

Eastwood Drain

Public Informational Meeting

Spaulding Township Hall

January 22, 2020

10:00 AM



Brian J. Wendling

Saginaw County Public Works Commissioner

Purpose of Meeting

- Review findings and design alternatives of engineering study
- Public Works Commissioner to receive input and comments from landowners on the drainage study

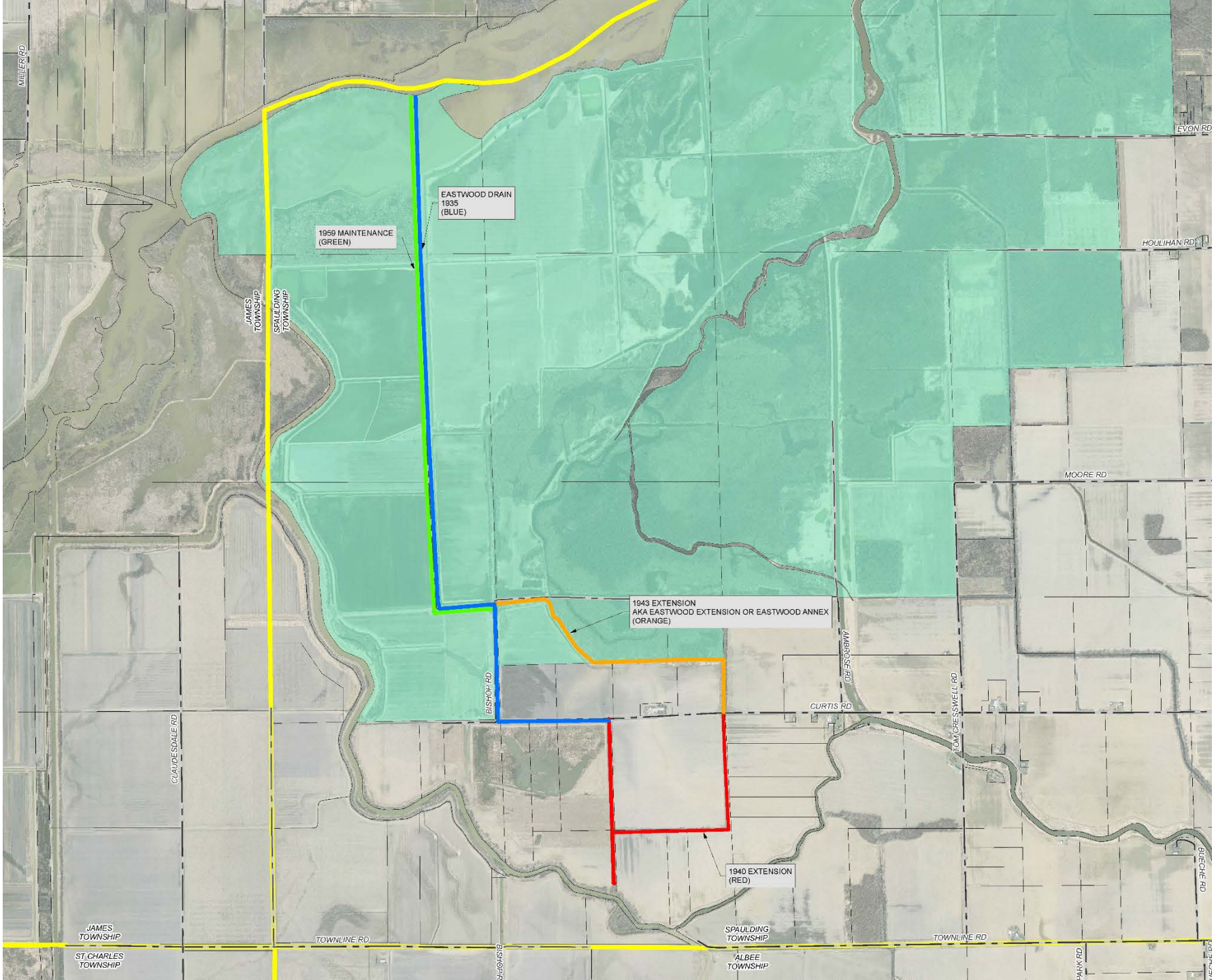


Presentation Agenda

- Drain Background
- Existing Conditions
- Design Alternative A
- Design Alternative B
- Design Alternative C
- Next Steps
- Questions and Comments

