment: No  
Site drainage: Away from tank  
Indications of underground leakage: No  
Shrub, tree, etc. encroachment: No  
Site Comments: Site driveway (private) would be containment anchor location.

### EXPOSED PIPING

Location: Tank base (in pit)  
Condition of structure: Good  
    Structure is: Dry  
    Pump present: No  
Cover condition: Good  
    Locked: No  
Altitude valve: No  
Pipe coating condition: Poor  
Describe coating: Delaminating and rust bleedthrough  
Condition of metal: Good  
Piping comments: Only one section of pipe in the pit (at the bottom of the basebell) has coating that is delaminating.

### FOUNDATION

Foundation exposed: Yes  
Exposed height: 1-6 inches  
Exposed foundation condition: Good

## **FOUNDATION**

Damage or deterioration: **No**

Foundation coated: **Yes**

Coating condition: **Good**

Grout Condition: **Good**

Amount missing: **0 feet**

Undermining of foundation: **No**

Foundation comments: **Top side of foundation is coated.**

## **EXTERIOR COATING**

### **Basebell:**

Topcoat condition: **Good**

Previous system condition: **Good**

Describe coating: **Fading, spot coating failures to substrate, and no significant coating deterioration**

Dry film thickness: **7-10 mils and spots 9-13**

Coating adhesion: **Not taken**

Reason not taken: **Cold**

Metal condition: **Good**

Basebell comments: **25-50 small touchups visible. 5-10 rock nicks to substrate.**

### **Riser:**

Topcoat condition: **Good**

Previous system condition: **Good**

Describe coating: **No significant coating deterioration**

Coating adhesion: **Not taken**

Mildew growth: **No**

Metal condition: **Good**

Riser comments: **10-15 touchups.**

### **Bowl:**

Topcoat condition: **Good**

Previous system condition: **Good**

Describe coating: **Fading**

Mildew growth: **Yes**

Metal condition: **Good**

Bowl comments: **15-20 touchups.**

### **Sidewall:**

Lettering: **Yes**

Number: **2**

## **EXTERIOR COATING**

Lettering Content: **Bradner**

Logo: **No**

Topcoat condition: **Good**

Previous system condition: **Good**

Describe coating: **No significant coating deterioration**

Metal condition: **Good**

Sidewall comments: **40-50 touchups.**

### **Roof:**

Topcoat condition: **Fair**

Previous system condition: **Fair**

Describe coating: **Spot coating failures to substrate and rust undercutting**

Metal condition: **Good**

Roof comments: **Most of the failures are within the antenna railing.**

## **EXTERIOR APPURTENANCES**

### **Access door:**

Size: **36 x 80 inches**

Coating condition: **Fair**

Metal condition: **Poor**

Access door comments: **The door frame is severely corroded.**

### **Anchor bolts:**

Number: **14**

Diameter: **1¼ inches**

Location: **Exterior**

Coating condition: **Good**

Metal condition: **Good**

### **Overflow pipe:**

Diameter: **6 inches**

Coating condition: **Good**

Metal condition: **Good**

Condition of screen: **Good**

Percent of screen open: **100**

Mesh size: **Perforated**

Flap gate: **No**

Air gap: **Yes**

Highest part of discharge to the ground distance: **17½ inches**

## EXTERIOR APPURTENANCES

Splash pad: Yes

Type: Storm drain

Condition: Good

Overflow comments: Some coating failures to substrate on the overflow flange.

### Roof handrail:

Diameter: 6 sides, each is 7 feet long, 3 x 3 kicker at each vertical post

Height: 40 inches

Midrail height: 10 & 34 inches

Kick plate height: 4 inches-flat

Vertical post Type: Tube

Size: 2 inch diameter

Top Rail Type: Angle-40 inches

Size: 2 x 2 inches

Mid-Rail Type: Angle-10 & 34 inches

Size: 3 x 3 inches

Coating condition: Fair

Metal condition: Good

Handrail comments: All have bolted connections

### Painter's rail:

Diameter: 15 feet

Are butt welds at braces: No (# not at brace: 3-4)

Coating condition: Fair

Metal condition: Good

### Roof rigging points:

Number: 1

Couplings covered: Yes

Coating condition: Fair

Metal condition: Good

### Removable cathodic caps:

N/A

### Wet interior roof hatch:

Neck size: 30 inches

Distance from center of the tank (to outer edge): 5 feet

Shape: Round

Handhold at opening: No



**EXTERIOR APPURTENANCES**

Hatch security: **None**  
Outside coating condition: **Good**  
Inside coating condition: **Good**  
Metal condition: **Good**

**Dry interior roof hatch:**

Neck size: **30 inches**  
Shape: **Round**  
Handhold at opening: **No**  
Hatch security: **None**  
Outside coating condition: **Good**  
Inside coating condition: **Good**  
Metal condition: **Good**

**Secondary wet interior roof hatches:**

**N/A**

**Bolted ventilation hatch:**

Neck diameter: **24 inches**  
Coating condition: **Fair**  
Metal condition: **Good**  
Ventilation hatch comments: **5-10 spot failures to substrate (dime size).**

**Access Tube Air Gap:**

Screened: **Yes**  
Condition: **Poor**  
Access tube air gap comments: **Little to no screening remains in place**

**Roof vent:**

Number: **1**  
Type: **Flow-through**  
Neck diameter: **12 inches**  
Coating condition: **Fair**  
Metal condition: **Good**  
Screen condition: **Poor**  
Pressure plate free to move: **Yes**  
Vent comments: **Pressure plate screen is deteriorated and missing on half the plate. Signs of bird entry. Hardware to remove cap and replace screen are painted over.**

## EXTERIOR APPURTENANCES

### Aviation lights:

Design: Double red  
Functioning: Unknown  
Globe condition: Good  
Photoelectric cell: Yes  
Aviation light comments: Photo cell is missing.

