

City of Enid



Agenda

- Review Demands
- Infrastructure Reductions
- Revised Schedule

Phase 2 Program Goals

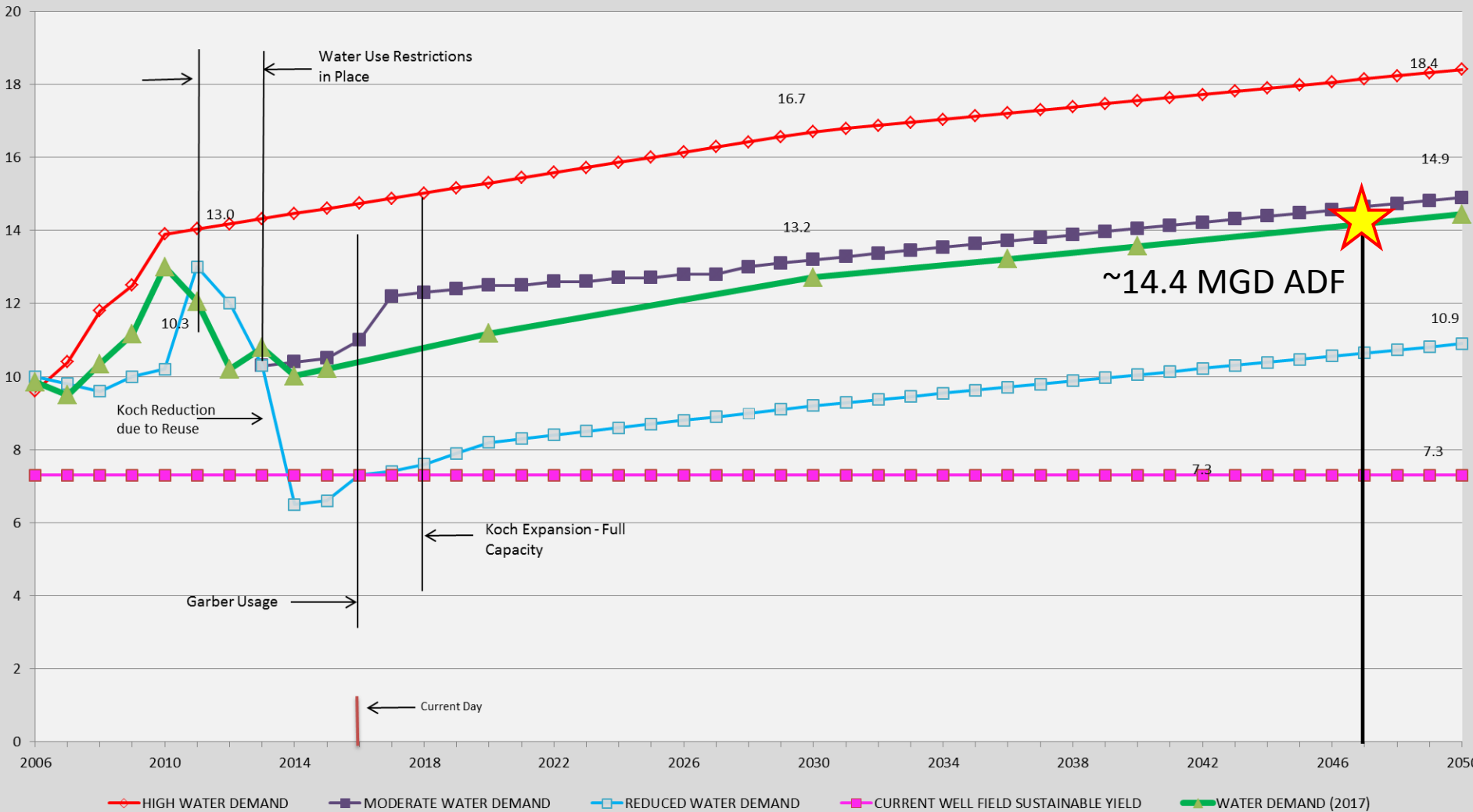
Prepare 30%
Design

Update Cost
Opinion
Capital and O&M

