

MANDO DITCH DRAINAGE IMPROVEMENT PETITION

UPDATE MEETING

OHIO REVISED CODE 6131 & 6137
MARCH 27, 2024



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THANK YOU FOR ATTENDING!
WE WILL GET STARTED AT 6:00 P.M.

- We will give a brief presentation on the project and its status.
- There will be a Q & A session at the end of the presentation.

Introductions



Project Schedule



- Petition Filed
 - February 24, 2021
- View
 - May 5, 2021
- First Hearing
 - June 8, 2021
- Preliminary Engineering Study
 - Summer 2021 – Winter 2023
- Engineering Design
 - Winter 2023 – Fall 2024
- Final Hearing
 - Date to be determined

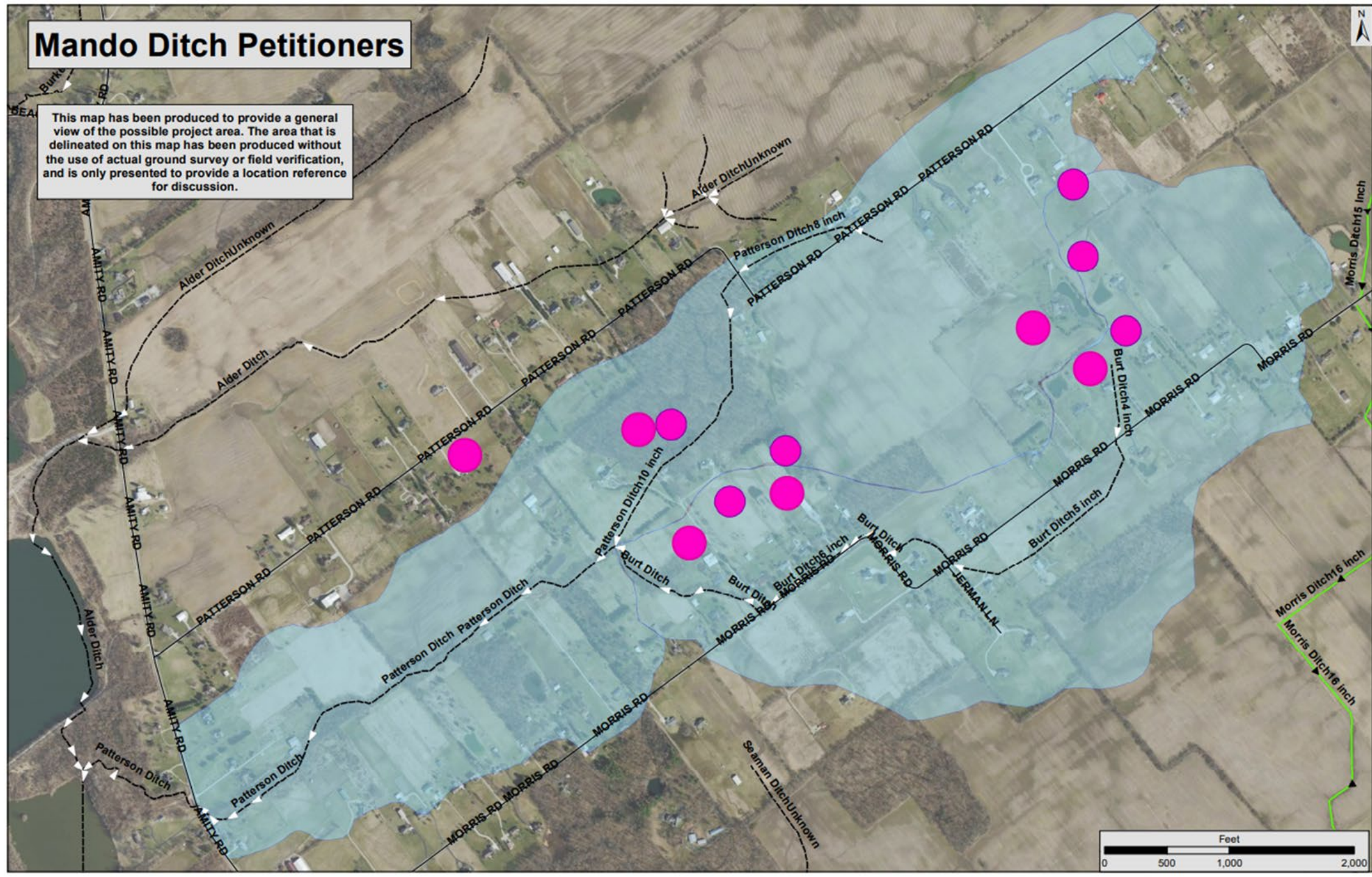
Project Background

- The Mando Ditch petition was signed by Frank Mando on February 13, 2021.
 - Total, the petition has signatures from owners of 12 properties
- The work petitioned for includes “to clean, construct, install tile, relocate and alter the drainage system as