### Antennas:

Roof Number: 6-panel  
Attached to: Handrail  
Cable runs: In dry interior  
Riser number: 0  
Cable penetrations sealed: Yes  
Sealed with: Rubber boots  
Antennas or cables interference: Yes  
Cables cross ladder  
Antenna comments: Tight access tube climb due to cables.

### Antenna pod:

N/A

### Electrical:

N/A

## DRY INTERIOR COATING

### Below the bottom platform:

Coating condition: Good  
Describe coating: Delaminating and spot coating failures to substrate  
Dry film thickness: 7-10 mils  
Metal condition: Good  
Floor: Stone  
Comments: Most spot failures are on the baseplate with delamination on the stiffeners around the door.

### Bottom platform:

Platform design: Full  
Coating condition: Poor  
Describe coating: Delaminating, spot coating failures to substrate, and rust undercutting  
Metal condition: Good

**DRY INTERIOR COATING**

Ladder opening size: **30 inches**

Shape: **Round**

Opening covered: **Yes**

Handhold at opening: **No**

Drain: **Yes**

Size: **3 inches**

Type: **To overflow**

Check valve: **Yes**

Platform comments: **Failures throughout**

**Riser above the bottom platform:**

Diameter: **7 feet 6 inches**

Coating condition: **Good**

Describe coating: **No significant coating deterioration**

Dry film thickness: **14-22 mils**

Metal condition: **Good**

**Intermediate platform:**

**N/A**

**Top platform:**

Platform design: **Full**

Material: **Steel plate**

Coating condition: **Fair**

Describe coating: **Delaminating, spot coating failures to substrate, and rust undercutting**

Metal condition: **Good**

Ladder opening size: **30 inches**

Shape: **Round**

Opening covered: **Yes**

Handhold at opening: **Yes**

Top platform comments: **Failures are mainly at the center portion of the platform.**

**Riser above the top platform:**

Coating condition: **Good**

Describe coating: **No significant coating deterioration**

Dry film thickness: **15-21 mils**

Metal condition: **Good**

## DRY INTERIOR COATING

### Bowl:

Material: Metal

Coating condition: Good

Describe coating: Spot coating failures to substrate and rust bleedthrough

Metal condition: Good

Rigging lug above opening: No

### Access tube:

Diameter: 36 inches

Topcoat condition: Fair

Prime coat condition: Fair

Describe coating: Delaminating and spot coating failures to substrate

Dry film thickness: 12-22 mils

Metal condition: Good

Access tube comments: 25-50 failures throughout, worst is on bottom half.

## DRY INTERIOR APPURTENANCES

### Electrical:

Lights functioning: Yes

Number damaged: 1 globe broke

Additional lights needed: No

Electrical outlet condition: Good

Used during inspection: Yes

### Expansion joint:

Location: Top of fill pipe

Accessible for inspection: No

### Fill pipe insulation:

Type: Styrofoam

Condition: Good

Seams loose: No

Insulation cover: No

### Base ladder:

Toe clearance: 7 inches or greater

Width of rungs: 16 inches

Thickness of rungs: ¾ inch

**DRY INTERIOR APPURTENANCES**

Shape of rungs: **Diamond**  
Coating condition: **Good**  
Metal condition: **Good**  
Fall prevention device: **Yes**  
Type: **Rail**  
Function Properly: **Yes**  
Cage: **No**

**Riser ladder:**

Toe clearance: **7 inches or greater**  
Width of rungs: **16 inches**  
Thickness of rungs: **¾ inch**  
Shape of rungs: **Diamond**  
Coating condition: **Good**  
Metal condition: **Good**  
Fall prevention device: **Yes**  
Type: **Rail**  
Function Properly: **Yes**  
Cage: **No**

**Painter's (bird) hatch:**

Size: **24 inch outside diameter**  
Handhold above hatch: **Yes**  
Coating condition: **Good**  
Metal condition: **Good**  
Hatch security: **Bolt**

**Manway to wet interior:**

Size: **12 x 18 inches**  
Location: **In access tube**  
Coating condition: **Poor**  
Metal condition: **Good**

**Mud valve:**

**N/A**

**Access tube ladder:**

Toe clearance: **7 inches or greater**  
Width of rungs: **16 inches**  
Thickness of rungs: **¾ inch**  
Shape of rungs: **Diamond**

## **DRY INTERIOR APPURTENANCES**

Coating condition: **Poor**

Metal condition: **Good**

Fall prevention device: **Yes**

Type: **Rail**

Function Properly: **Yes**

## **WET INTERIOR COATING**

### **Roof:**

Topcoat condition: **Fair**

Primer coating condition: **Fair**

Describe coating: **Touch-up delaminating, spot coating failures to substrate, and rust bleedthrough**

Metal condition: **Good**

Lap seams: **Welded**

Condition of laps: **Good**

Roof comments: **Failed touch-ups and weld burns present.**

### **Sidewall:**

Topcoat condition: **Good**

Primer coating condition: **Good**

Describe coating: **No significant coating deterioration**

Mineral deposits: **Light**

Metal condition: **Good**

Active pitting: **No**

Previous pitting: **No**

### **Access tube:**

Topcoat condition: **Good**

Primer coating condition: **Good**

Describe coating: **No significant coating deterioration**

Mineral deposits: **Light**

Metal condition: **Good**

Active pitting: **No**

Previous pitting: **No**

### **Tank bottom:**

Type: **Bowl**

Topcoat condition: **Good**

Primer coating condition: **Good**

Describe coating: **No significant coating deterioration**

Mineral deposits: **Light**

**WET INTERIOR COATING**

Metal condition: **Good**  
Active pitting: **No**  
Previous pitting: **No**  
Depth of sediment: **1-2 inches**

