CITY OF WHITEWATER WASTEWATER UTILITY

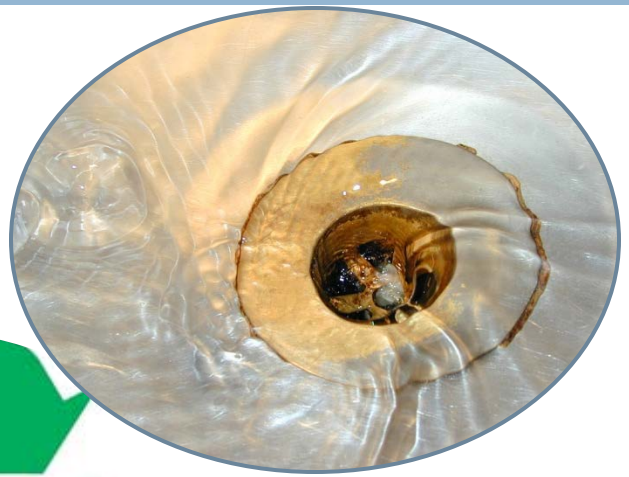
Looking to the future…

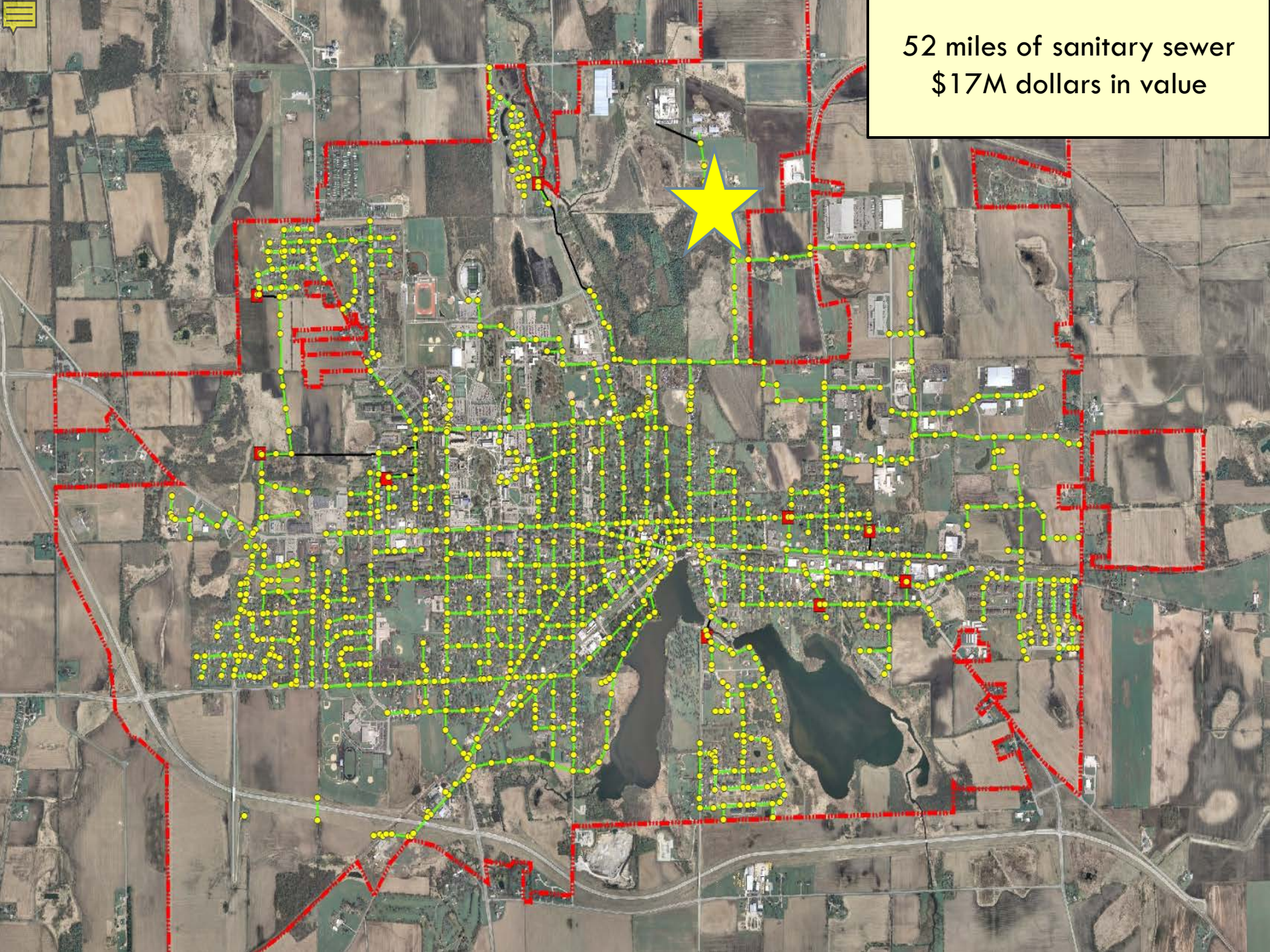
Outline

- Treatment Overview
- Facility Background
- Proposed Improvements
- Impact on Residents & Businesses
- Q&A

Treatment Overview: What we do

- Collect Wastewater (1.5M gallons/day)
- Treat inorganics & nutrients
- Return clean water to the watershed



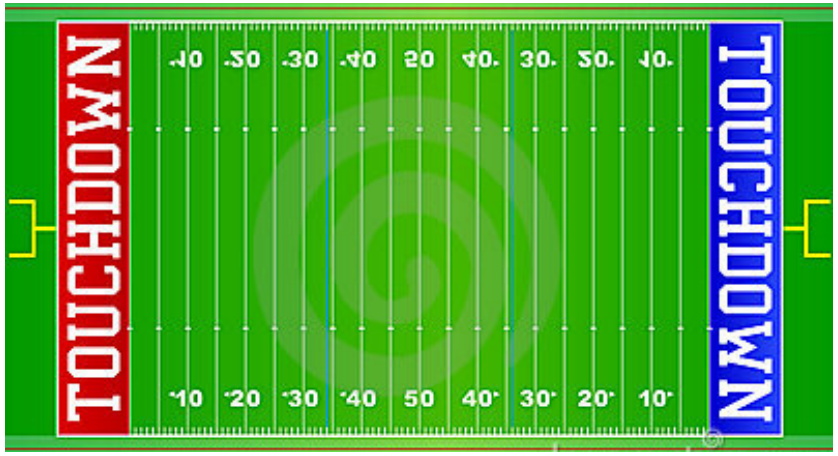

52 miles of sanitary sewer
$17M dollars in value

Treatment Overview: What we do

How much is 1.5 million gallons?