necessary to provide proper and sufficient drainage and extending such work downstream as necessary to provide a proper outlet.”



Mando Ditch Petitioners

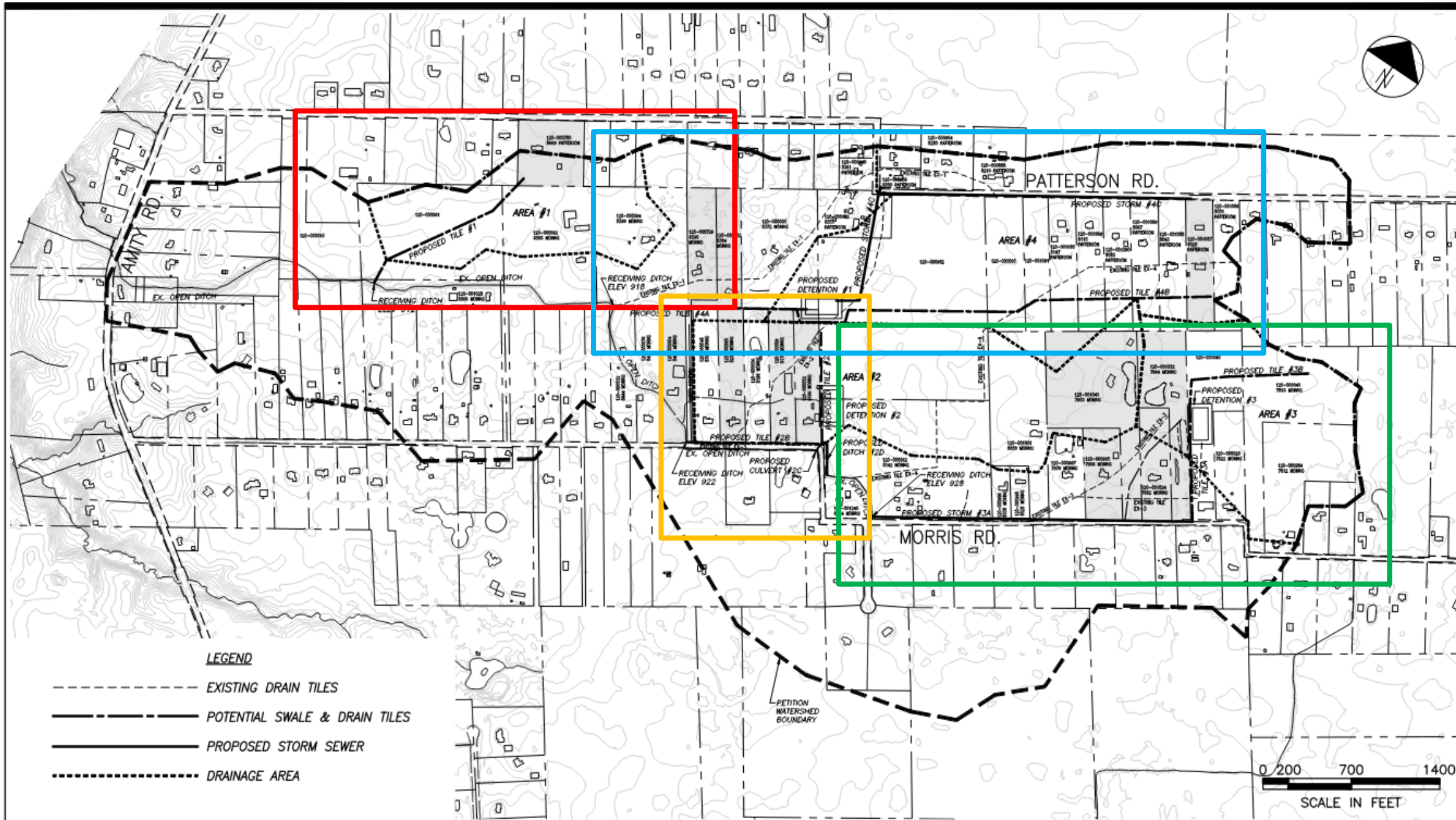
This map has been produced to provide a general view of the possible project area. The area that is delineated on this map has been produced without the use of actual ground survey or field verification, and is only presented to provide a location reference for discussion.