**WET INTERIOR APPURTENANCES**

**Tank ladder:**

Toe clearance: **7 inches or greater**  
Width of rungs: **16 inches**  
Thickness of rungs: **3/4 inch**  
Shape of rungs: **Diamond**  
Shape of side rails: **Flat**  
Coating condition: **Good**  
Metal condition: **Good**  
Fall prevention device: **Yes**  
Type: **Rail**

**Cathodic protection:**

**N/A**  
Clips: **Yes**  
Location of Clips: **Bowl**  
Couplings: **Yes**

**Roof stiffeners:**

**N/A**

**Sidewall stiffeners:**

**N/A**

**Interior platform:**

**N/A**

**Overflow pipe:**

Type: **Vortex break**  
Coating condition: **Poor**  
Metal condition: **Good**

**Fill pipe:**

Diameter: **8 inches**  
Height above bowl: **14 inches**  
Deflector over end: **Yes**

**WET INTERIOR APPURTENANCES**

Mixing system: **No**

Coating condition: **Good**

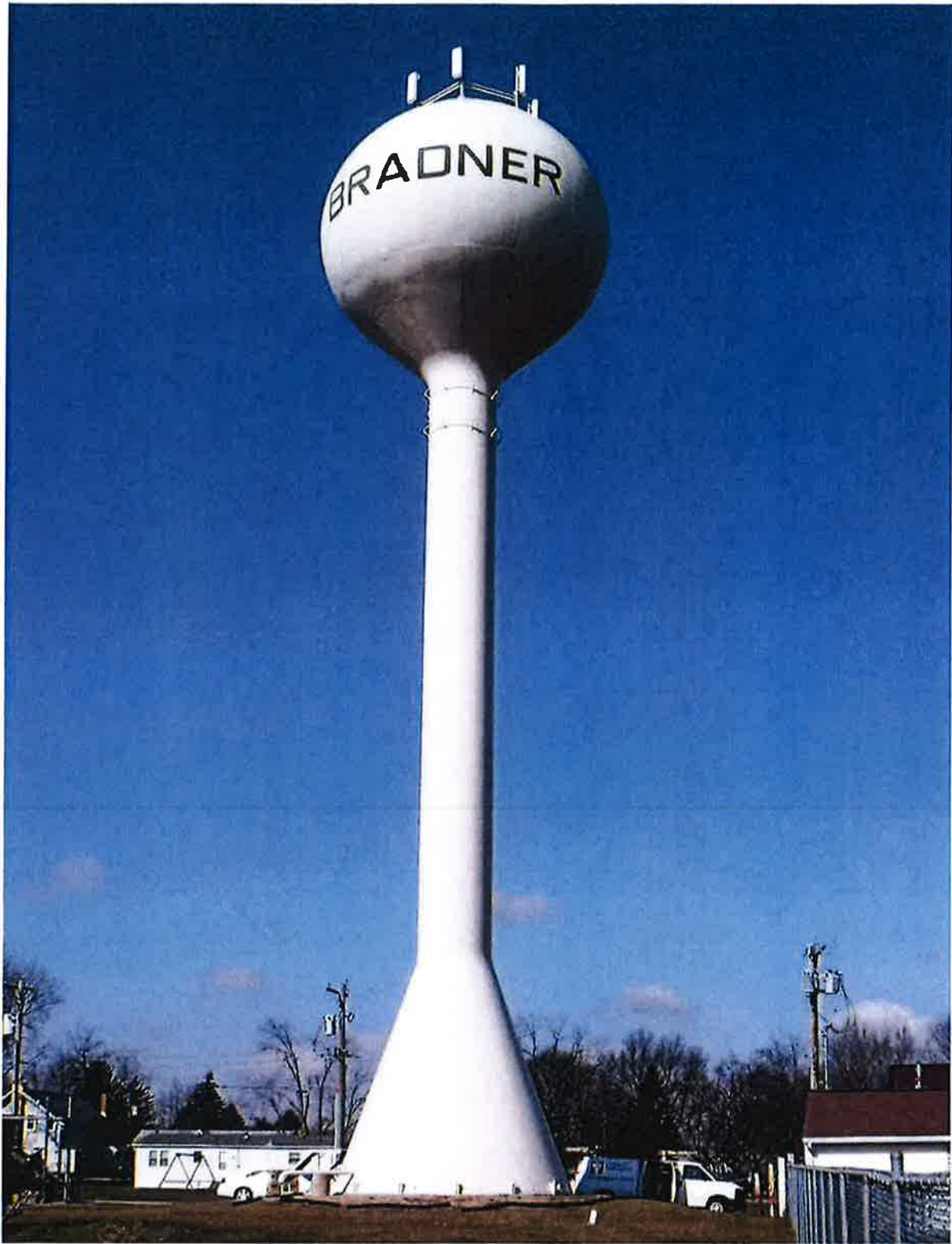
Metal condition: **Good**

**Separate draw pipe:**

**N/A**

Field Inspection Report is prepared from the contractor's viewpoint. It contains information the contractor needs to prepare his bid for any repair or recoating. The engineer uses it to prepare the engineering report. Cost estimates are more accurate if the contractor's problems can be anticipated. While prepared from the contractor's viewpoint, the only intended beneficiary is the owner. These reports are completed with diligence, but the accuracy is not guaranteed. The contractor is still advised to visit the site.