Develop
Executable
Plan

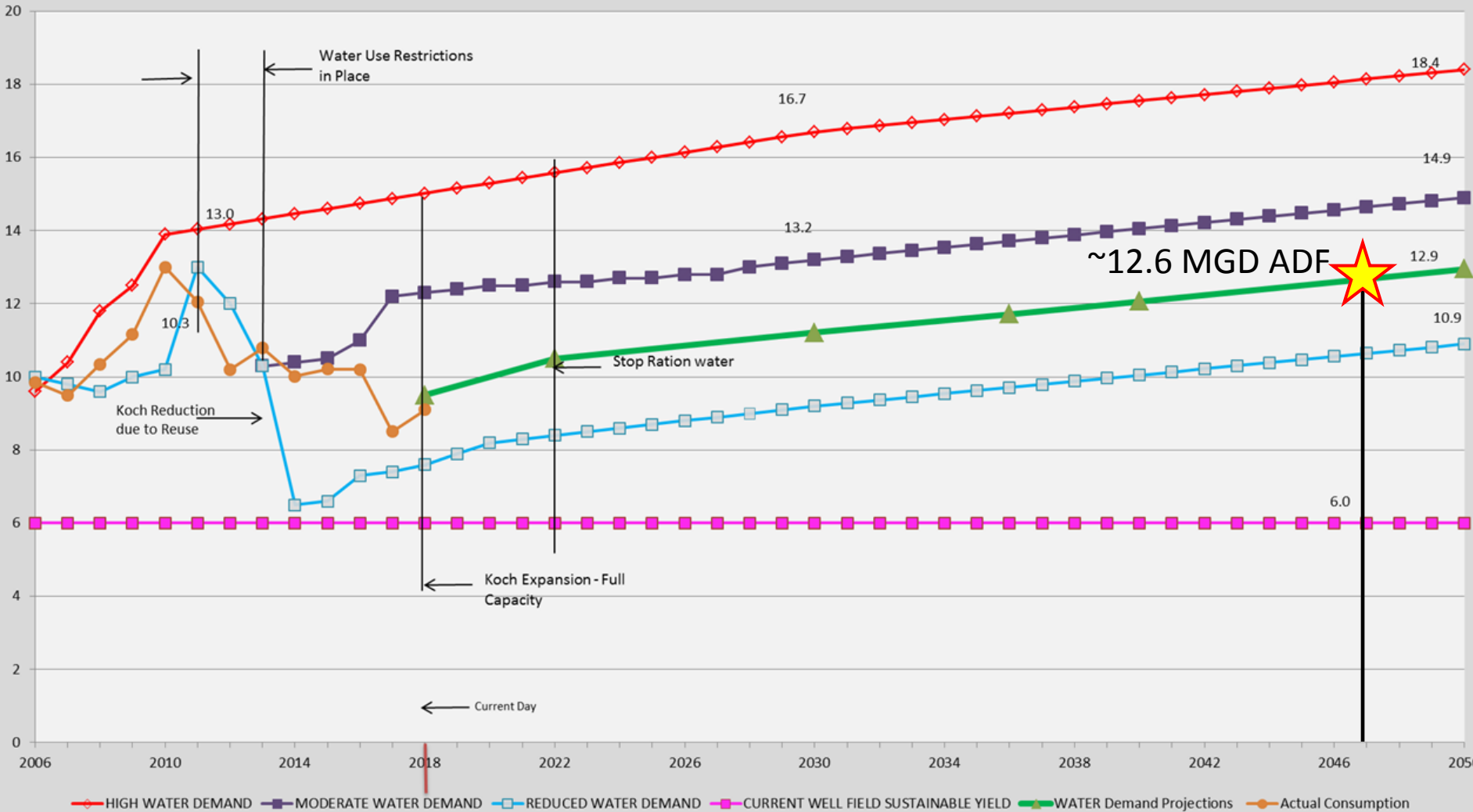
Previous Projected Water Demand

Enid Annual Water Demand-2050



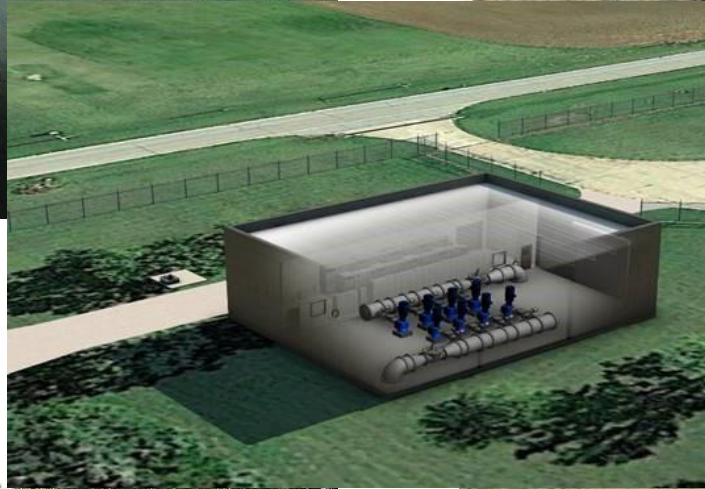
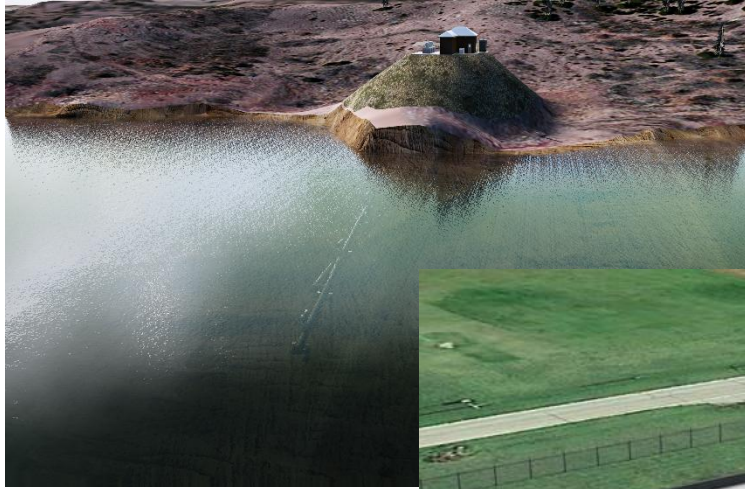
Updated Projected Demand

Enid Annual Water Demand-2050



◆ HIGH WATER DEMAND
 ■ MODERATE WATER DEMAND
 □ REDUCED WATER DEMAND
 ■ CURRENT WELL FIELD SUSTAINABLE YIELD
 ▲ WATER Demand Projections
 ● Actual Consumption