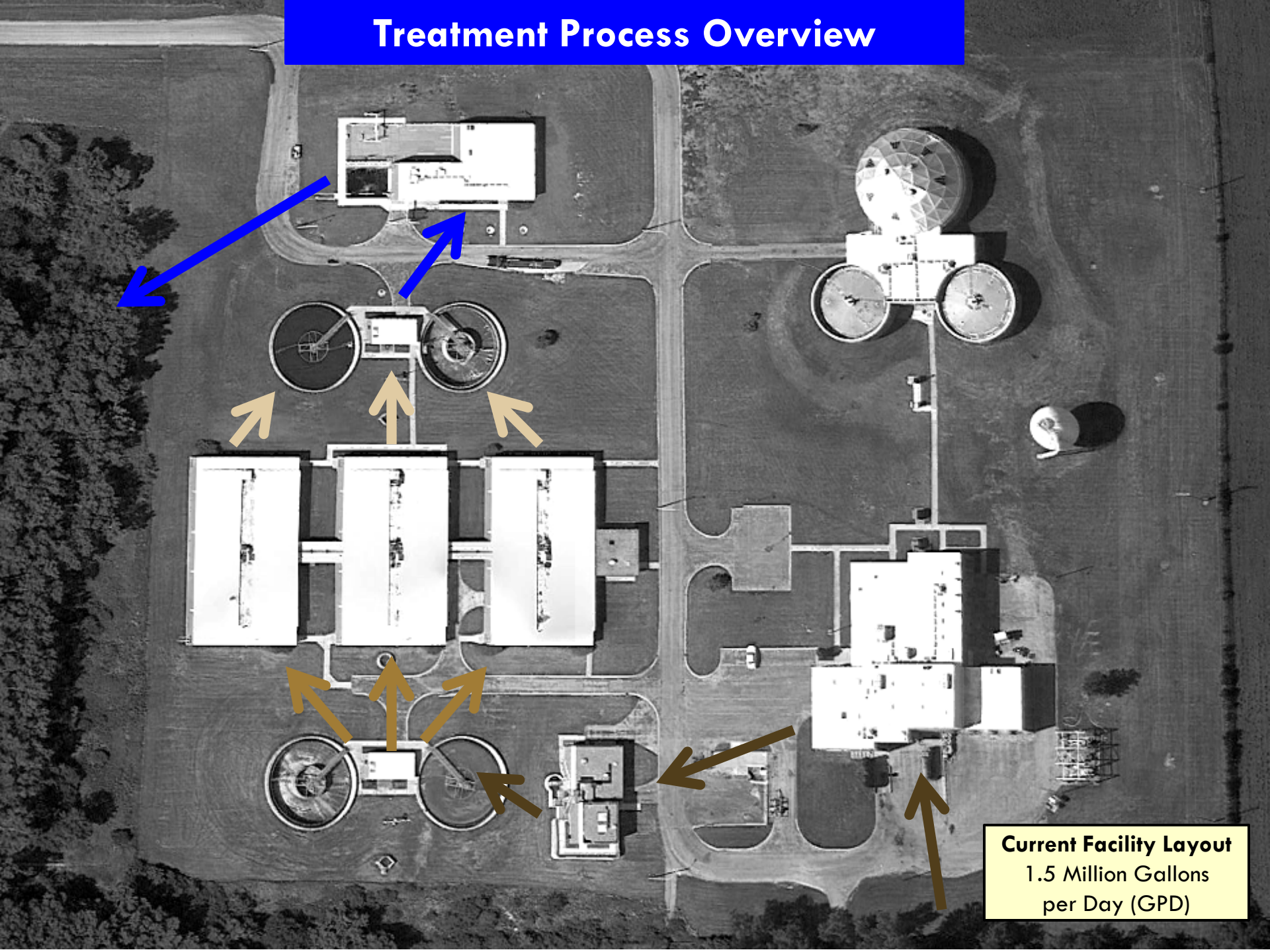
50 x

or



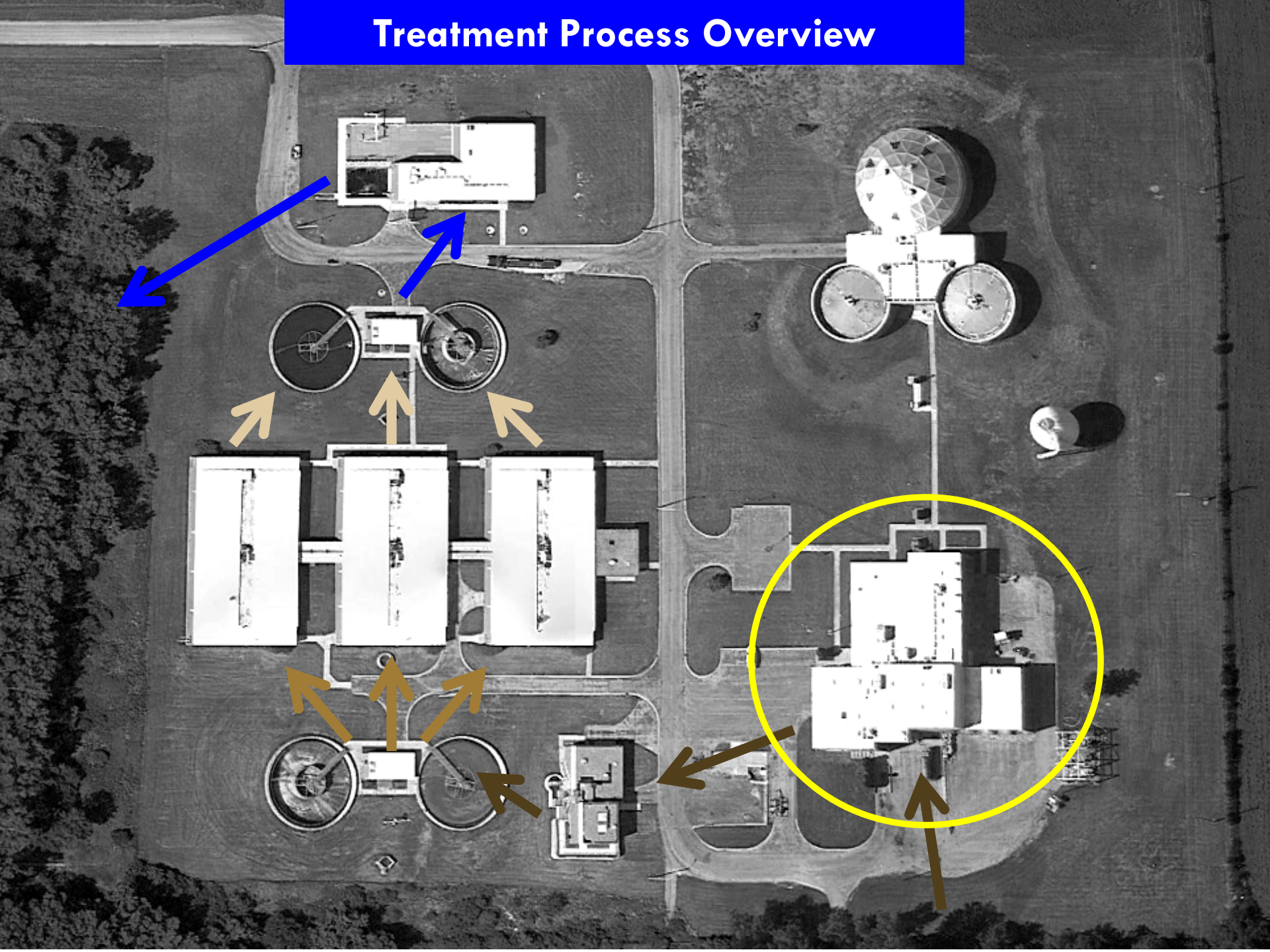
Covered in 3.5 feet of water

Treatment Process Overview



Current Facility Layout
1.5 Million Gallons
per Day (GPD)

Treatment Process Overview



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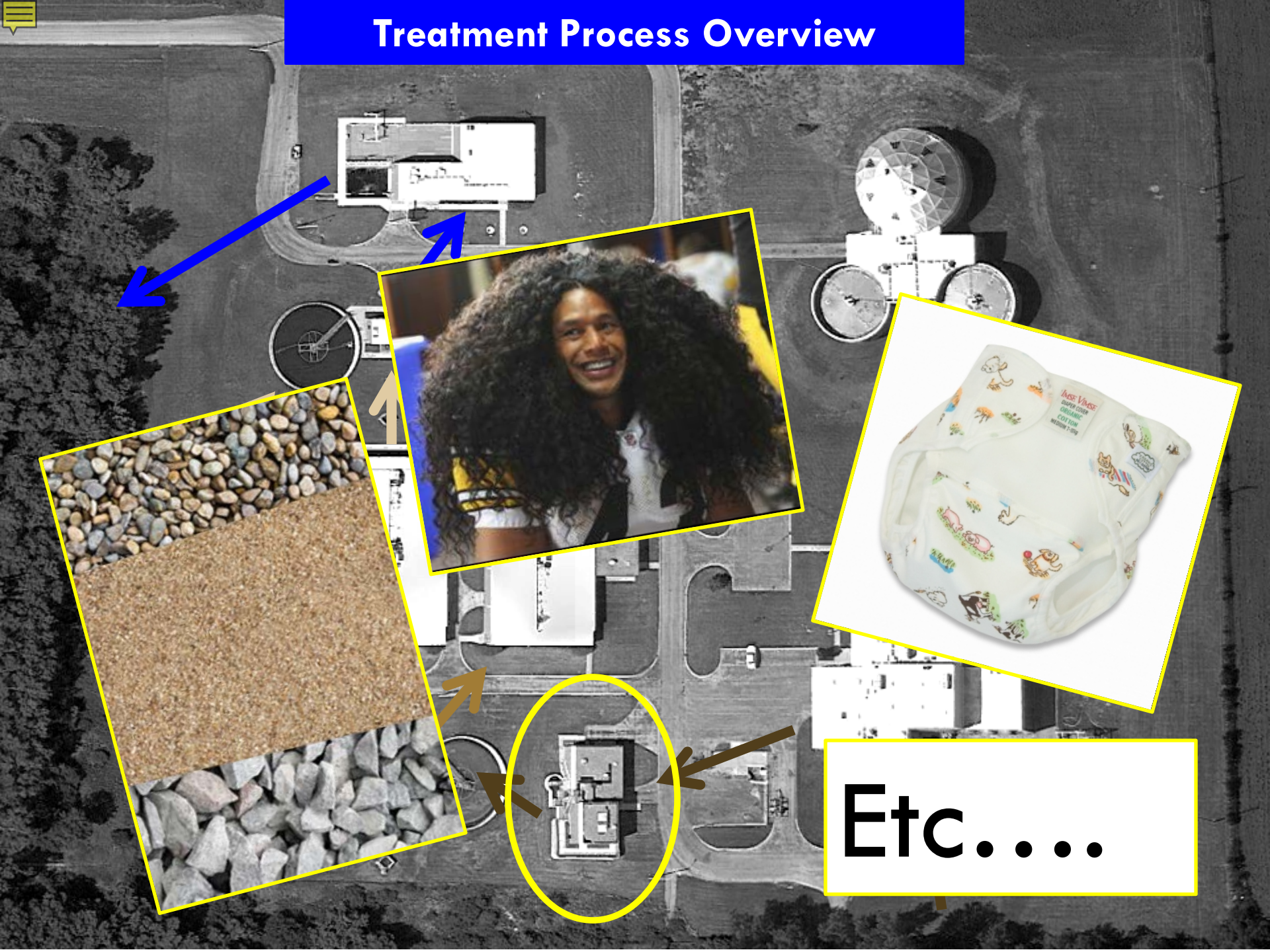