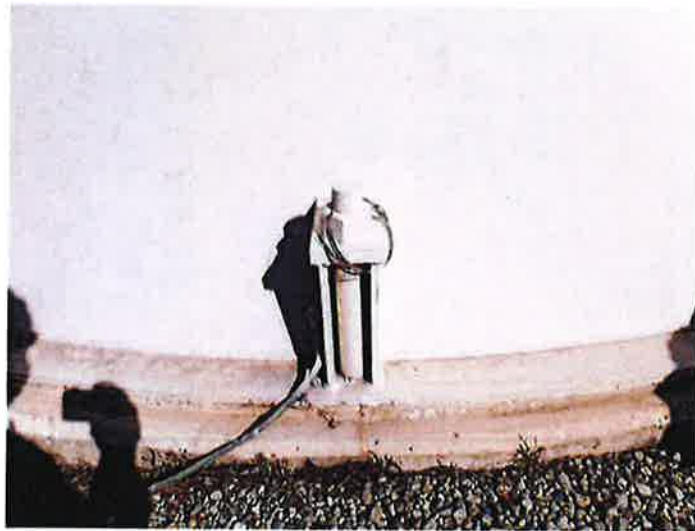


150,000 gallon elevated sphere water storage tank located in Bradner, Ohio.



1) The exposed foundation is in good condition with no significant failures.

2) Typical anchor bolt coating is in good condition.



3) The overflow pipe discharge area is in good condition.



4) The overflow pipe screen is in good condition.

5) The antenna cable penetrations in the basebell are sealed with rubber boots.



6) The access door operated properly during inspection.

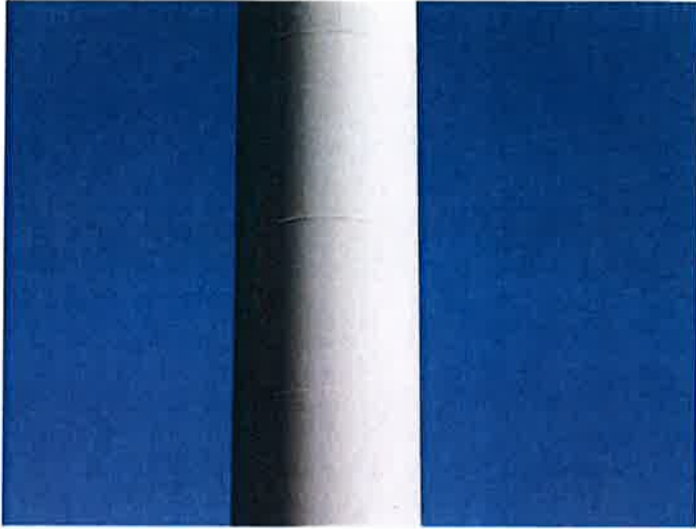


7) There is deterioration on the lower section of the door frame.

8) Minor coating failures on the basebell.



9) Rock nicks on the basebell.



10) The riser coating is in good condition with minor fading.

11) Same.



12) The bowl coating is in good condition with minor fading and previous touch-ups.



13) The sidewall coating is in good condition with minor fading.

14) Access tube cover with hinged hatch.



15) Significant deterioration of the access tube air gap screen.

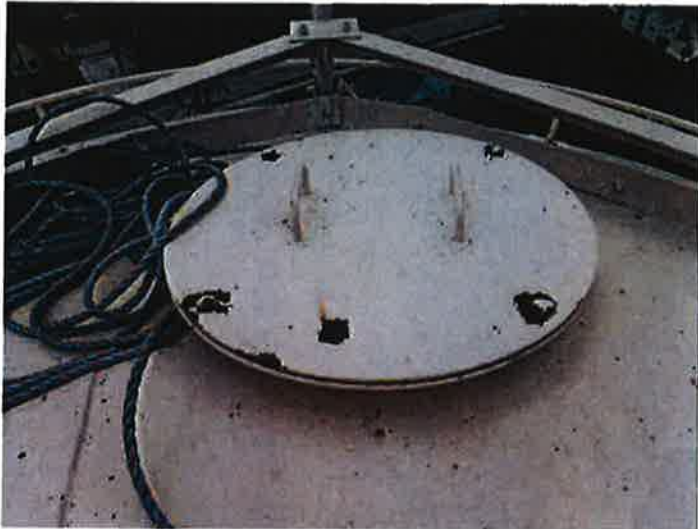


16) The pressure vacuum vent coating is in poor condition.

17) The vent screen is in poor condition with large gaps.

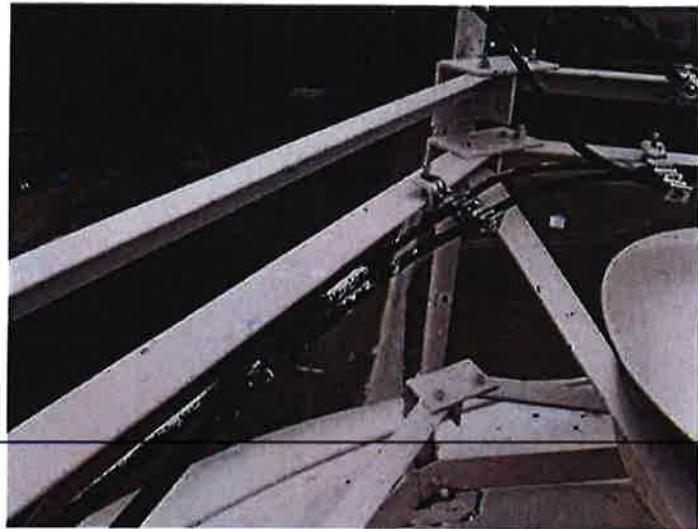


18) The aviation light is in good condition.



19) The roof contains a bolted ventilation hatch that is in good condition.

20) The roof handrail is in good condition. Antennas and cables are attached to the railing.