Existing Conditions

- After draining through Prairie Oaks Metro Park, the Mando Ditch watershed ultimately drains to Big Darby Creek, a national scenic river.
- The project area is best described as rural agricultural and rural residential consisting of soils that are poorly drained with flat topography.
- The land use consists of crop farming, small residential farms, and large-lot, single-family homes.
- To our knowledge, all homes obtain water from onsite wells and treat wastewater with household sewage treatment systems (HSTSs).
- The areas with poor drainage and ponding are not directly tied to a common cause, but rather due to locally entrapped drainage due to the former agricultural use of the area, deteriorating tile system, and disruptions from residential development.





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MANDO DRAINAGE IMPROVEMENT PROJECT

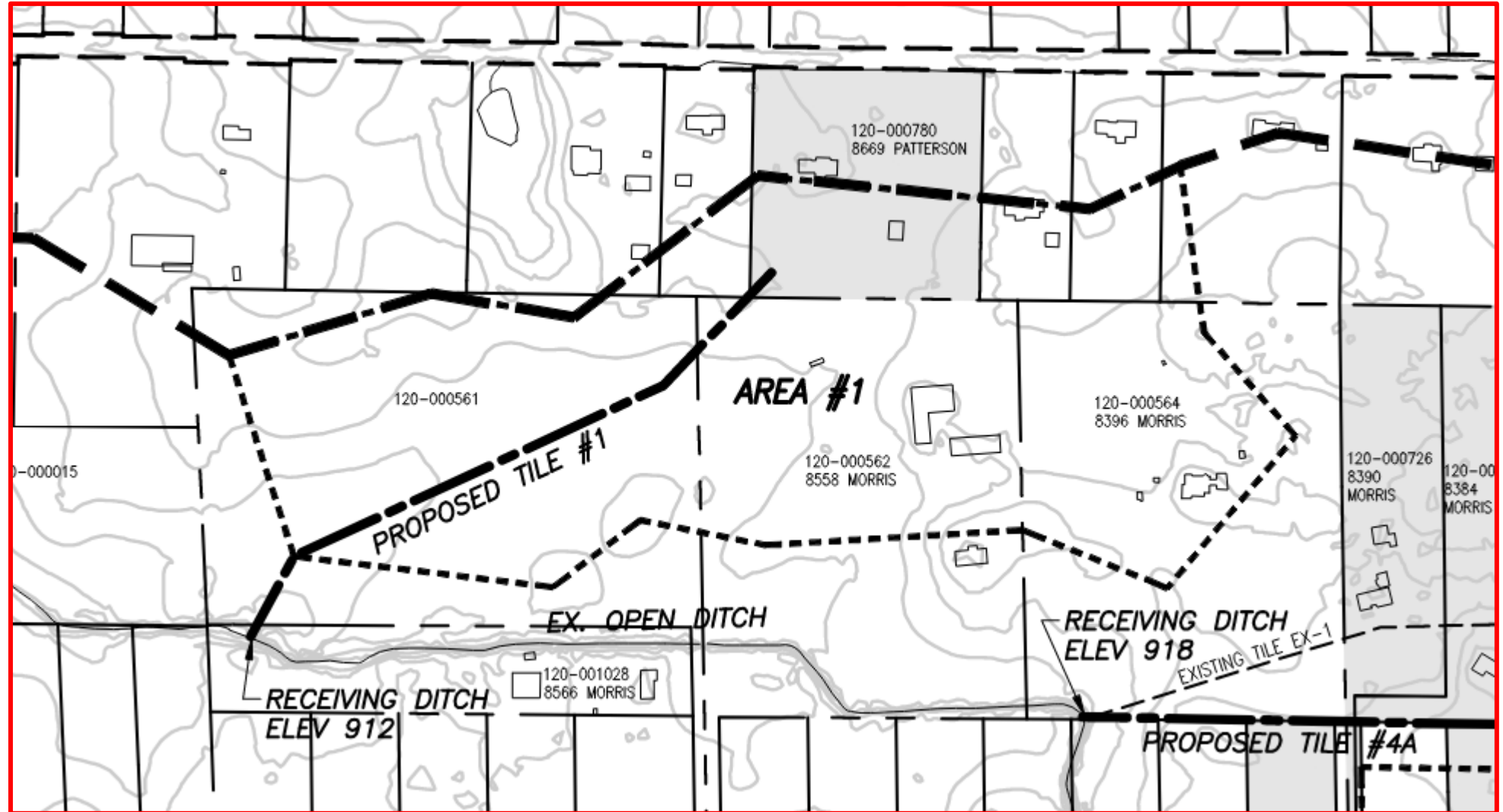
EXISTING & PROPOSED STORM DRAINAGE IMPROVEMENTS

EXHIBIT-2

Area 1

Recommendation:
1500' extension of
12" drain tile from
the existing ditch

The layout follows
the existing flow
pattern.