Drain Background

- Eastwood Drain - History
 - Under the jurisdiction of the Public Works Commissioner
 - Established as a county drain in 1935
 - Main drain extended in 1940
 - Eastwood Extension (Annex) added in 1943
 - Shiawassee National Wildlife Refuge established in 1953
 - Last drain project completed by SCPW in 1959 from outlet to Bishop Rd/Bartel Rd



EASTWOOD DRAIN
1935
(BLUE)

1959 MAINTENANCE
(GREEN)

1943 EXTENSION
AKA EASTWOOD EXTENSION OR EASTWOOD ANNEX
(ORANGE)

1940 EXTENSION
(RED)

MILLER RD

EYON RD

HOULIHAN RD

MOORE RD

CLAUDES DALE RD

BISHOP RD

AMBERS RD

CURTIS RD

TOM CRESSWELL RD

BIRCH RD

JAMES
TOWNSHIP

ST. CHARLES
TOWNSHIP

TOWNSHIP

SPAULDING
TOWNSHIP

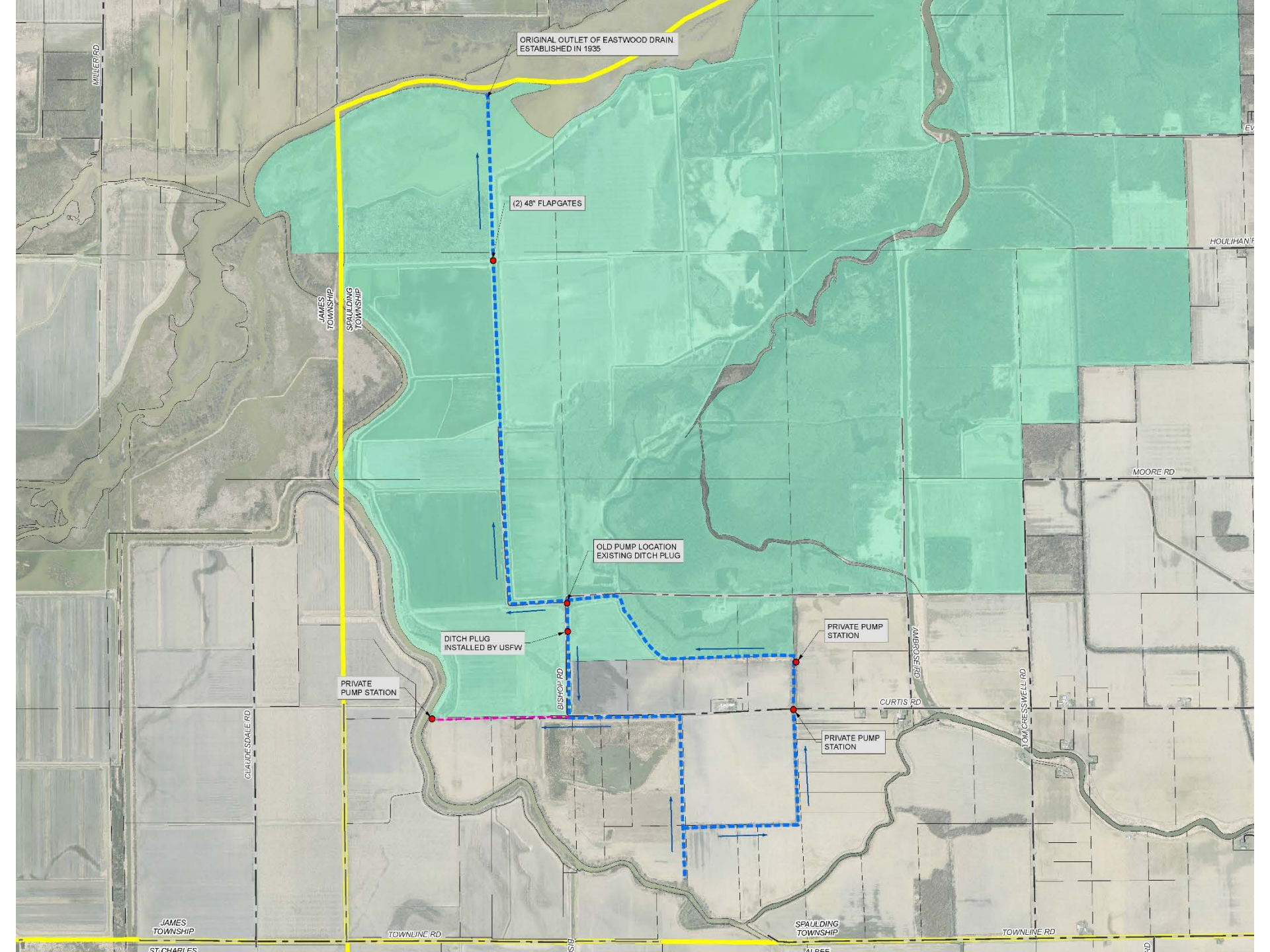
ALBEE
TOWNSHIP

TOWNSHIP

PARK RD

Existing Conditions

- (2) 48” Flapgates near outlet protect drain from backwaters from the river
- Ditch plugs along Bishop Road separate upper end of main drain from outlet
- Private pump station and private ditch provide outlet for upper end of the county drain
- 2 Private pump stations located along Eastwood Extension (Annex)
- Original drain outlet no longer functioning properly