21) Roof painter's railing butt weld is not at stand-off.





22) The exterior roof coating is in fair condition with spot failures inside the railing.

23) The exterior roof coating is in fair condition.



24) The exterior roof hatches are in good condition and operated properly during the inspection.



25) Failures on the baseplate.

26) The basebell coating is in good condition.



27) The pit piping cover is in good condition.



28) The coating on the pit piping is in poor condition.

29) The basebell ladder is in good condition and is equipped with a fall prevention device.



30) Condensate platform opening with hinged cover and handhold. The coating is in poor condition with spot failures to the substrate.



31) The riser coating is in good condition.

32) Failures on a riser stiffener.



33) The insulation over the fill pipe is in fair condition overall.



34) Top platform opening with cover. There are spot coating failures in the center of the platform.

35) The painter's hatch is in good condition and operated properly during inspection.



36) The expansion joint is covered with insulation and was not visible for inspection.



37) The coating above the top platform is in good condition.

38) Rust bleedthrough on the bowl.



39) Coating failure on the access tube.



40) Same.

41) The access tube manway is in good condition. The coating is in poor condition.



42) Coating failures on the access tube ladder.



43) The wet interior roof coating is in fair condition with failures at previous spot repairs.

44) Same.



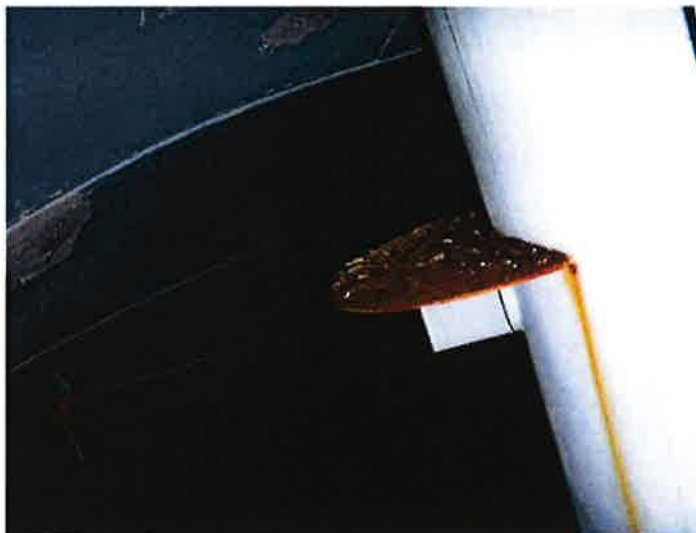
45) The sidewall coating is in good condition with no significant failures.





46) Same.

47) The bowl coating is in good condition with no significant failures.



48) The overflow vortex break is in good condition.



49) The wet interior ladder is in good condition and is equipped with a fall prevention device that operated properly during inspection.

50) The bowl prior to cleaning.



51) The fill pipe is in good condition.

## Small Government Commission Application Checklist

This checklist will help ensure that your application is scored at its best competitive advantage. It will also assist with the timely release of the Project Agreement should your project be funded. This form is for your use only. See various templates and forms in this manual, on the Small Government webpage, and on the Application webpage.

- [X ] Compliant certified authorizing legislation by applicant's governing body (OPWC Application webpage)
- [N/A ] Cooperative agreement if multi-jurisdictional (OPWC Application webpage). Road/bridge/culvert projects must include an engineer's statement certifying the percentages of each participating jurisdiction's share of the total project.
- [X ] Compliant Chief Financial Officer's Certification and Loan Letter (OPWC Application webpage)
- [N/A ] Funding commitment letters and or documentation for all non-OPWC matching funds
- [X ] Signed/stamped registered professional engineer's detailed cost estimate including in-kind costs (OPWC Application webpage). If project is a mix of new/expansion and repair/replacement items, engineer must include a percentage break-down by category.
- [N/A ] Signed/stamped professional engineer's weighted useful life statement if not submitted with original application (cannot be modified)
- [X ] Small Government Engineer's Plan Status Certification form (in this manual and on SG webpage)
- [X ] Clear description of problem and scope of work with appropriate documentation
- [X ] Source documentation for proof of age with year clearly visible or compliant letter from eligible public official {letter template in this manual}
- [X ] Project site photos, If appropriate
- [X ] Map showing project location/site
- [N/A ] Farmland Preservation Review Letter if any impact to farmland (OPWC Application webpage)
- [X ] ADT report for Road, Bridge & Culvert Projects  
*OR*  
Number of households/EDUs (with calculation) for Water, Wastewater, Storm Water Collection, Solid Waste Projects who directly benefit. If waterline or sewer project with additional benefitted users beyond scope of construction, then also Engineer's study documenting these additional users.

Roads, Bridges/Culverts, Storm Water, Solid Waste Projects Only:

- [N/A ] Auditor's Certificate of Estimated Resources with line item detail unless applicant in State of Fiscal Emergency; also if Storm Water or Solid Waste project, the fund(s) typically used must be identified {examples in back of this manual}.
- [N/A ] Low volume road projects that include documentation using ODOT's TIMS System showing a positive Rate of Return is required to maximize points under population.