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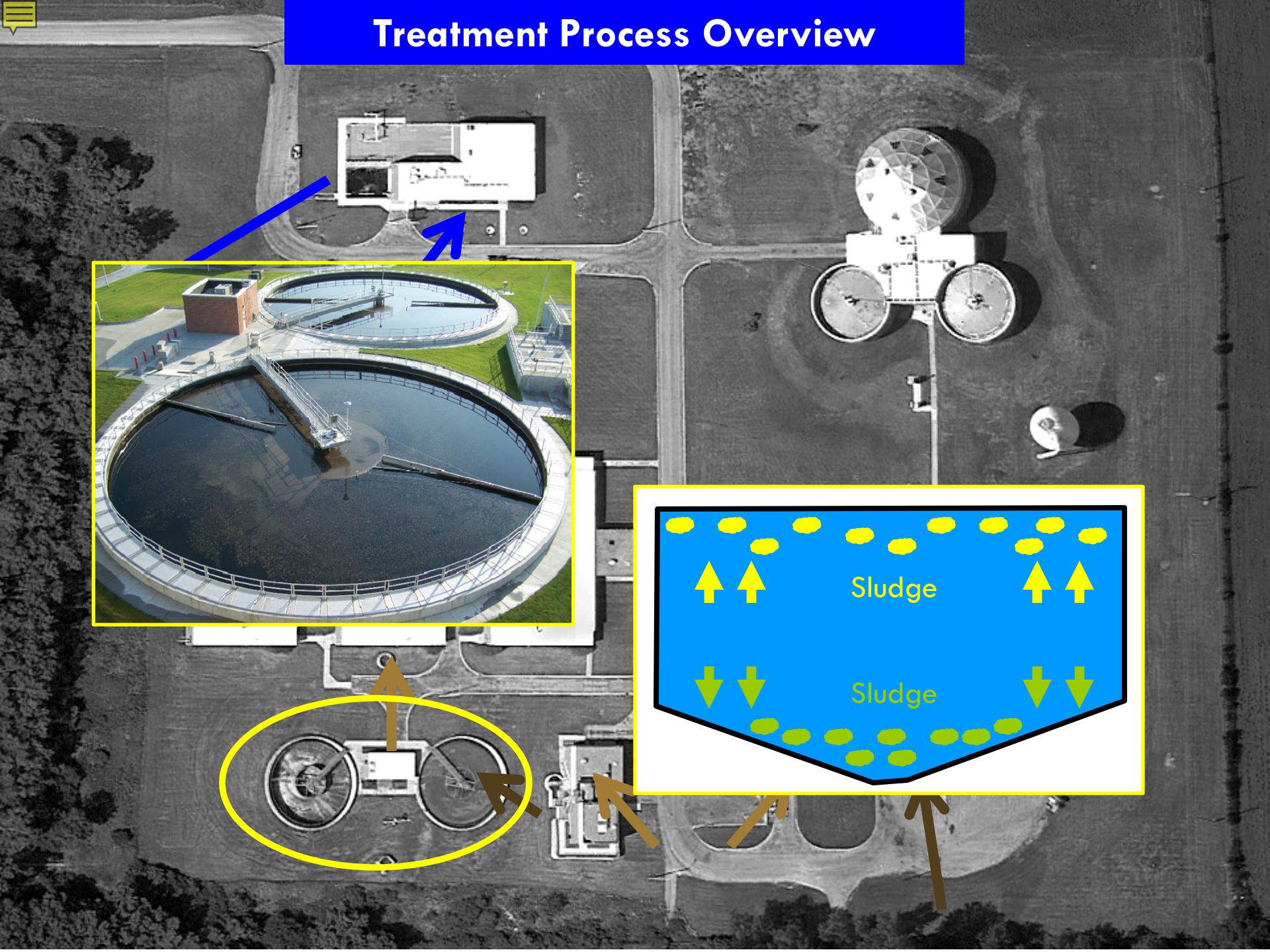

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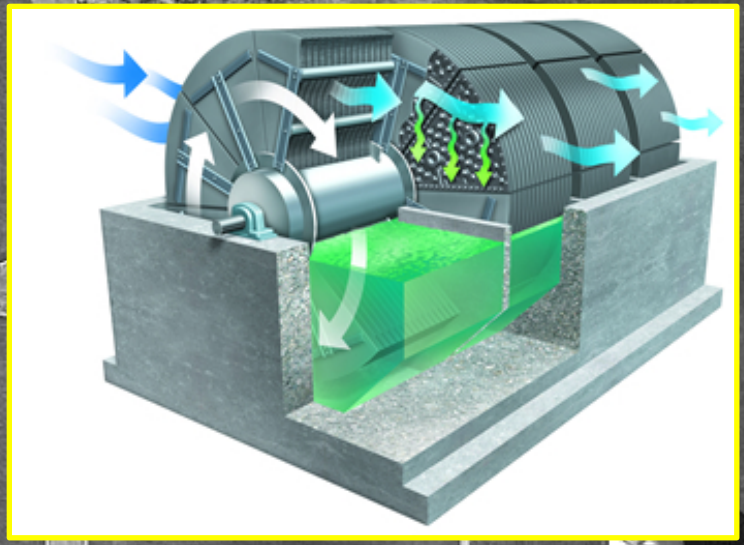