Area 2

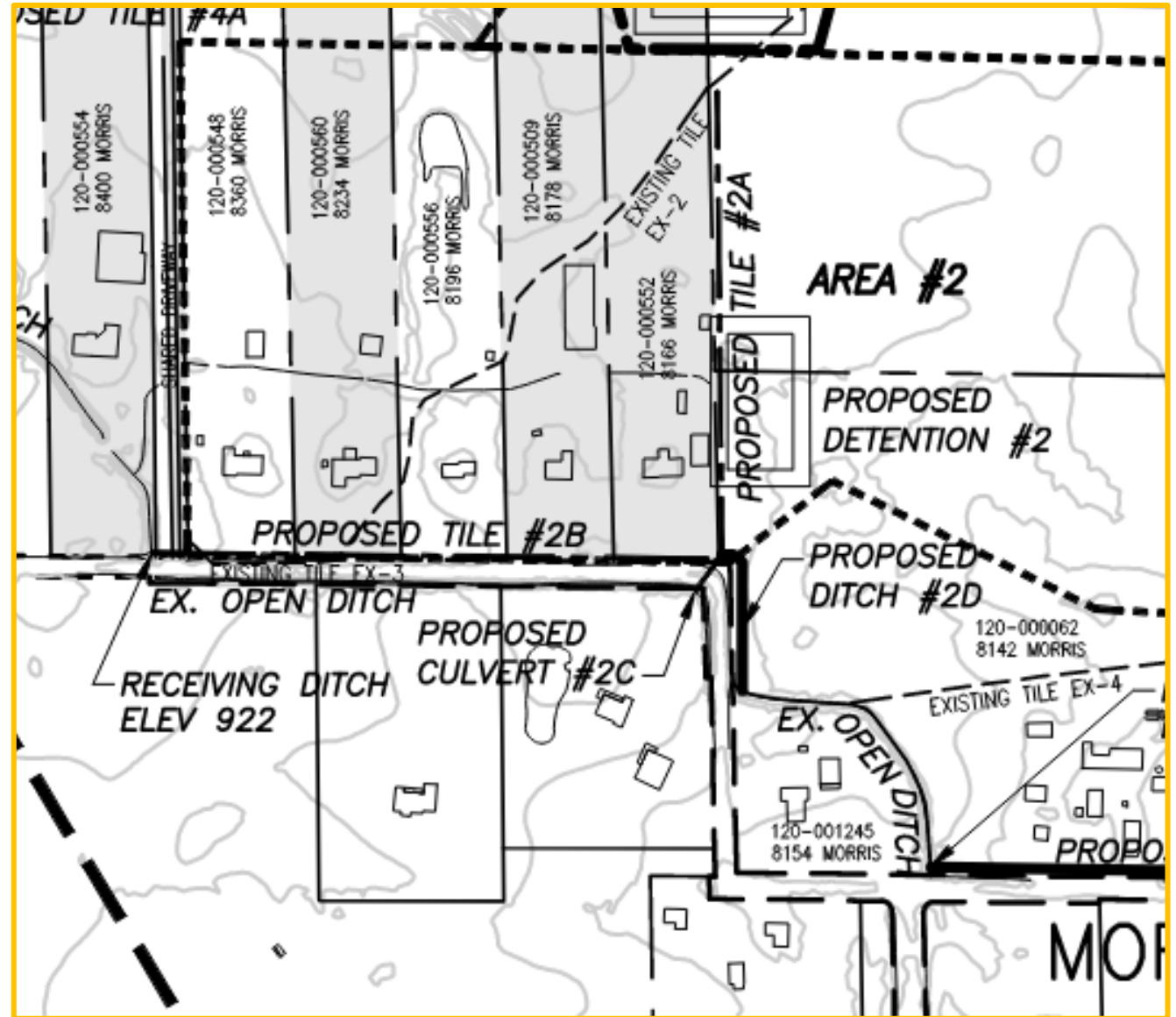
Recommendations:

Tile #2A: 890' of 12" drain tile

Optional Detention basin #2 to reduce release rates

One of the following alternatives:

- #2B: 1050' of tile on the north side of Morris Rd.
- #2C: Outlet tile directly across Morris Rd. just east of the drive to 8166 Morris Rd.
- #2D: Extend swale and tile to the east around the curve to intersect the existing ditch.