ORIGINAL OUTLET OF EASTWOOD DRAIN
ESTABLISHED IN 1935

(2) 48" FLAPGATES

OLD PUMP LOCATION
EXISTING DITCH PLUG

DITCH PLUG
INSTALLED BY USFW

PRIVATE PUMP
STATION

PRIVATE PUMP
STATION

PRIVATE PUMP
STATION

JAMES
TOWNSHIP
SCOULDING
TOWNSHIP

JAMES
TOWNSHIP

SPAULDING
TOWNSHIP

MILLER RD

CLAUDESDALE RD

TOWNLINE RD

BISHOP RD

CURTIS RD

AMBROSE RD

TOM CRESSWELL RD

MOORE RD

HOULIHAN RD

ST CHARLES

ALBEE

TOWNLINE RD

RD

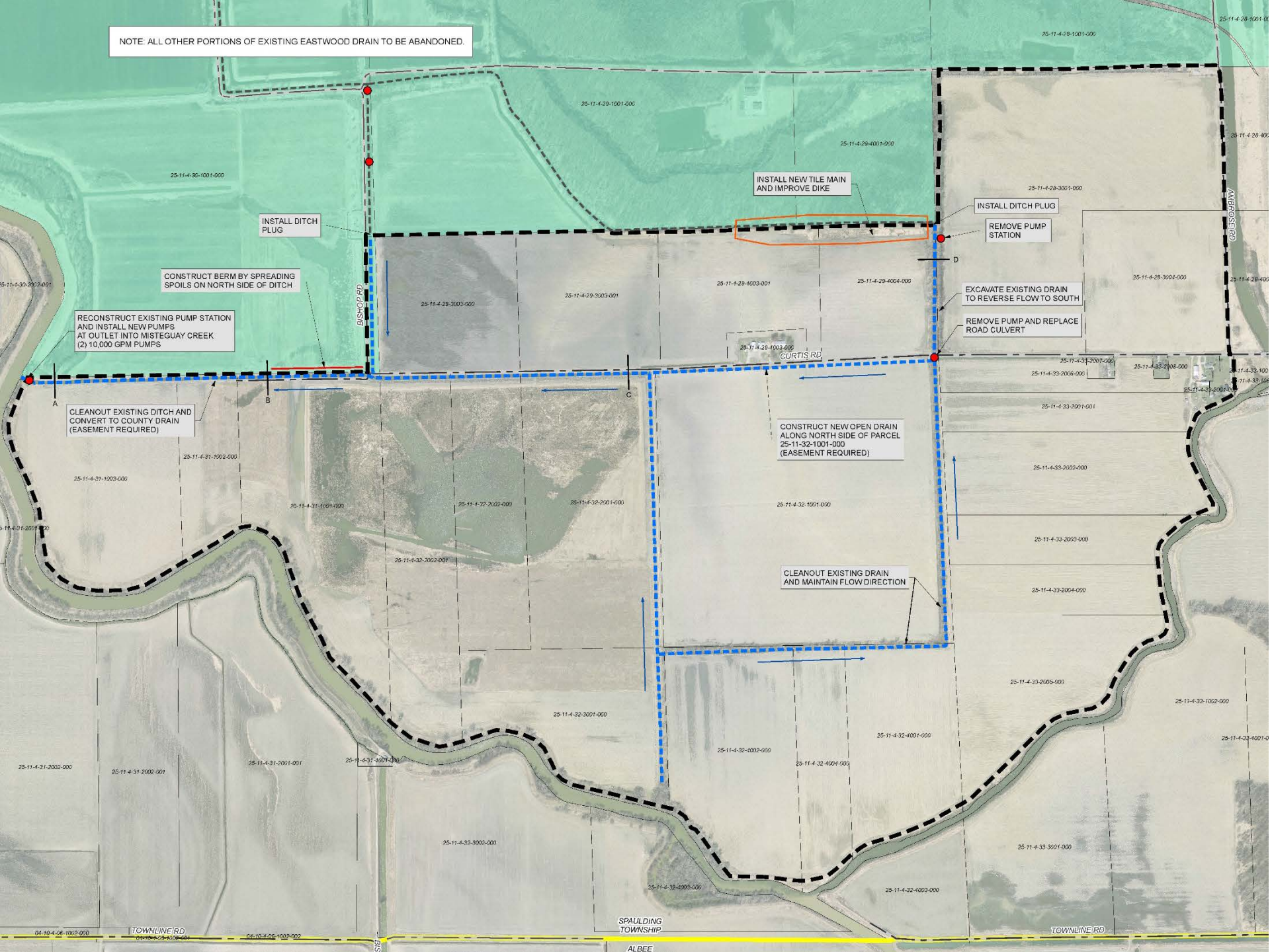
Design Alternative A

- 1,100 Acre Drainage District
- USFW to be separated from drainage district by installing ditch plugs on property line
- Private ditch west of Bishop Rd to be established as county drain.
- Existing private pump station to be replaced with new pump station
- Flow of existing Extension Drain will be reversed South to Curtis Rd.
- Drain will be designed to gravity flow to new pump station to allow removal of other pump stations

Design Alternative A

- Includes:
 - Site Clearing