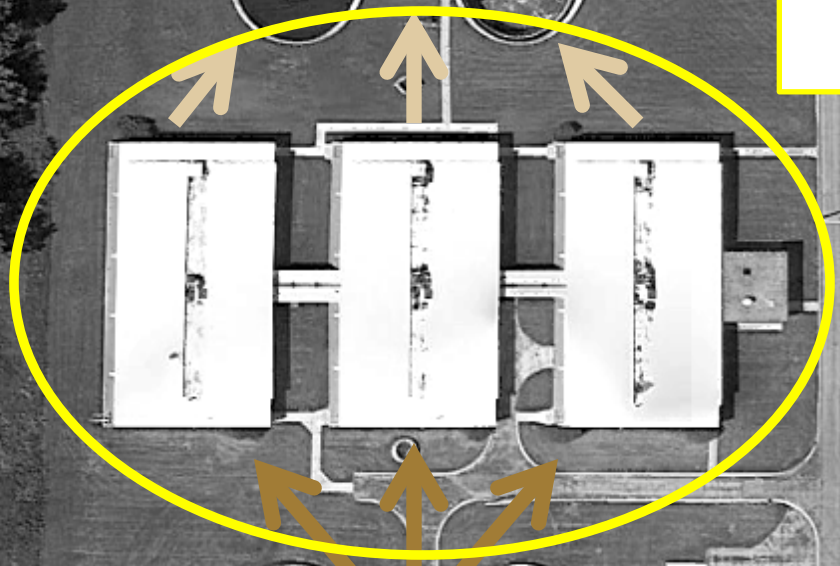

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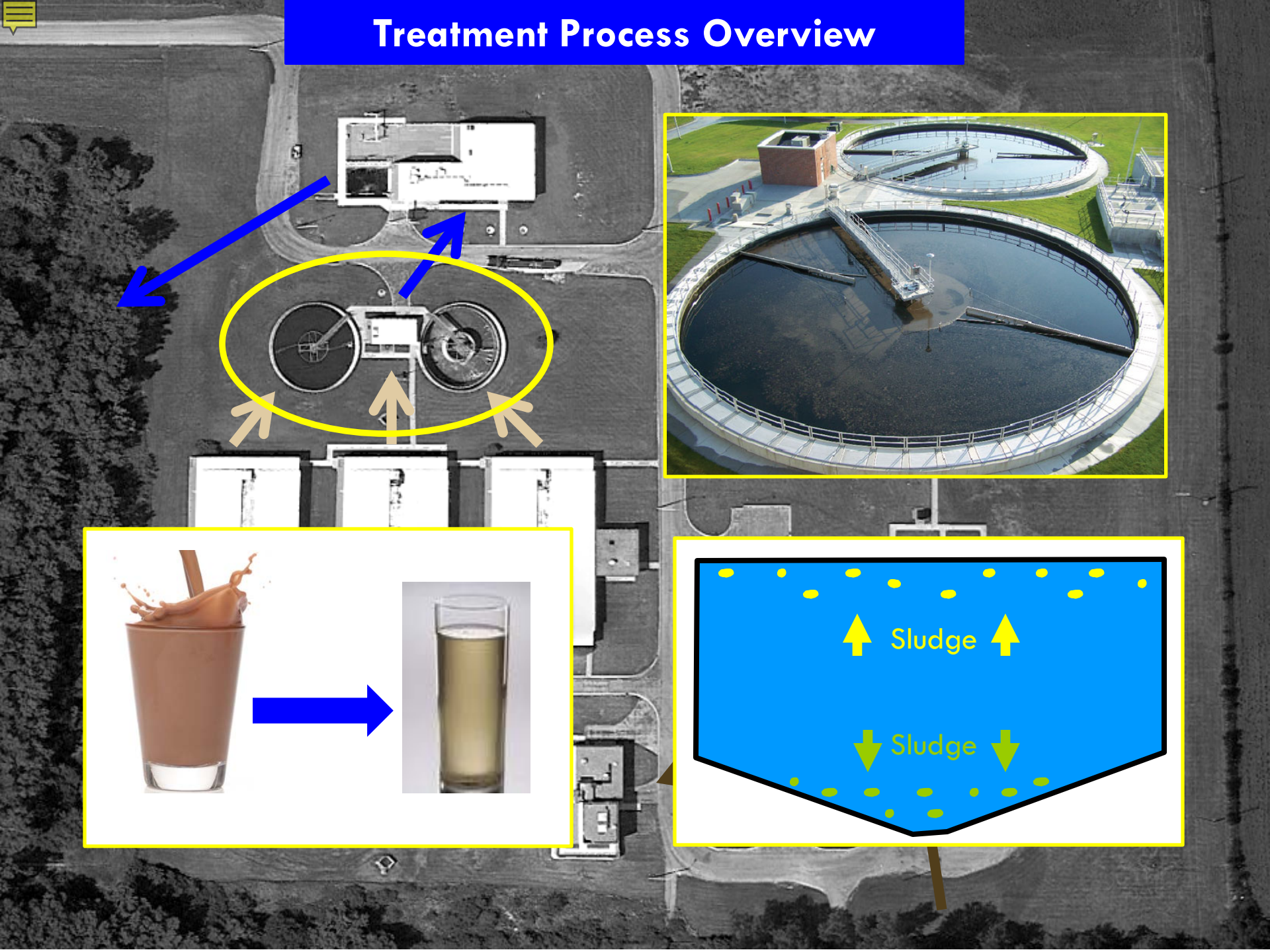
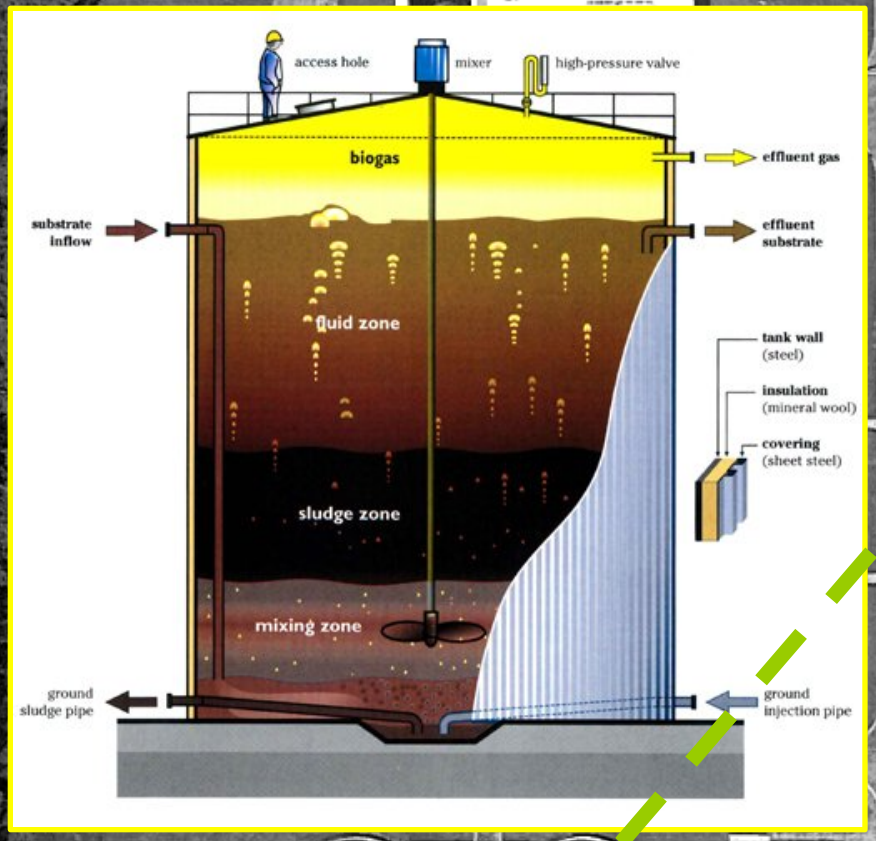


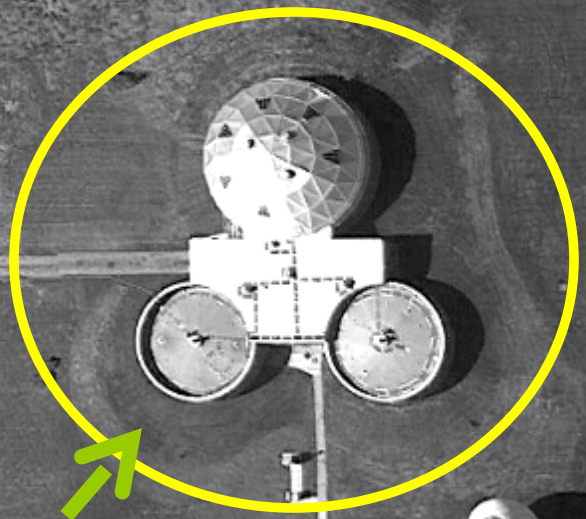
Treatment Process Overview

- Tertiary Treatment
- UV Treatment
- Aeration

Treatment Process Overview

- Two (2) Covered, Heated Anarobic Digesters
- One (1) Storage Tank





Facility Background

- Current facility built in 1982
- Preliminary Building - 1997
- Facility Planning - May 2008
- ARRA Project - 2009
- Facility Plan revisited - 2013

Facility Background: Concerns & Needs

- Aging infrastructure
- ID Safety and code requirements
- Hydraulic bottlenecks
- Secondary Treatment
- Digester capacity