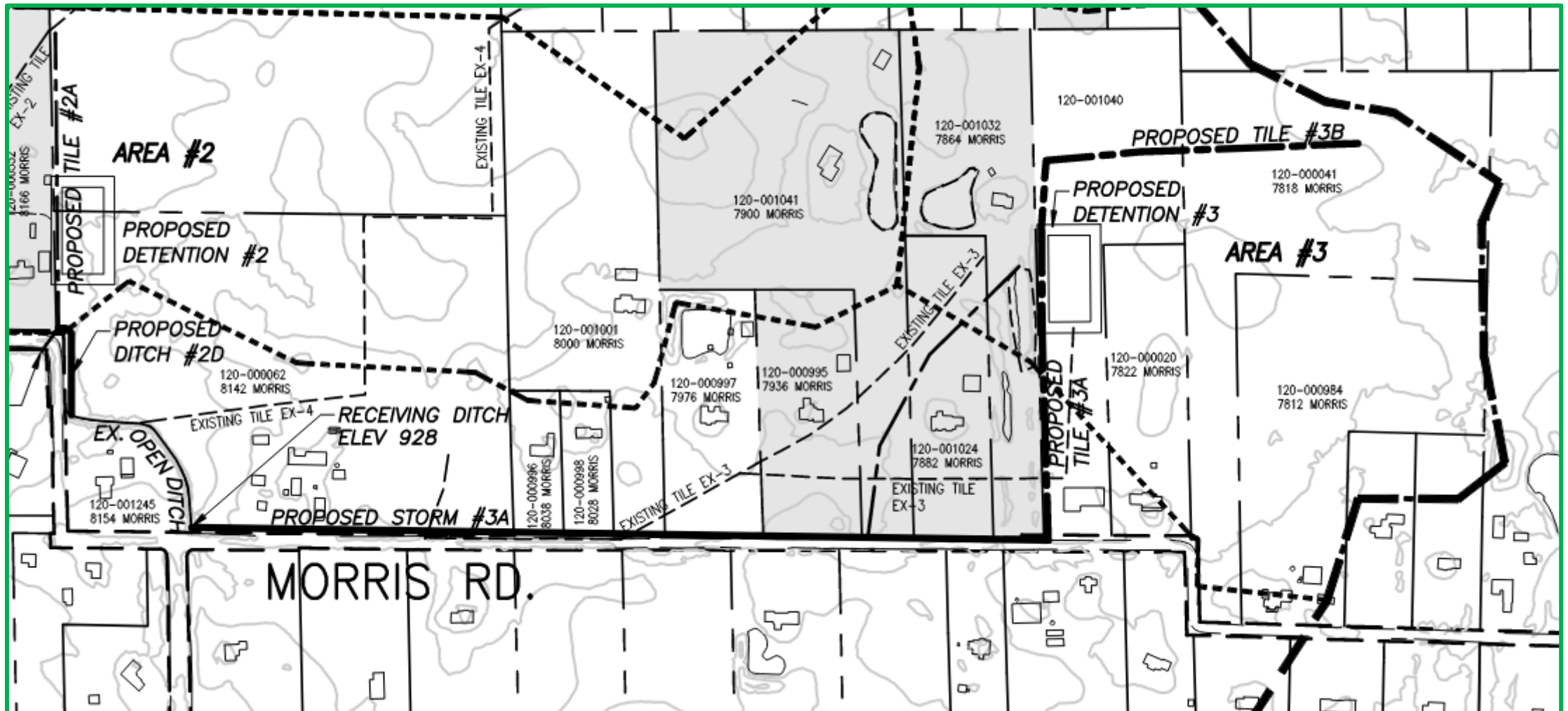
Recommendations:

Area 3

Tile #3A: Replacement of the existing tile along Morris Rd (2536' of 30" Storm Sewer)

Tile #3B: Re-establish the field tile to properly drain those areas (2050' of 12" Tile)

Optional Detention basin #3 to reduce release rates



Recommendations:

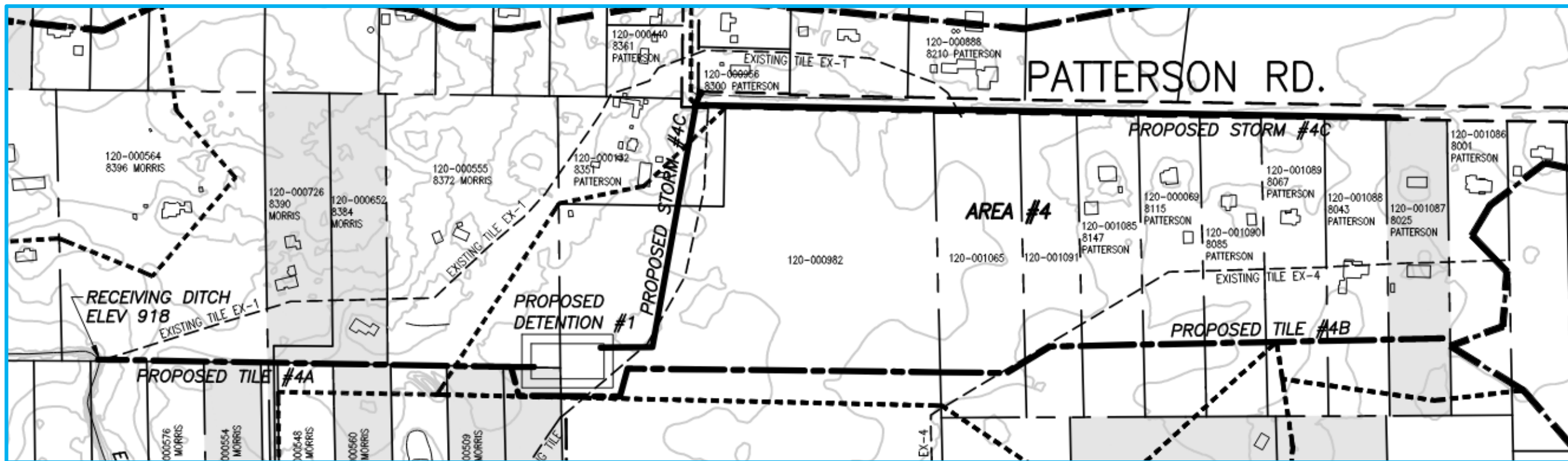
Area 4

Tile #4A: 3115' of 18" tile and swale

Tile #4B: 1796' of 12" tile on south side of Patterson Road properties

Tile #4C: 3500' of 12"-30" storm sewer to outlet Patterson Road

Optional Detention basin #1 to reduce release rates





Updated Project Cost

These estimates are preliminary and made in the absence of a complete engineering design.

	Improvements	Estimated Cost
Areas of Proposed Improvements	Area 1 Improvements	\$ 221,500
	Area 2 Improvements	\$ 131,500
	Proposed Detention Basin #2	\$ 224,250
	Area 3 Improvements	\$ 508,000
	Proposed Detention Basin #3	\$ 230,000
	Area 4 Improvements	\$ 887,500
	Proposed Detention Basin #1	\$ 360,000
Total Construction Cost:		\$ 2,562,750
	Engineering, 15% (e.g. design fee, bidding, construction inspection)	\$ 384,412
	First-year Maintenance Startup (5%)	\$ 128,137
Total Project Cost:		\$ 3,075,299



Frequently Asked Questions

Vegetation Removal

- We will only remove vegetation that is necessary to construct and maintain the project and improve the functionality of the ditch.

Areas of Improvement

- Area 1, 2, and 4 can be approved and constructed independently of one another.
- The approval of Area 3 is contingent on the approval of Area 2.

Private Property Affected

- We are making all possible efforts to minimize property impacts and follow lot lines.
- Disturbed areas will be seeded and mulched or restored to existing conditions.
- Existing tile sections through private property not worked on through this improvement will not be maintained by the county.



Assessments

Each parcel in the watershed is assessed a portion of the cost of constructing and maintaining the proposed improvement. This includes rights-of-way owned by local or state governments and utilities.

Parcels are only assessed for portions of the improvement used by that parcel.

Parcels are individually analyzed against assessment factors and levied construction assessments semiannually for up to 30 installments (15 years).



Calculation of Assessments

Parcels are only assessed for portions of the improvement used.

Acreage of a parcel

- Area of the lot within the watershed

Land Use

- Agricultural, residential, commercial, etc.
- Affects imperviousness and runoff rates

Remoteness of the parcel to the improvement

- Distance from the lot to the improvement
- Lots closer to the improvement should see a greater benefit

Percentage of improvement used

- Parcels in the downstream section do not see benefits from improvements upstream

Other benefits seen

- Improvement and watershed dependent

QUESTIONS?

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