 - New Pump Station (To be part of county drain)
 - (2) 10,000 gpm pumps
 - Replacement of 5 Road/Drive Culverts
 - 1,200 ft. of Open Channel Construction of new drain
 - 8,150 ft. of Open Channel Excavation of existing drain
 - Installation of (2) ditch plugs near USFW property line
 - Legally abandon all other portions of existing drain
 - Planning Level Estimated Total Cost: \$ 900,000

NOTE: ALL OTHER PORTIONS OF EXISTING EASTWOOD DRAIN TO BE ABANDONED.



INSTALL NEW TILE MAIN AND IMPROVE DIKE

INSTALL DITCH PLUG

CONSTRUCT BERM BY SPREADING SPOILS ON NORTH SIDE OF DITCH

RECONSTRUCT EXISTING PUMP STATION AND INSTALL NEW PUMPS AT OUTLET INTO MISTEGUAY CREEK (2) 10,000 GPM PUMPS

CLEANOUT EXISTING DITCH AND CONVERT TO COUNTY DRAIN (EASEMENT REQUIRED)

INSTALL DITCH PLUG

REMOVE PUMP STATION

EXCAVATE EXISTING DRAIN TO REVERSE FLOW TO SOUTH

REMOVE PUMP AND REPLACE ROAD CULVERT

CONSTRUCT NEW OPEN DRAIN ALONG NORTH SIDE OF PARCEL 25-11-32-1001-000 (EASEMENT REQUIRED)