Proposed Improvements

Biological Treatment System

Electrical Systems

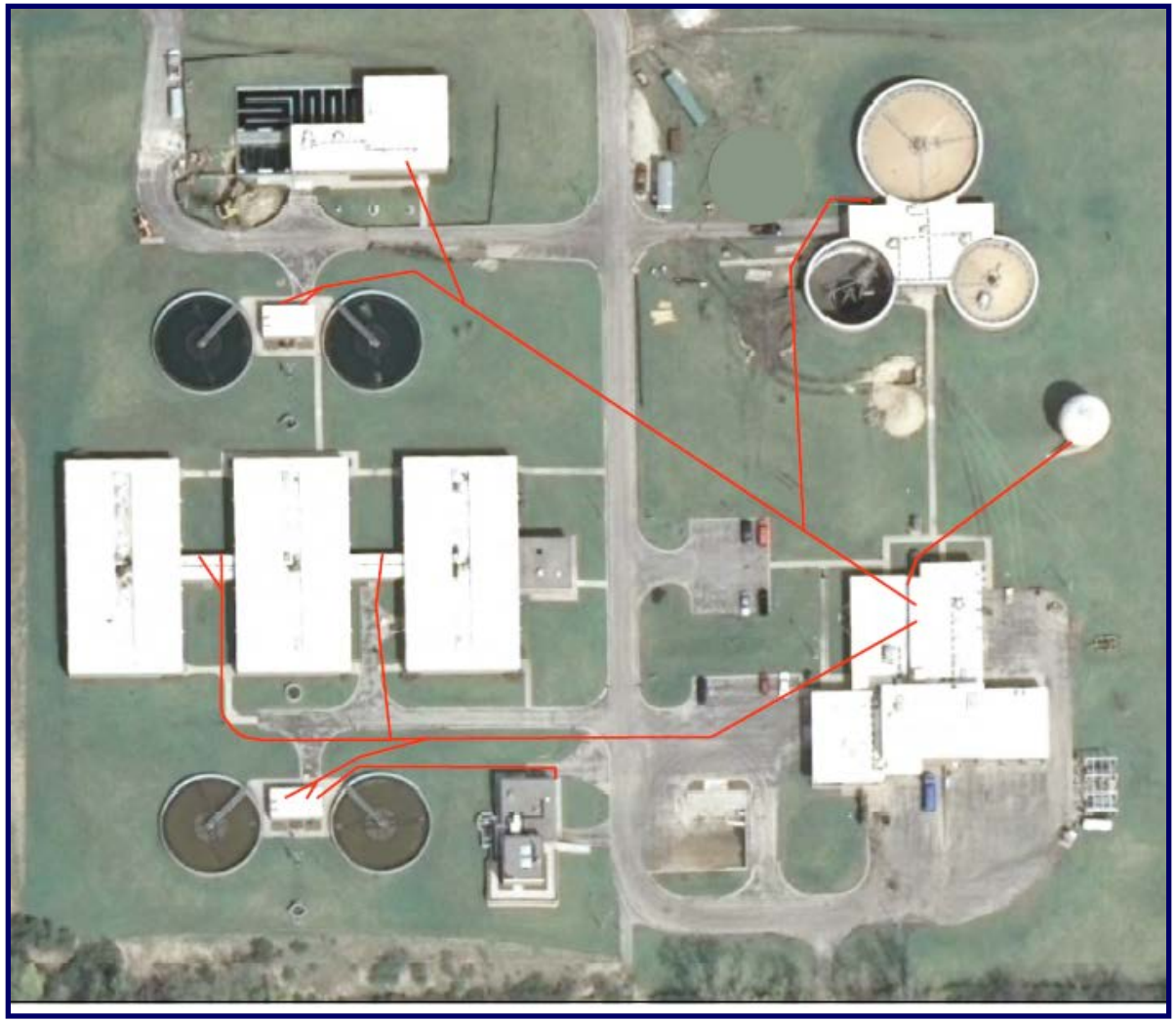
Fire and Safety Guidelines

Buildings

Site

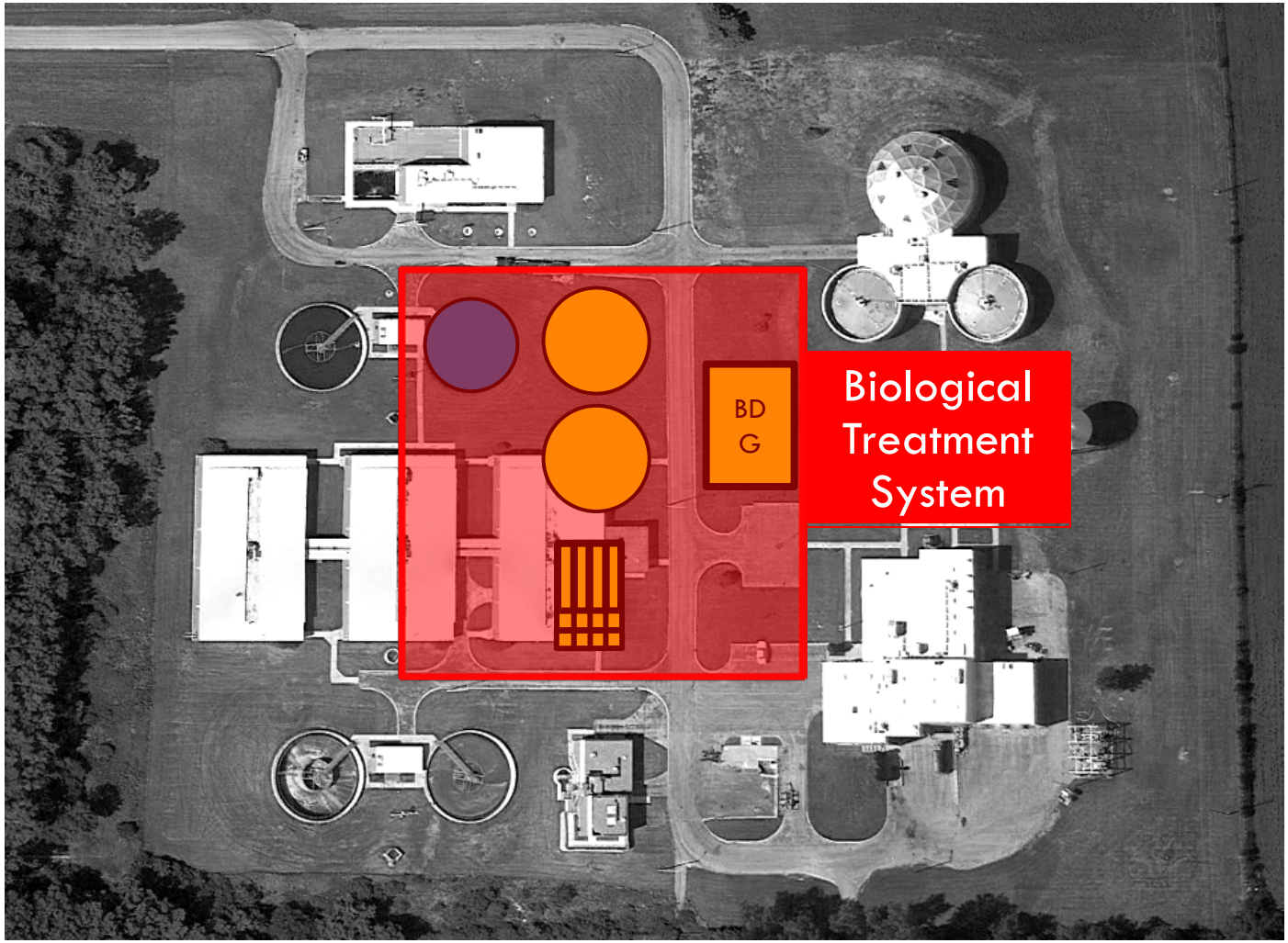
$20.7M

Proposed Improvements



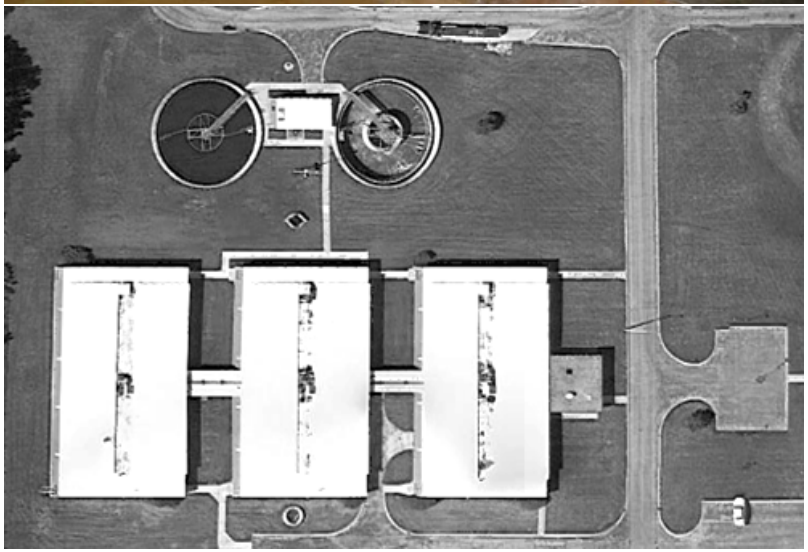
Electrical Systems

Proposed Improvements