(Continued on next page)

Water and Wastewater Projects Only:

- [X ] "Current" water and wastewater rate ordinances/resolutions for all entities providing services unless applicant in State of Fiscal Emergency
  
- [X ] Small Government Water & Wastewater Ability & Effort Supplemental form (in this manual and on SG webpage)

**Small Government Self-Score**

*(Input Score in box for each criterion; will total automatically)*

**Applicant:** Village of Bradner

		<b>SCORE</b>
<b>1</b>	<b>Ability &amp; Effort (Use A or B according to project type)</b>	
A.	<i>Roads, Bridges/Culverts, Storm Water, Solid Waste Projects ONLY</i> 0    2    4    6    8    10	<input type="text" value="0"/>
B.	<i>Water &amp; Wastewater Projects ONLY</i> Calculated by Administrator	<input type="text" value="N/A"/>
<b>2</b>	<b>Health &amp; Safety (Use A or B according to project type)</b>	
A.	<i>Road, Bridge, Culvert</i> 0    2    4    6    8    10	<input type="text" value="0"/>
B.	<i>Water, Wastewater, Storm Water, Solid Waste</i> 0    2    4    6    8    10	<input type="text" value="4"/>
<b>3</b>	<b>Age &amp; Condition</b>	
I.	<i>Age</i> 0    1    2    3    4    5	<input type="text" value="3"/>
II.	<i>Condition</i> 1    2    3    4    5	<input type="text" value="3"/>
<b>4</b>	<b>Leveraging Ratio</b> 0    1    2    3    4    5    6    7    8    9    10	<input type="text" value="8"/>
<b>5</b>	<b>Population Benefit</b> 0    1    2    3    4    5	<input type="text" value="5"/>
<b>6</b>	<b>District Priority Ranking</b> - Completed by Administrator	<input type="text" value="N/A"/>
<b>7</b>	<b>OPWC Funds Requested</b> 0    5    10	<input type="text" value="10"/>
<b>8</b>	<b>Loan Request</b> (Default 0 points if no loan requested) 1    5    10	<input type="text" value="0"/>
<b>9</b>	<b>Useful Life</b> 1    2    3    4    5	<input type="text" value="5"/>
<b>10</b>	<b>Median Household Income</b> 2    4    6    8    10	<input type="text" value="8"/>
<b>11</b>	<b>Readiness to Proceed</b>	
I.	<i>Status of Plans</i> 0    2    5	<input type="text" value="0"/>
II.	<i>Status of Funding</i> 0    3    5	<input type="text" value="5"/>
<b>TOTAL</b>		<input type="text" value="51"/>



Ohio Public Works Commission

Small Government  
Capital Improvements Program

PY 34 Methodology – Rating Scales

Approved July 18, 2019

Ohio Public Works Commission  
65 East State Street, Suite 312  
Columbus, Ohio 43215  
614.466.0880  
<http://www.pwc.ohio.gov>

**Complete and compliant support documentation must be provided for a criterion to be awarded points. See Applicant Manual for more information.**

**1. Ability and Effort of the Applicant to Finance the Project (Maximum 10 points)**

A. Roads, Bridges/Culverts, Storm Water, Solid Waste Projects Only – “Auditor’s Certificate of Estimated Resources” showing fund detail, as provided in ORC sections 5705.35 and 5705.36 is used to determine potential financial resources available for the project. Score is based on the project’s total cost as a percentage of financial resources.

- 0 Total project cost represents 0 to 20% of subdivision's total combined funds legally eligible for infrastructure type
- 2 Total project cost represents 21 to 40% of subdivision's total combined funds legally eligible for infrastructure type
- 4 Total project cost represents 41 to 60% of subdivision's total combined funds legally eligible for infrastructure type
- 6 Total project cost represents 61 to 80% of subdivision's total combined funds legally eligible for infrastructure type
- 8 Total project cost represents 81 to 100% of subdivision's total combined funds legally eligible for infrastructure type
- 10 Total project cost exceeds 100% of subdivision's total combined funds legally eligible for infrastructure type, or subdivision is in fiscal emergency

B. Water and Wastewater Projects Only – Determined by SG Administrator according to the Water & Wastewater Ability & Effort calculation described in Applicants Manual. Information is obtained from both water and wastewater rate ordinances, Small Government Water & Wastewater Ability & Effort Supplemental, and data from the *U.S. Census Bureau's American Fact Finder* web application. Points are provided for the hours worked to pay for water and wastewater services according to the highest of two variances as a percentage above or below State Averages: weighted average of household income or percentage of households making less than \$25,000.

- 0 More than 50% above state average
- 2 25.1% - 50% above state average
- 4 0 - 25% above state average
- 6 0.1% - 25% below state average
- 8 25.1% to 50% below state average
- 10 More than 50% below state average

**2. Importance of Project to Health and Safety of Citizens** – Score is assigned according to the application project description and any pertinent supplemental documentation. (Maximum 10 points)

A. Road, Bridge, Culvert

- 0 New infrastructure to meet future or projected needs
- 2 New infrastructure to meet current needs; Roadway surface paving less than 2 inches; Bridges with General Appraisal of 6 or above or with a Sufficiency Rating of 81-100

- 4 Roadway surface paving equal to or greater than 2 inches with/without milling; Replace or install signal where warranted; Bridges with a General Appraisal of 5 or Sufficiency Rating of 66-80; Culvert replacement with no associated damage
- 6 Road widening to add paved shoulders or for safe passage, and/or roadway paving with full-depth base repair equal to or greater than 5% of roadway surface area; Intersection improvement to add turn lanes or realignment; Bridges with a General Appraisal of 4 or Sufficiency Rating of 51-65; Culverts with inadequate flow capacity
- 8 Complete roadway full-depth reconstruction (includes removal/replacement of base) or reclamation with/without drainage; Widening to add travel lanes; Intersection improvements to address excessive accident rate and/or inadequate level of service with Crash Reduction Factor ( $0.0 < CRF < 0.2$ ); Bridges with a General Appraisal of 3 or Sufficiency Rating of 26-50; Culverts with inadequate flow capacity and property damage (i.e. flooding)
- 10 Complete roadway reconstruction or reclamation with/without drainage with widening to add travel lanes; Intersection improvement to address excessive accident rate and/or inadequate level of service with Crash Reduction Factor ( $CRF \geq 0.2$ ); Bridges with General Appraisal of 2 or less, or Sufficiency Rating of less than 26; Culverts that are structurally deficient