Surface Water System Phasing Items

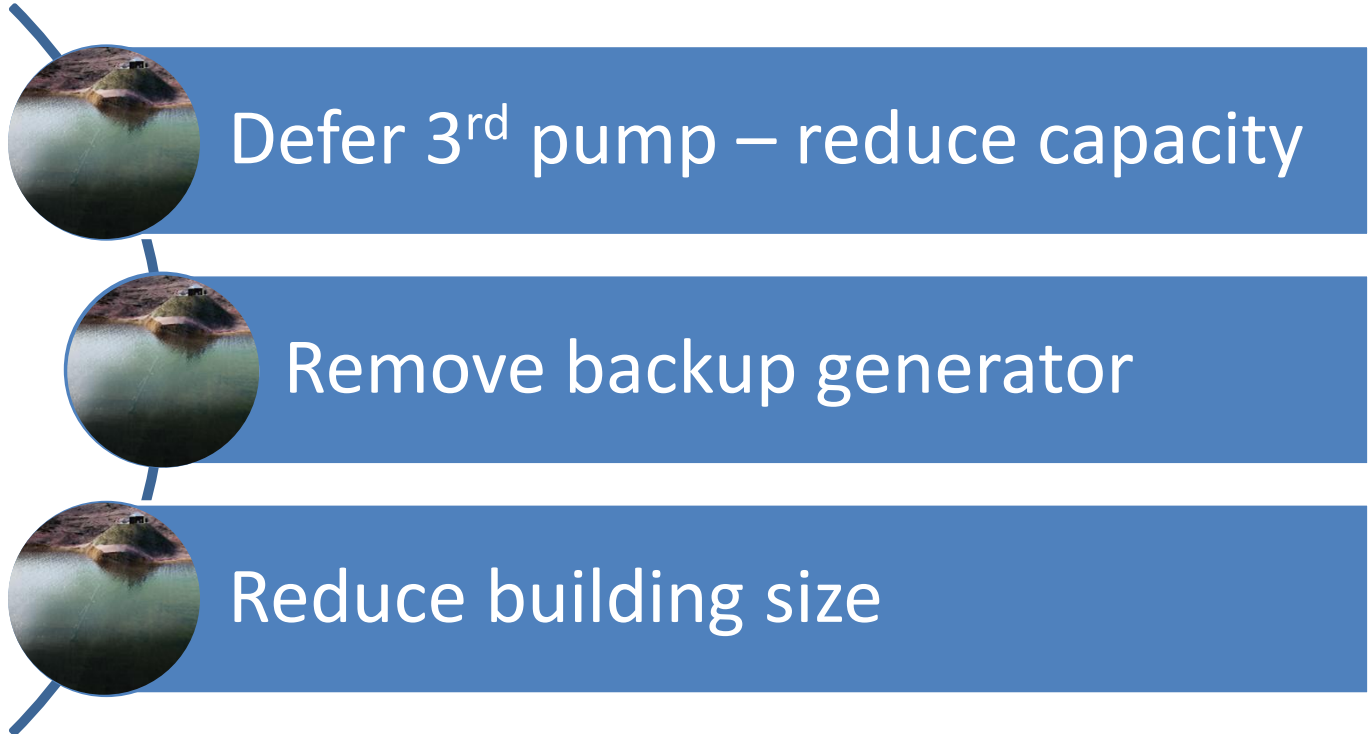


Cost Reductions for 2047 Design Horizon

Infrastructure	Full Build Out Program	% Reduction Through Phasing	Phased Program
Intake	\$ 30,244,000	25%	\$ 22,631,000
Intermediate BPS	\$ 13,585,000	100%	\$ -
Pipeline	\$ 145,725,000	4%	\$ 139,430,000
TSR EM	\$ 22,475,000	100%	\$ -
TSR EQ	\$ 21,307,000	63%	\$ 7,945,000
Treatment Plant	\$ 125,103,000	60%	\$ 50,576,000
Distribution Interface	\$ 40,159,000	40%	\$ 23,928,000
Subtotal	\$ 398,598,000	39%	\$ 244,510,000
Remaining Program Execution & Design	\$ 70,500,000	30%	\$ 49,300,000
USACE Water Storage Contract	\$ 6,000,000	-	\$ 6,000,000
Total Estimated Cost	\$ 475,098,000	37%	\$ 299,810,000