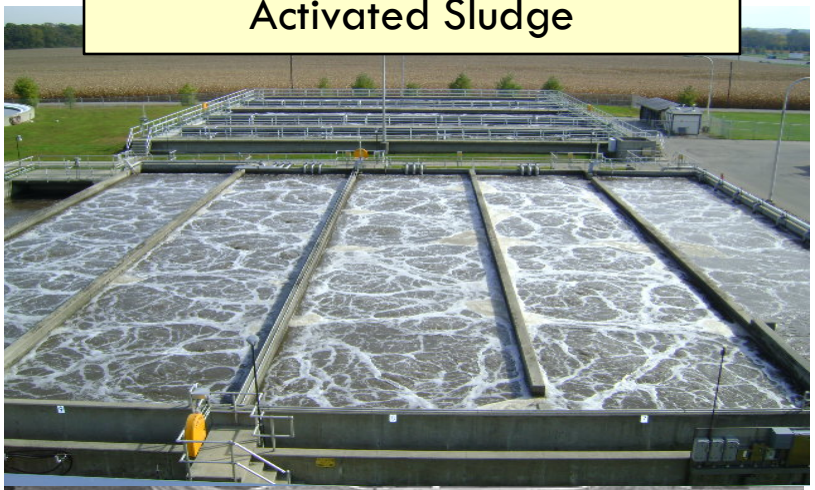


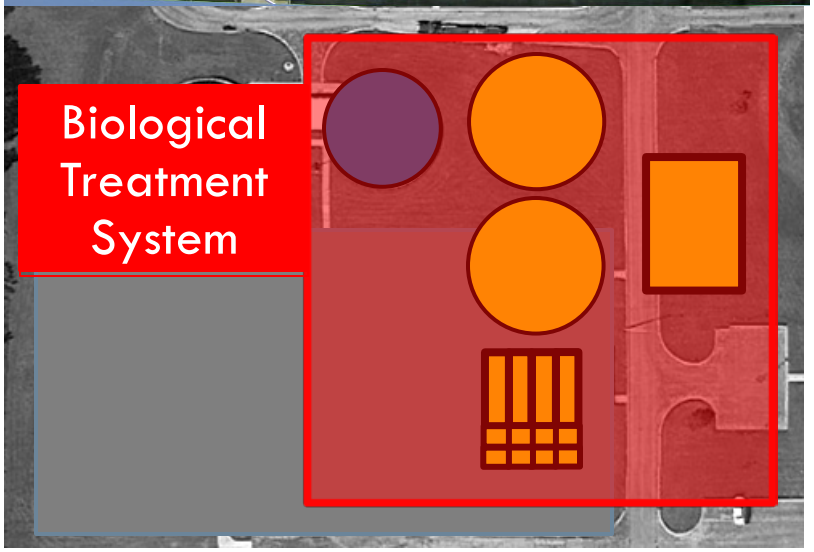
Proposed Improvements

Rotating Biologic Contactors



Activated Sludge





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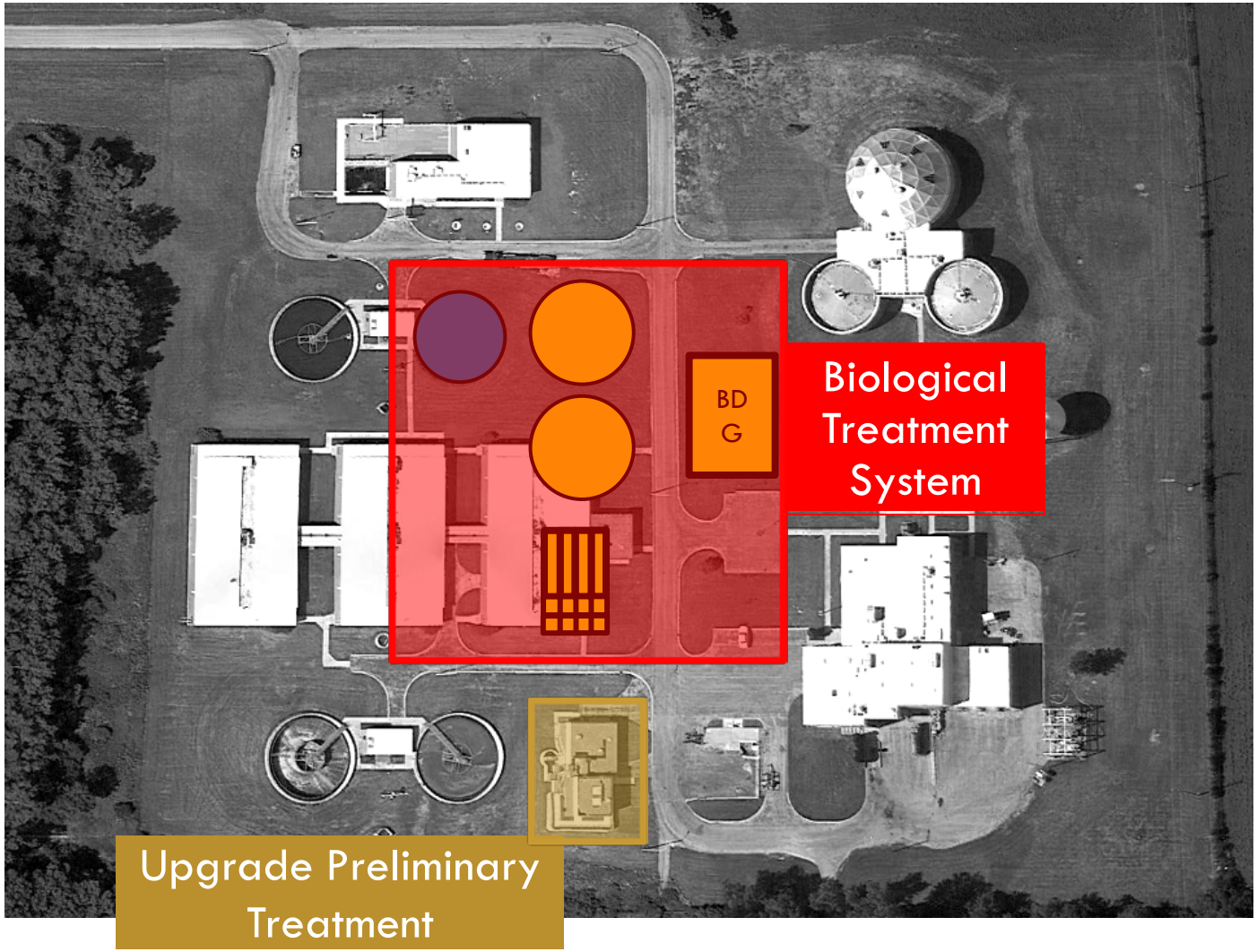

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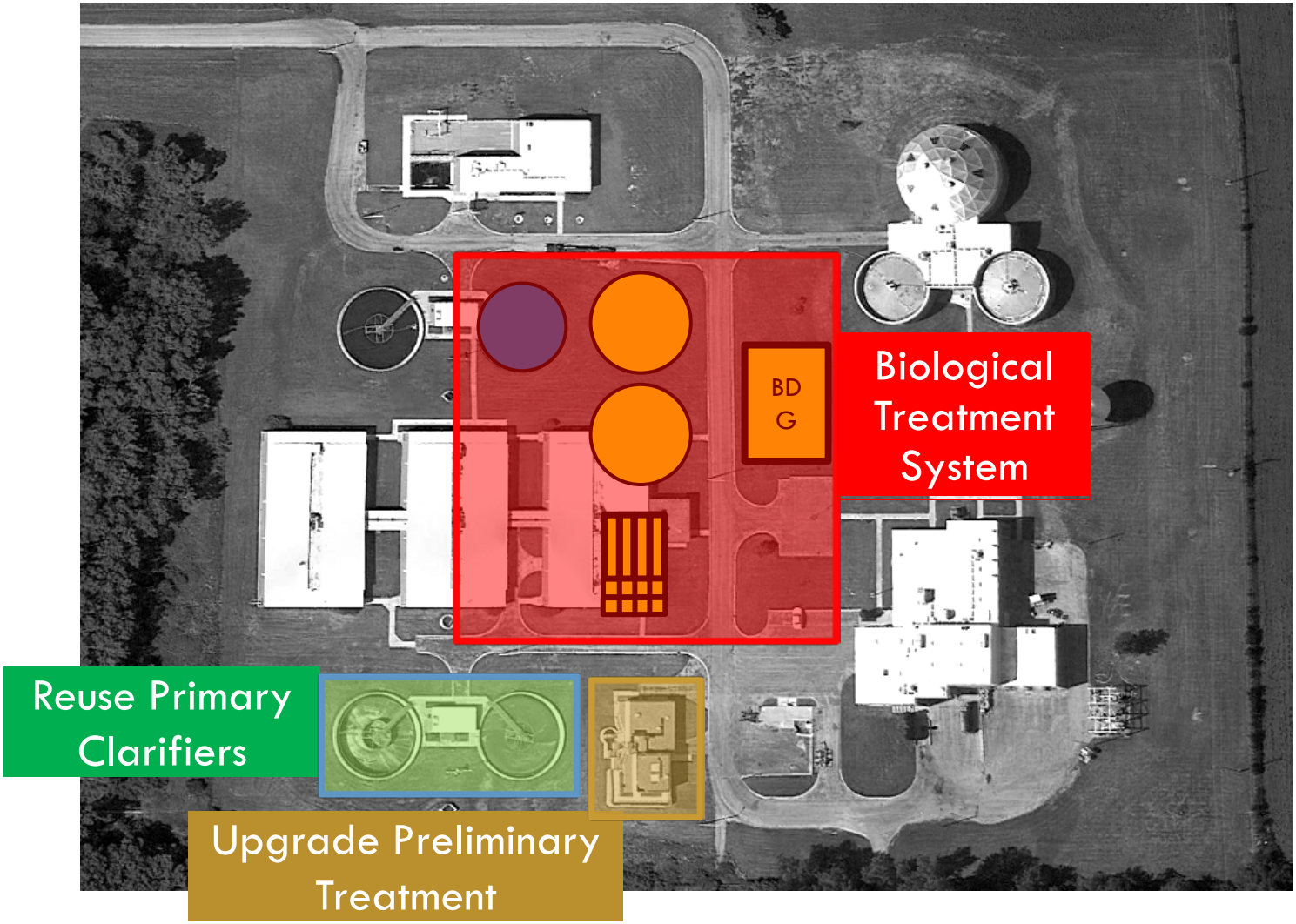