CLEANOUT EXISTING DRAIN AND MAINTAIN FLOW DIRECTION

EXISTING EASTWOOD DRAIN

CURTIS RD

SPAULDING TOWNSHIP

ALBEE

TOWNSHIP LINE RD

TOWNSHIP LINE RD

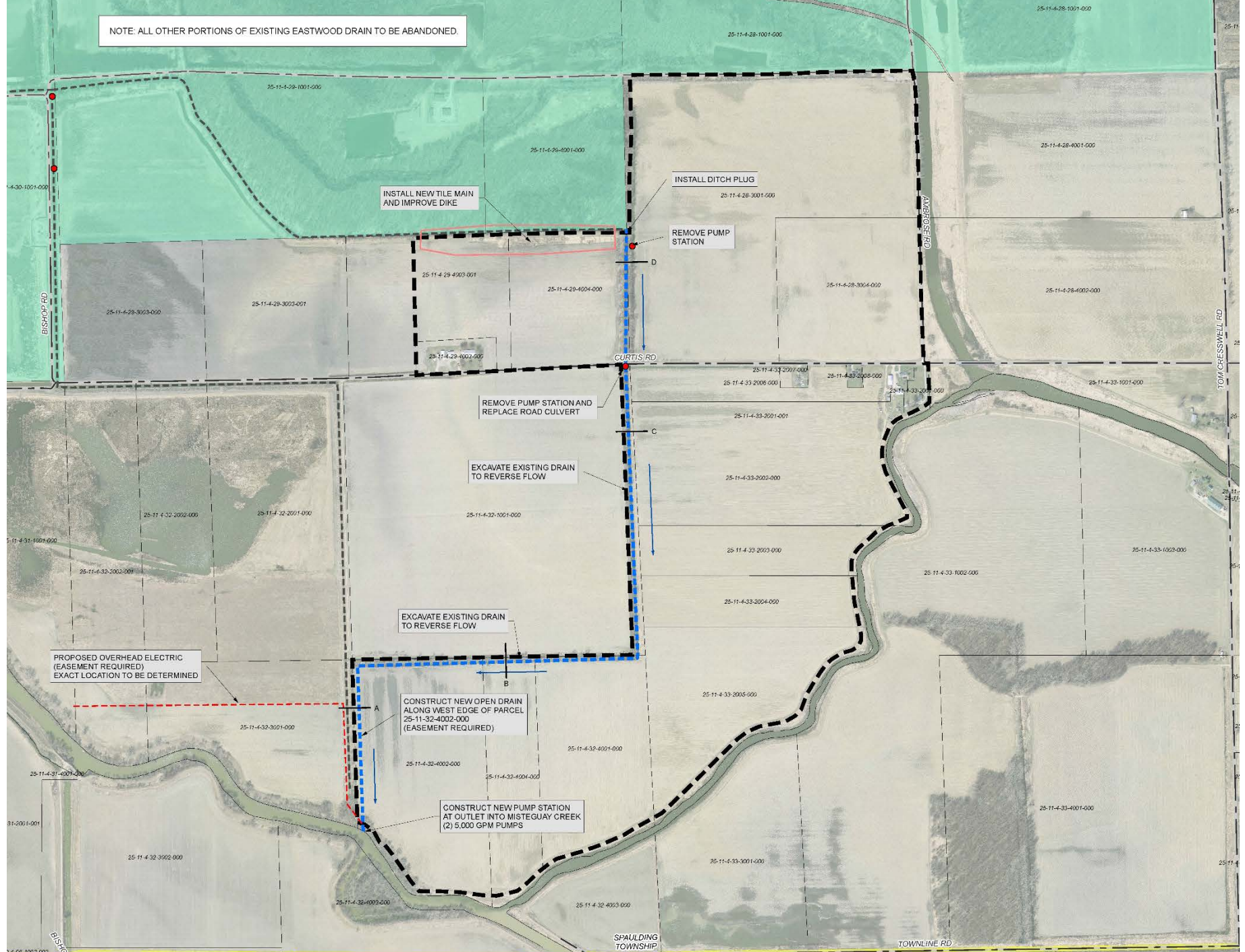
Design Alternative B

- 500 Acre Drainage District
- USFW to be separated from drainage district by installing ditch plug on property line
- New outlet to be constructed South of Curtis Road into Misteguay Creek/Flint River
- New pump station to be constructed at outlet
- Flow of existing Drain will be reversed to South
- Drain will be designed to gravity flow to new pump station to allow removal of other pump stations

Design Alternative B

- Includes:
 - Site Clearing
 - New Pump Station (To be part of county drain)
 - (2) 5,000 gpm pumps
 - Replacement of 1 Road Culvert
 - 1,400 ft. Open Channel Construction of new drain
 - 6,300 ft. of Open Channel Excavation of existing drain
 - Installation of ditch plug near USFW property line
 - Legally abandon all other portions of existing drain
 - Planning Level Estimated Total Cost: \$ 740,000

NOTE: ALL OTHER PORTIONS OF EXISTING EASTWOOD DRAIN TO BE ABANDONED.



INSTALL NEW TILE MAIN AND IMPROVE DIKE

INSTALL DITCH PLUG

REMOVE PUMP STATION

REMOVE PUMP STATION AND REPLACE ROAD CULVERT

EXCAVATE EXISTING DRAIN TO REVERSE FLOW

EXCAVATE EXISTING DRAIN TO REVERSE FLOW

PROPOSED OVERHEAD ELECTRIC (EASEMENT REQUIRED) EXACT LOCATION TO BE DETERMINED

CONSTRUCT NEW OPEN DRAIN ALONG WEST EDGE OF PARCEL 25-11-4-32-4002-000 (EASEMENT REQUIRED)

CONSTRUCT NEW PUMP STATION AT OUTLET INTO MISTIGUAY CREEK (2) 5,000 GPM PUMPS

SPAULDING TOWNSHIP

TOWNLINERD

Design Alternative C

- A design alternative C was considered to re-established original route and course of the Eastwood Drain
 - Most expensive option
 - Requires larger pumps, more culverts, more drain to maintain
 - Does not add more assessable acres to district

Next Steps

- Landowners who wish to pursue further consideration of proposed work on the Eastwood Drain may file a petition with the Saginaw County Public Works Commissioner.
- If a petition is not received, no further action will be taken at this time.

Questions or Comments?