Intake Phasing

25%
Reduction



Intermediate Booster Pump Station Phasing

100%
Reduction



Defer entire element to future
phase

Pipeline Phasing

4%
Reduction



Defer fiber optic communication with intake



Material Value Engineering

Emergency Terminal Storage Reservoir Phasing

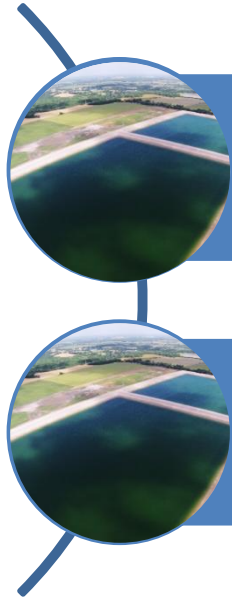
100%
Reduction



Defer entire element to future
phase

Equalization Terminal Storage Reservoir Phasing

63%
Reduction



Defer 2 of 3 cells to future phase

Liner Value Engineering

Water Treatment Plant Phasing

60%
Reduction



Reduce capacity to 2047 Design Life

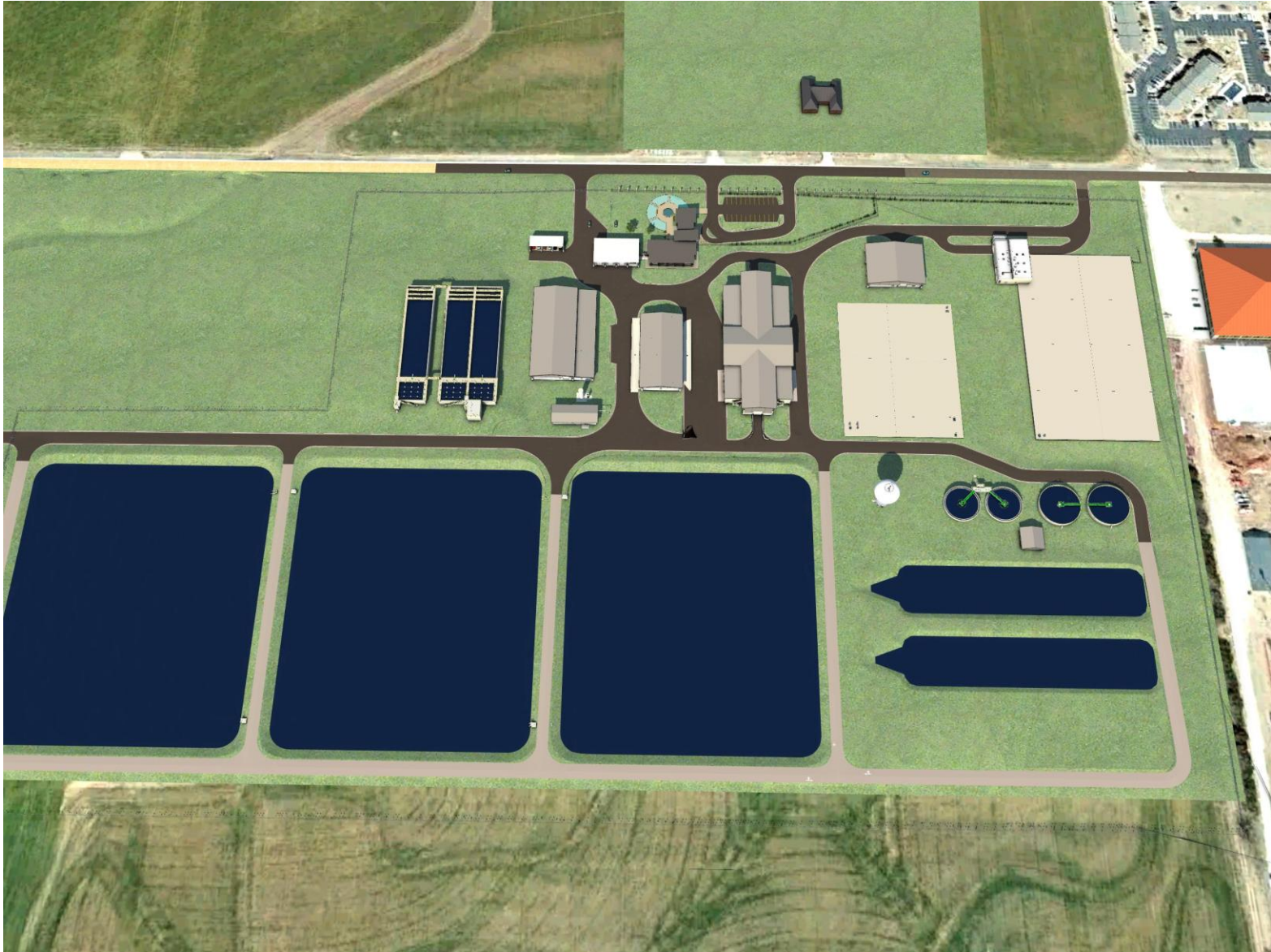