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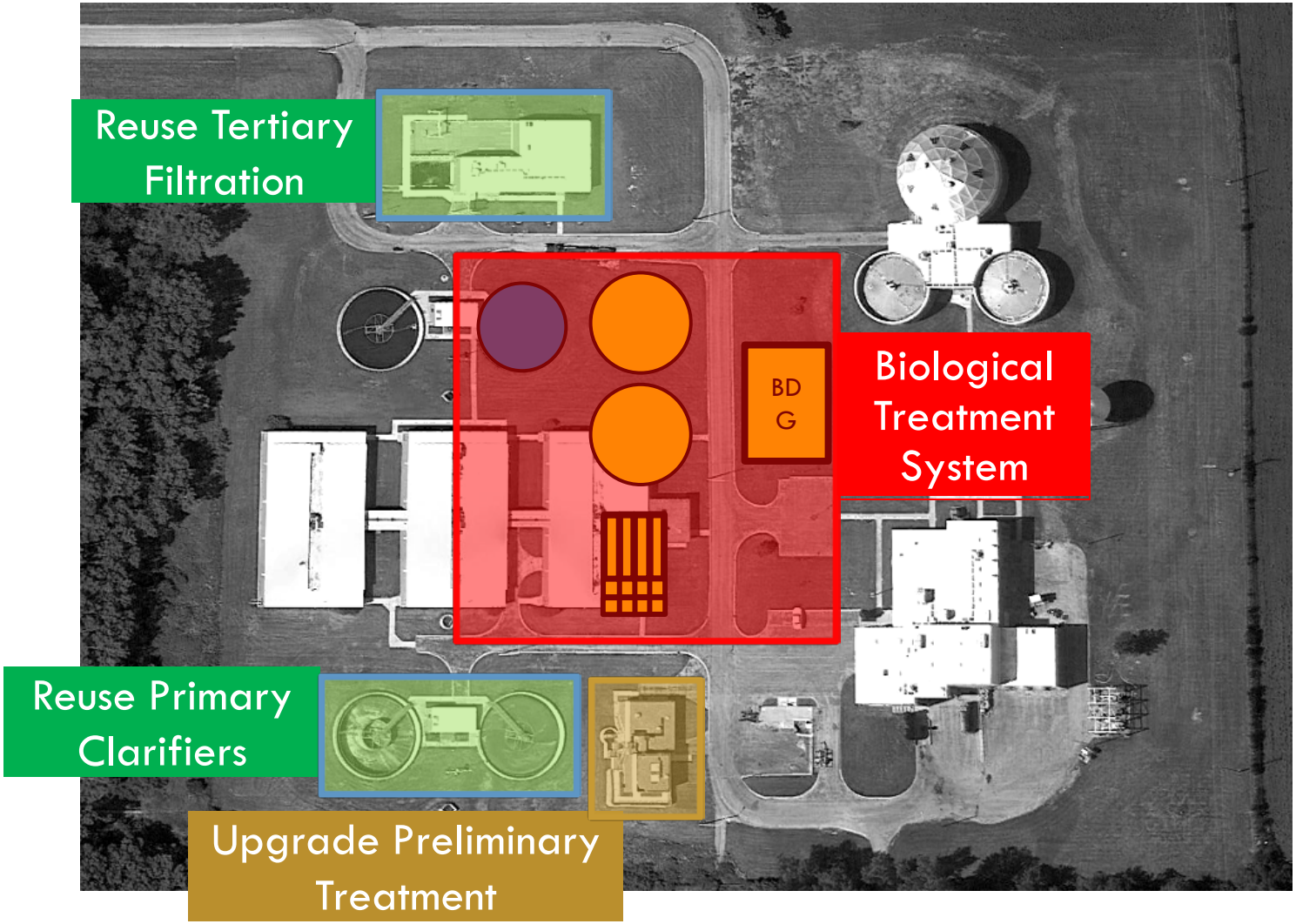

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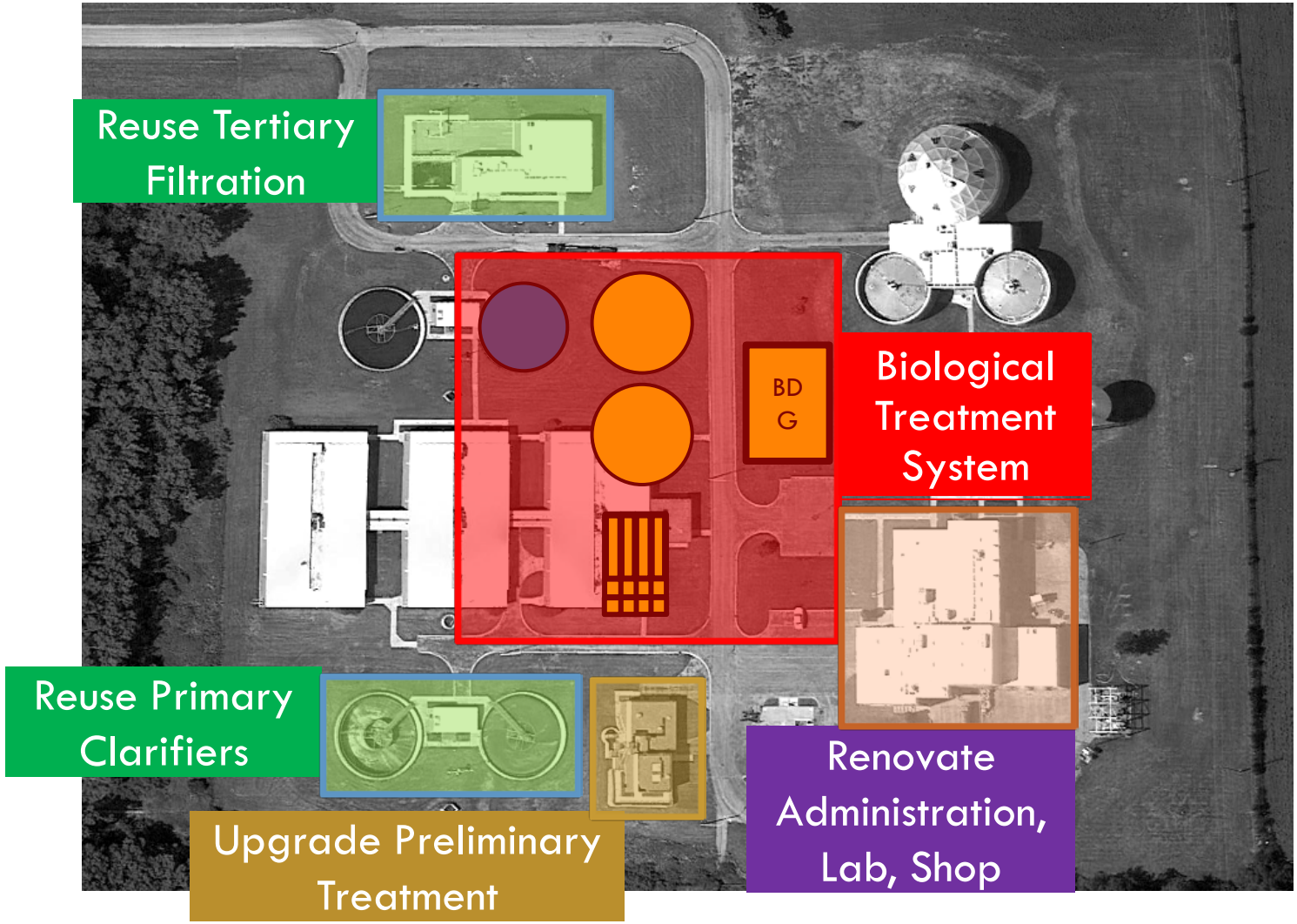

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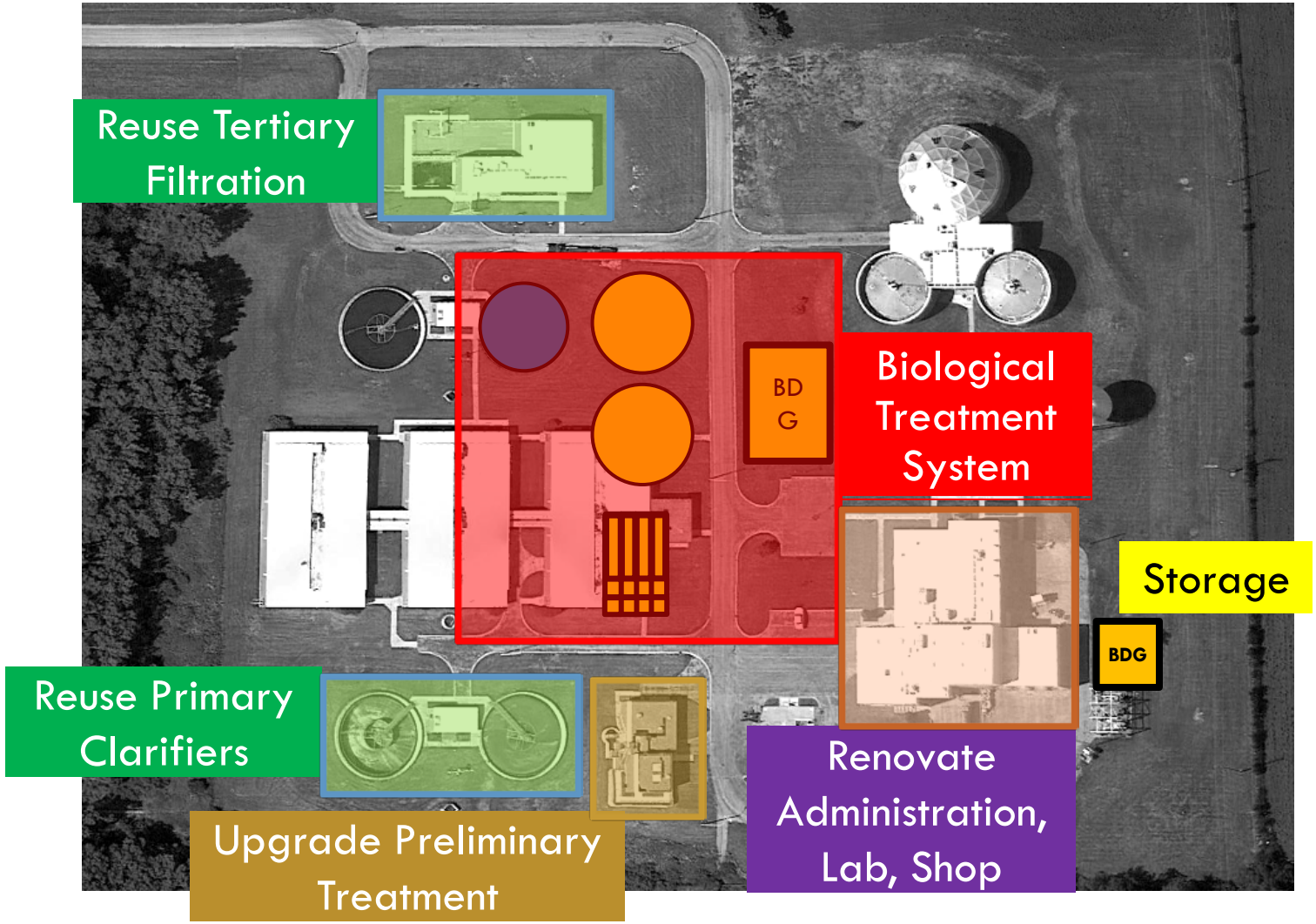

