



**Lower Missouri River PAS Meeting
August 27, 2020
Holt County Area Stakeholder Input**

<u>Location</u>	<u>Description</u>	<u>Potential Solution</u>	<u>Advantages</u>	<u>Challenges</u>
From IA to St. Joseph	Bed height does not provide adequate conveyance in the river channel (See USGS Presentation to the FRAWG)	None offered		
Length of Lower MO River		Increase floodplain access for river. Explore public-private partnerships (examples: NRCS easements, L-536)	Room for flooding without major property damage	Land purchase required
River Mile 498 (Rulo, NE)	HWY 159 and RR crossing. Bridges raised since '08, 7-8' higher but still constricted	Add spans on bridge abutment to allow additional conveyance near HWY 159.		
	Modifications to rail embankments in certain locations impede flow, contributing to flooding impacts in adjacent areas	Coordinate with railroads to address unintended consequences to neighboring landowners.		
Holt Levee #9		height of levee increased 2' for approximately 14 miles	More protective of property behind levee	Unknown impacts downstream and upstream
Holt Levee #9		Install wires along conservation ground to prevent erosion	Relatively simple and inexpensive	Long term efficacy is unknown

Cannon Levee	Cannon Creek upper Cannon Levee	New levee footprint (See map below)		
Cannon Levee	Brown Conservation Area	Realign levee (setback) (See map below)		
L-497 - L1	L1 of MRLS 497L is a relatively small, 1.6 mile long earthen levee protecting portions of Forest City, Missouri, including businesses vital to the community. Sandbagging was conducted to save the town from inundation in 2019.	Permanently raising this levee above the height of the adjacent Kimsey Holly and L2 of L497 could be evaluated.	Work in the existing footprint, provide better protection for Forest City	Could cause impacts elsewhere on the river.
L-497 - L1	See map below	Gravity drain structure	Simple and inexpensive	
L-497 – L2	See map below	Install rock weirs to direct flow away from levee where 2011 scour occurred	Simple and relatively inexpensive	
L-497 – L2	See map below	Repair rock armor	Simple and relatively inexpensive	

Canon Levee

Proposed footprint- upper stretch

Legend

 Levee Path

159

111

Google Earth



1 mi



Canon Levee

Proposed footprint

Legend

 Levee Path



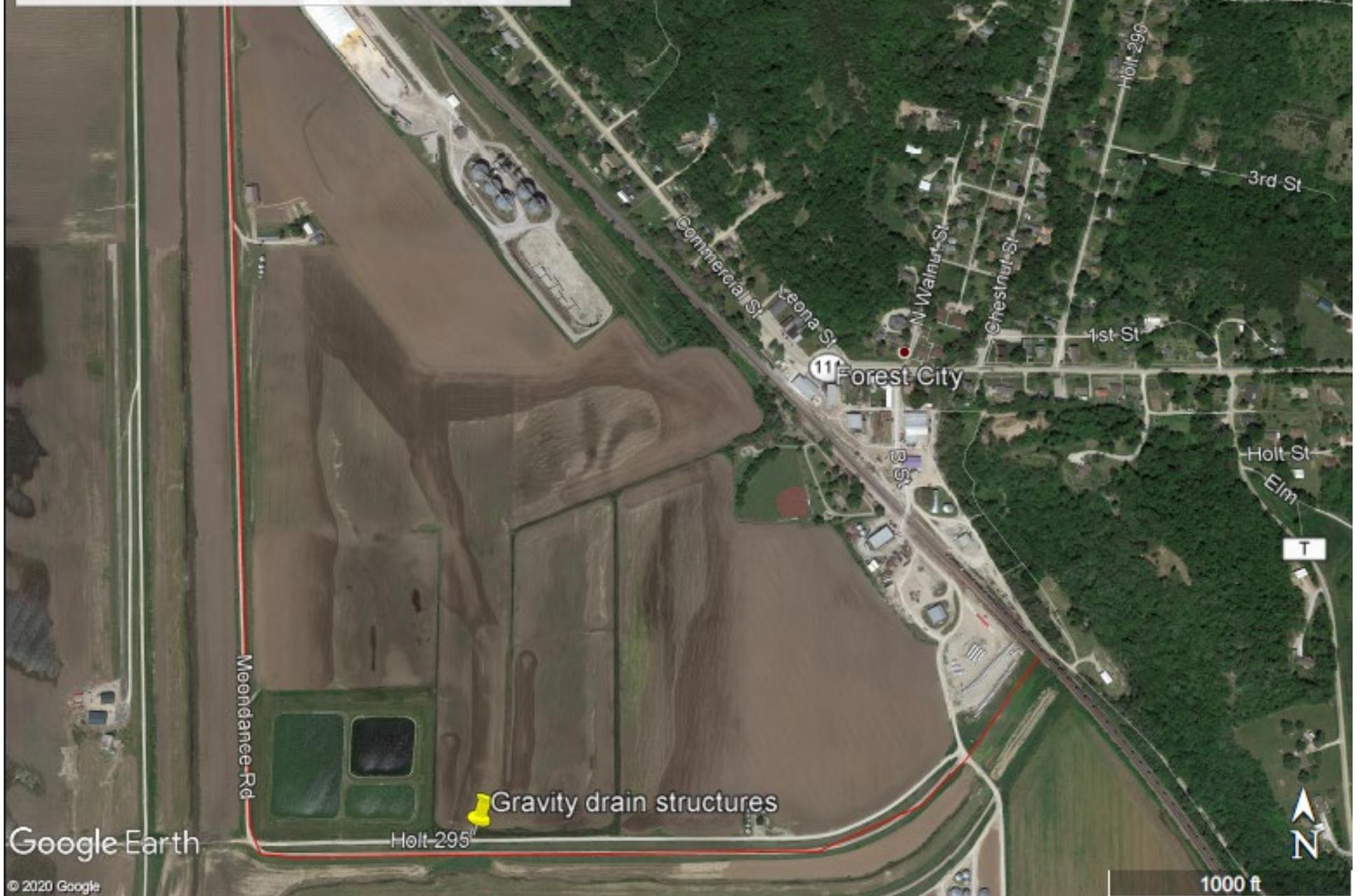
Google Earth

L-497 L1

- 1) Raise elevation of L1 by 2 ft to protect Forest City, MO
- 2) Raise gravity drain structures, silted in from Morehead Creek

Legend

- Forest City
- Levee Path



L-497 L2

- 1) Install rock weirs to direct flow away from levee where the 2011 scour occurred
- 2) Repair the rock armor along L2

Legend

- Forest City
- Levee Path