Reduced building area over treatment processes

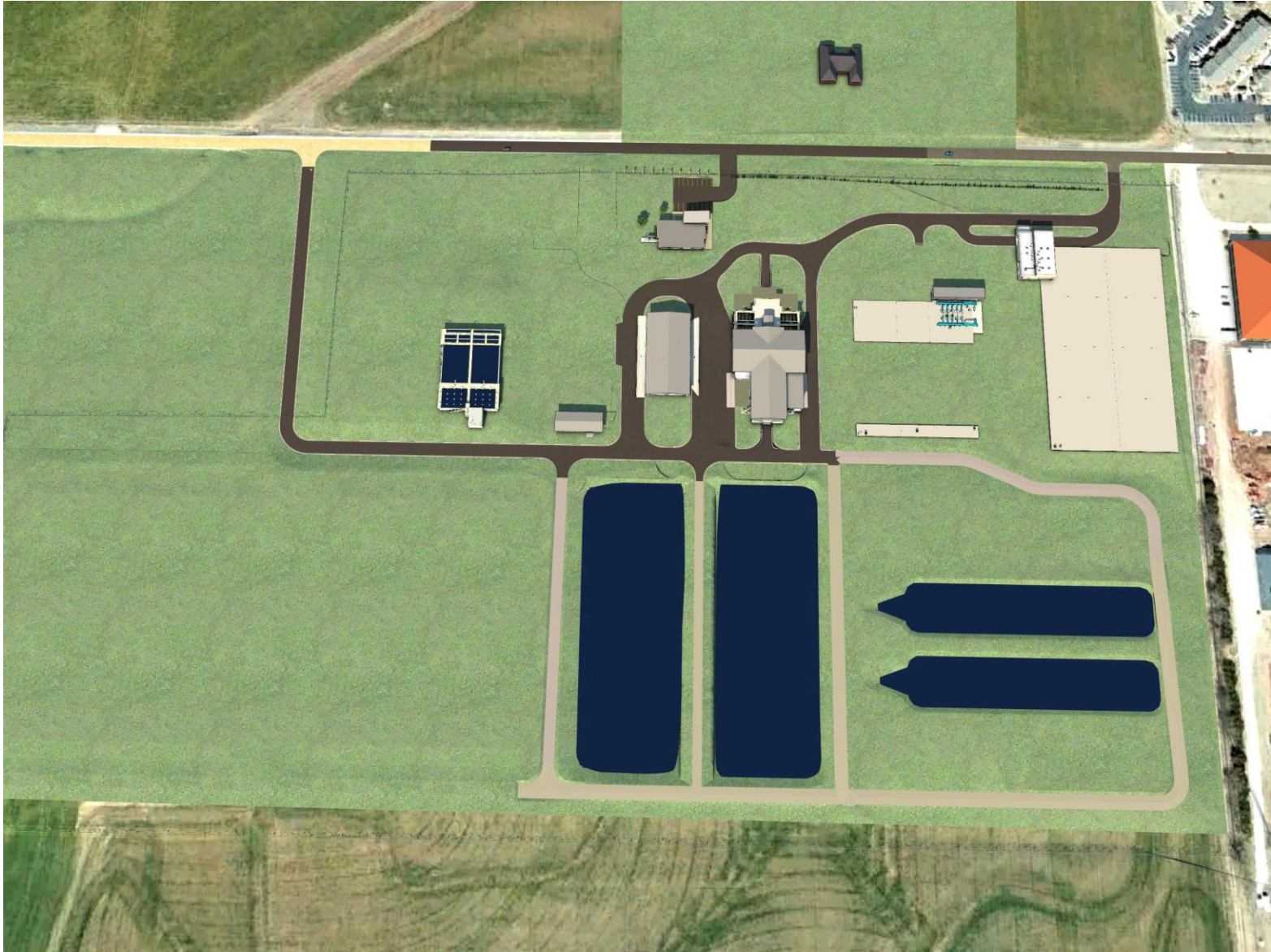


Defer some taste and odor treatment to future phase

Water Treatment Plant Original Design



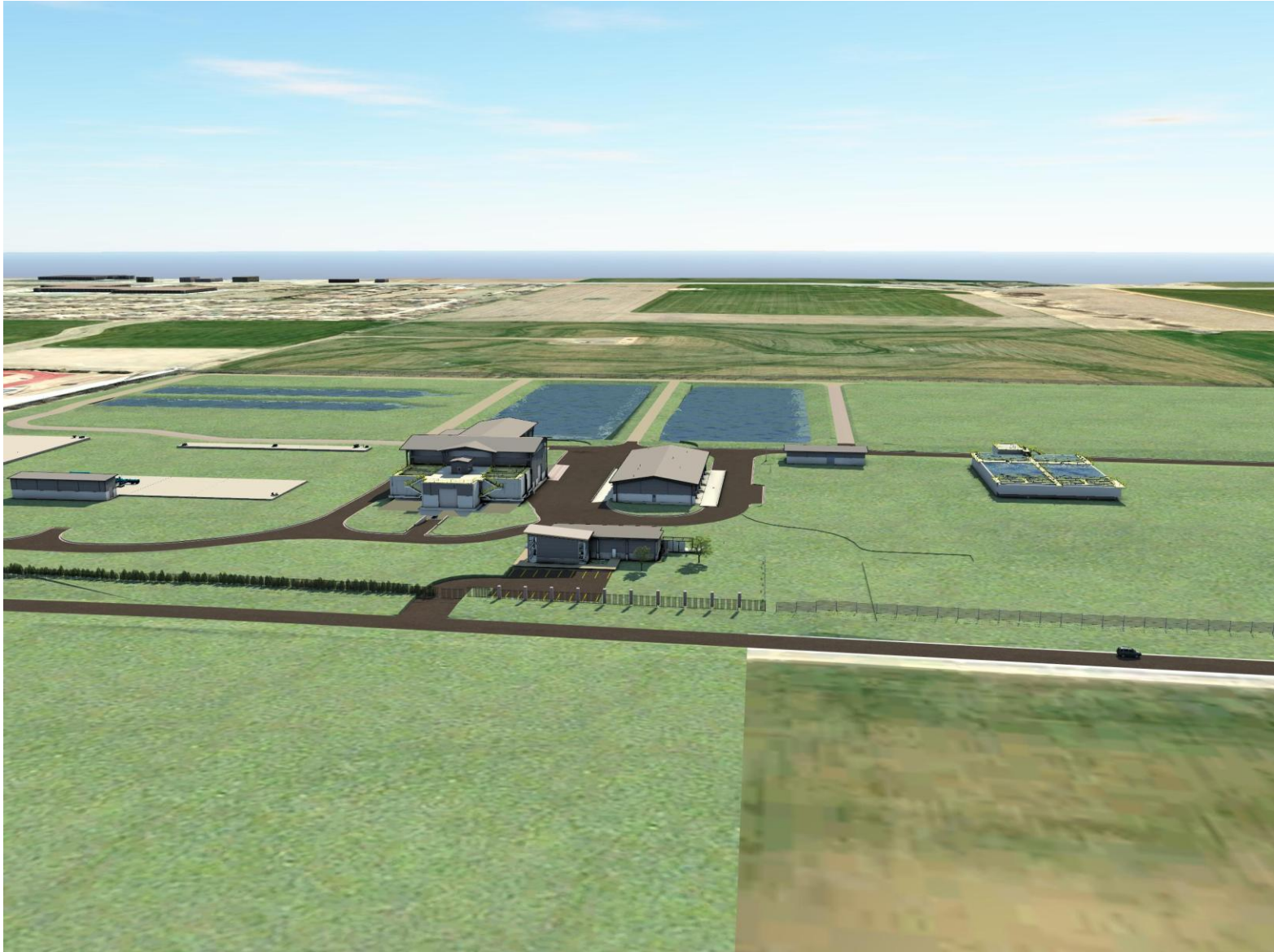
Water Treatment Plant Phased Design



Water Treatment Plant Original Design

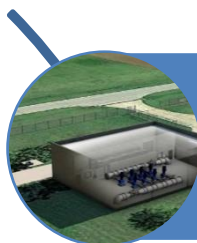


Water Treatment Plant Phased Design

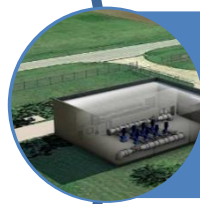


Distribution Interface Phasing

40%
Reduction



Reduce volume of finished water storage



Reduce disinfection process to 2047 Design Life



Integration of High Service Pump Station into storage tank

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Phasing Strategy Results

- Phased KLWS meets 2047 projected demand
- Phased KLWS Program provides
 - Pipeline that can supply water for 50+ years
 - Safe, robust drinking water treatment system
 - Desperately needed improvements to existing distribution infrastructure
- Total Phased Program Cost Estimate: \$299M

Schedule Risks

- Do not have access to all properties for field work
 - Includes cultural resources and survey
- Potential delays with land acquisition negotiations
- Schedule anticipated an April 1 start for the next phase

Kaw Law Water Supply Program Re-Baselined Schedule – July