B. Water, Wastewater, Storm Water, Solid Waste

- 0 Infrastructure to meet future or projected needs
- 2 Expanded infrastructure to meet specific development proposal
- 4 Infrastructure to meet current needs; Update processes to improve effluent or water quality; To remain in compliance with permit due to increased standards; Increase storm sewer capacity in which there is no associated land damage; Increase sanitary sewer capacity; Replace water meters as part of an upgrade
- 6 OEPA recommendations; District health board recommendations; Increase storm sewer capacity that has associated land damage; Replace undersized waterlines as part of upgrade; Install new meters or replace meters that have exceeded useful life
- 8 Replacement of storm or sanitary sewers due to chronic flooding, back-up, or property damage; Inflow and/or Infiltration; Inadequate capacity to maintain pressure required for fire flows; Replacement of waterlines or towers due to excessive corrosion
- 10 OEPA Findings & Orders, OEPA orders contained in permit, Consent Decree or Court Order; Structural separations (CSOs) Age and Condition of System to be repaired or replaced. This is a two-part criterion. (Maximum 10 points)



**3. Age & Condition of System to be repaired or replaced**

Part I – Age: This uses provided documentation for existing infrastructure. Documentation pertains to source documentation or from a compliant letter written by an eligible local official who can vouch for the time period during his/her term in office. If no documentation the default score is 1 point. (Maximum 5 points)

Life	20	30	50
Project Type	Road	Wastewater	Bridge/Culvert. Sanitary Sewer, Water, Storm Water, Solid Waste
Points			
0	New / Expansion	New / Expansion	New / Expansion
1	2014-2019	2011-2019	2004-2019
2	2009-2013	2004-2010	1993-2003
3	2004-2008	1996-2003	1981-1992
4	1999-2003	1989-1995	1969-1980
5	1998 or before	1988 or before	1968 or before

Part II – Condition (Maximum 5 points)

- 1 New/Expansion: New or expansion project components represent at least 50% of improvements
- 2 Expansion: New or expansion project components represent between 25% and 49% of improvements
- 3 **Poor: Infrastructure requires repair to continue functioning as originally intended and/or upgrade to meet current design standards.**
- 4 Critical: Infrastructure requires replacement to continue functioning as originally intended.
- 5 Failed: Not functioning

**4. Leveraging Ratio – Local and all non-OPWC funding sources as a percentage of total funding. (Maximum 10 points)**

	Repair/Replacement (Poor/Critical/Failed in Criterion 3)	New/Expansion (New/Expansion &/or Expansion in Criterion 3)
0	10 or less	50 or less
1	11-15	51-55
2	16-20	56-60
3	21-25	61-65
4	26-30	66-70
5	31-35	71-75
6	36-40	76-80
7	41-45	81-85
8	46-50	86-90
9	51-55	91-95
10	56 or more	96 or more

5. **Population Benefit** – Number of those to benefit directly from the improvement as a percentage of applicant’s total population. (Maximum 5 points)

0	10% or less
1	25% - 11%
2	35% - 26%
3	45% - 36%
4	55% - 46%
5	56% or more

6. **District Priority Ranking as provided by District** (Maximum 10 points)

6	5 <sup>th</sup> ranked district project
7	4 <sup>th</sup> ranked district project
8	3 <sup>rd</sup> ranked district project
9	2 <sup>nd</sup> ranked district project
10	1 <sup>st</sup> ranked district project

7. **Amount of OPWC funding requested** (Maximum 10 points)

0	\$500,000 or more
5	\$250,000 - \$499,999
10	249,999 or less

8. **Loan Request as a percentage of OPWC assistance** (Maximum 10 points)

1	15 - 29% of OPWC assistance
5	30 - 49% of OPWC assistance
10	50 - 100% of OPWC assistance

9. **Useful Life of Project** – Taken from engineer’s useful life statement. (Maximum 5 points)

1	7 - 9 years
2	10 - 14 years
3	15 - 19 years
4	20 - 24 years
5	25 years or more

10. **Median Household Income** – Applicant’s MHI as a percentage of the statewide MHI. Information derived from the most recent 5-year American Community Survey as published by the Ohio Development Services Agency. (Maximum 10 points)

2	110% or more
4	100% - 109%
6	90% - 99%
8	80% - 89%
10	79% or less

11. **Readiness to Proceed** (Maximum 10 points)

Part I – Status of Plans – This uses the Small Government Commission’s Engineer’s Plan Status Certification. (Maximum 5 points)

- 0 Plans not yet begun
- 2 Surveying through Preliminary Design Completed (Items A-C)
- 5 Surveying through final construction plans, and secured permits and right-of-way as appropriate (Items A-H)

Part II – Status of Funding Sources – This uses source documentation including CFO certifications and loan letters. (Maximum 5 points)

- 0 All funds not yet committed
- 3 Applications submitted to funding entities
- 5 All funding committed