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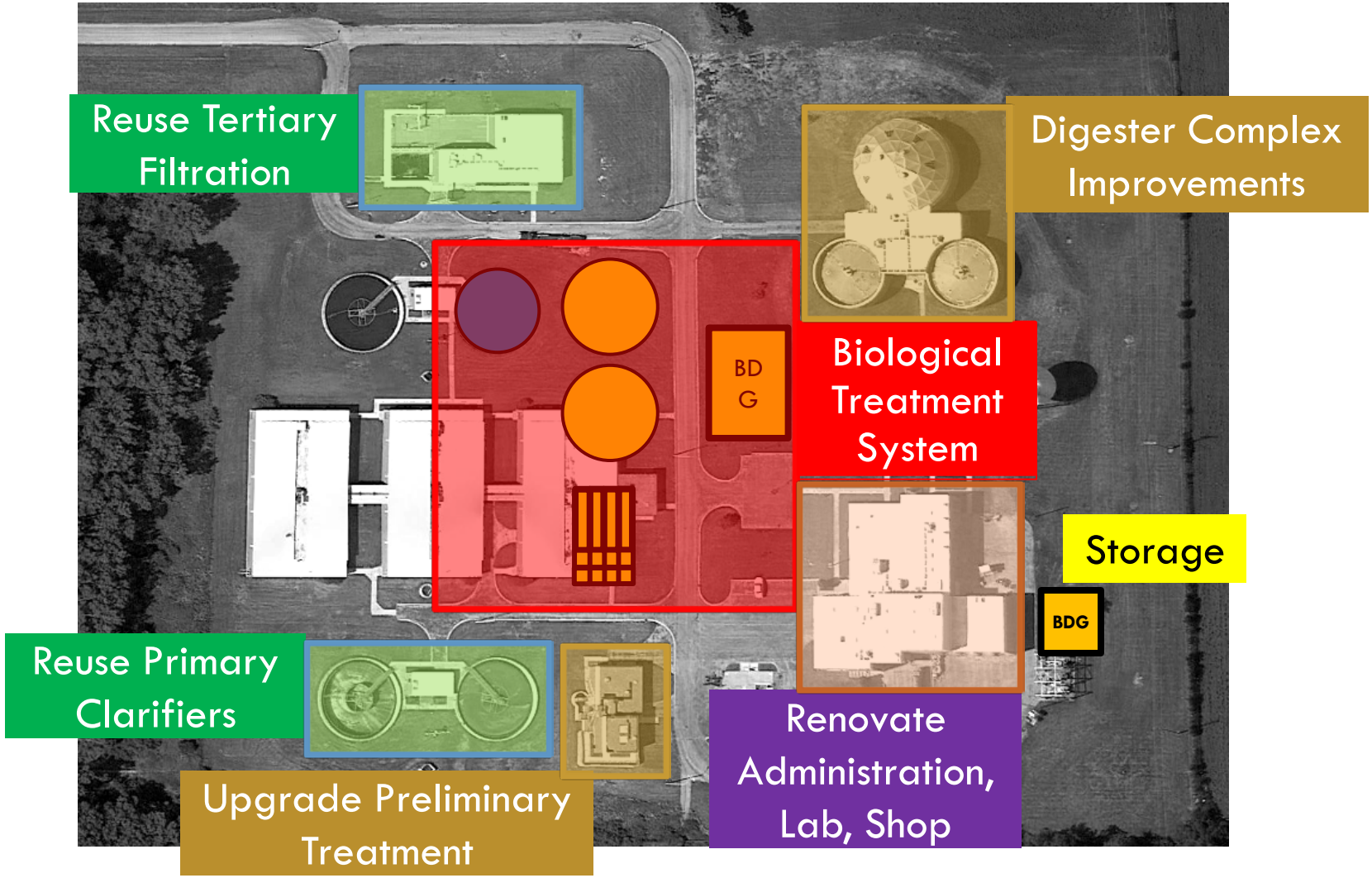

Impact: Liquid Treatment Cost

Project Element	Total Project Cost
Biological Treatment System: Activated Sludge	$10.3M
Electrical Systems	$3.5 M
Fire and Safety Guidelines	$0.4 M
Buildings: HVAC and Lab QC	$0.5M
Buildings: Lab Expansion and Space Use	$0.6M
Site: Aging Site Infrastructure	$0.9M
Site: Hydraulics, Controls, and Aging Equipment	$2.5M
Total Project	$18.7M

No Digestion Complex Improvements

Impact: Solids Treatment Cost

- Recommended upgrades to digestion complex

Biogas Boilers	$174,000
Hauled Waste Receiving Station	$299,000
Leaking pipe penetrations	$1,300
Repair floor decking	$13,000
Electrical MCC and duct bank repair	$172,000
NFPA 820 code compliance	$607,000
Post Digestion Thickening	$294,000
Passive overflow between digesters	$41,000
Digester mixing modifications	$450,000
Total Estimated Upgrade Cost	$2,052,000

Recommended for energy savings and increased revenue

Essential for safety and code compliance

Recommended for process performance and flexibility

Impact: A Look at the Utility Bill

WHITEWATER UTILITIES
312 W. WHITEWATER ST.
P.O. BOX 690
WHITEWATER, WI 53190
262-473-1383

CODE	READINGS PREVIOUS	READINGS CURRENT	USAGE	AMOUNT
WU	378,659	372,682	5,977	12.43
WATER BASE CHARGE				7.31
SEWER USAGE			5,977	39.27
SEWER BASE CHARGE				9.56
STORM WATER			1.00 ERU's	5.58
PUBLIC FIRE PROTECT				7.42
CURRENT PERIOD AMOUNT DUE:				81.57

PRESORTED
FIRST CLASS MAIL
U.S. POSTAGE
PAID
WHITEWATER, WI
53190
PERMIT NO. 2

FORWARDING SERVICE REQUESTED

CUSTOMER
CLAPPER, CAMER

SERVICE ADDRESS
950 W CONGER ST

DUE DATE
04/20/2015

BILLING DATE
03/31/2015

AMOUNT DUE
$81.57

ACCOUNT NO.
1501900001

AFTER DUE DATE PAY
$84.34

SERVICE TYPE
WALW RES

SERVICE FROM - TO
02/25/2015 03/27/2015

RETURN BOTTOM PORTION WITH PAYMENT

PAST DUE AFTER	AFTER DUE DATE PAY
04/20/2015	$84.34

ACCOUNT NO.: 1501900001 AMOUNT DUE: $81.57

Service Address: 950 W CONGER ST

CAMERON CLAPPER
950 W CONGER ST
WHITEWATER WI 53190

Impact: Resident & Business Cost

- Volume Charge + Fixed (Base) Charge = Total
- Rate Summary:

	Volume (per 1000 gals)	Meter Fixed per Month (Option 1)	Single Fixed per Month (Option 2)
2014	$6.57	$9.56 per month (3/4" meter)	N/A
2016	$10.55	$10.00 per month (3/4" meter)	$12.00 per month

Impact: Resident & Business Cost

- Total estimated project cost $20.7M
- Impact on average user
  - Current $30/mo.
  - Proposed $45/mo.