**Small Government Commission  
Engineer's Plan Status Certification  
Required for Criterion No. 11, Part I**

Applicant: Village of Bradner

District No.: 5

Project Name: Caldwell Street Elevated Storage Tank Rehabilitation

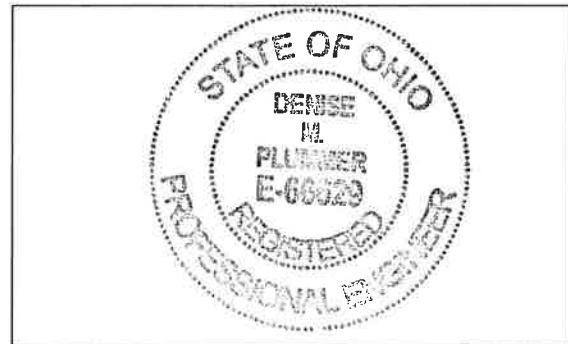
Item	Necessary for project?	Status	Completion Date
Met Completion dates for Items A - C (2 points)			
A	Surveying Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
B	R/W Acquisition Identified Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
C	Preliminary Design Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
Met Completion dates for Items A - H (5 points)			
D	Final Construction Plans Y <input checked="" type="checkbox"/> N/A <input type="checkbox"/>		6/15/2020
E	Permit to Install Issued Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
F	NPDES Issued Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
G	Other Permits Issued Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		
H	Executed Right of Way Option or Agreement Y <input type="checkbox"/> N/A <input checked="" type="checkbox"/>		

I hereby certify that the information above is true and correct to the best of my knowledge and belief.

Denise M. Plummer, P.E.  
Engineer's Printed Name

Denise M. Plummer  
Engineer's Signature

9-5-19  
Date



Engineer's Stamp/Seal



RESOLUTION NO. 04-2017

**A RESOLUTION SETTING THE WATER RATES,  
BULK WATER RATES AND TAP CHARGES FOR  
THE VILLAGE OF BRADNER, OHIO**

WHEREAS, the Bradner Board of Public Affairs manages and operates a Water System and sells water to users in the Village of Bradner, Ohio, and;

WHEREAS, upon review of the anticipated revenues and expenses of the Water System, the Bradner Board of Public Affairs desires to establish the water rates, bulk water rates and tap charges for the water system.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF PUBLIC AFFAIRS, VILLAGE OF BRADNER, COUNTY OF WOOD, AND STATE OF OHIO, THAT:

**SECTION 1: WATER RATES**

Rates for customers located inside the corporate limits of the Village effective with the December 2017 meter reading, January 1, 2018 billing date shall be:

Monthly Service Charge*	\$20.12
Monthly Fire Hydrant Charge	\$ .50
Water Usage Rate	\$ 7.12 per 1,000 gallons

Rates for customers located outside the corporate limits of the Village (which are 150% of the inside rates) effective with the December 2017 meter reading, January 1, 2018 billing date shall be:

Monthly Service Charge*	\$25.13
Monthly Fire Hydrant Charge	\$ .75
Water Usage Rate	\$ 10.65 per 1,000 gallons

\* Regardless of usage

**SECTION 2. BULK WATER RATES**

\$6.00 per 1,000 gallons plus a \$20.00 Service Charge

**SECTION 3. RATE FOR FILLING SWIMMING POOLS**

Applicable Water Usage Rate per 1,000 gallons if filled through the customer's meter. The sanitary sewer usage rate will be waived one time per year if the utility clerk is contacted prior to filling.

**SECTION 4. WATER TAP RATES**

In Town

¾" water tap - \$ 800.00  
1" water tap - \$1,000.00

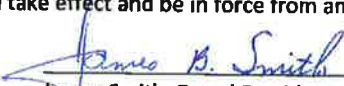
Out of Town

¾" water tap - \$1,200.00  
1" water tap - \$1,500.00


Larger taps – The price is to be determined by the Board of Public Affairs based on time and material.

Water taps will only be installed during normal working hours.

SECTION 5. This Resolution shall take effect and be in force from and after the earliest period allowed by law.

  
James Smith, Board President

ATTEST:

  
Kerstan Kaminski, Fiscal Officer

APPROVED: 1/8/2018

**ORDINANCE NO. 20-2014**

AN ORDINANCE AMENDING THE VILLAGE OF BRADNER'S REGULATIONS GOVERNING THE USE OF PUBLIC AND PRIVATE SEWERS BY INCREASING THE MONTHLY SEWER USE DEBT CHARGE FEE, AND TO DECLARE AN EMERGENCY.

WHEREAS, Village council recently met with a representative of the United States Department of Agricultural (USDA) to review the Village sewer rate charges and more particularly to review the monthly debt service charge the Village levies per dwelling unit, to generate funds required to repay the USDA loan made for improvements at the Village sewage treatment facility and at the same time provide sufficient reserves to maintain the Village sewer system; and

WHEREAS, it was determined that the current monthly debt charge levied on each dwelling unit connected to the Village sewer system is not adequate to provide funds needed to pay the debt charges and to generate sufficient funds necessary to maintain the Village sewer system.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE VILLAGE OF BRADNER, WOOD COUNTY, OHIO:

SECTION I. That Section 7.2 Basis of Charges of the Regulations Governing the Use of Public and Private Sewers, User Charge Systems and Sanitary Sewer Charges adopted as Ordinance No. 26-91, and as amended by Ordinance No. 12-92, Ordinance No. 28-98, Ordinance No. 05-2005, Ordinance No. 01-2006, Ordinance No. 19-2006, Ordinance No. 14-2008, and Ordinance No. 19-2009 shall be amended to increase the sanitary sewer debt charge to \$14.25 per month per dwelling unit effective with the October 1, 2014, sewer bill.

SECTION II. That this Ordinance is an emergency measure and shall go into immediate effect on its passage. The reason for the emergency is that it is urgently necessary to adjust and increase the monthly sewer debt charge for each dwelling unit connected to the Village sewer system, in order to comply with the USDA mandate that the Village maintain sewer rates sufficient to both discharge the debt payable to the United States Department of Agriculture and provide sufficient funds to properly maintain its sewer system.

PASSED:

  
President of Council

ATTEST:

  
Clerk

APPROVED:

9-18-14  
Date

  
Mayor