



**Benefits and Damage Statement for the Improvement Determination of Benefits  
Goodhue CD1**

In accordance with Minnesota Statute (MS) 103E.321, subd. 2, we the viewers, submit the following Viewers' Report:

The fundamental principle for the determination of benefits and damages is based upon a comparison of the conditions prior to the construction or improvement of the ditch system with the conditions that exist after the implementation of the ditch system or proposed drainage project.

The undersigned viewers, pursuant to the order of the Goodhue County Drainage Authority, did meet virtually prior to commencing duties on the June 22, 2021. Having taken the oath as required by MS 103E.305, did view, all lands affected by said proposed drainage system and further, we did determine the damages to lands affected by grass strips, permanent and temporary damages.

We were able to determine the boundaries of the benefited area by processing and analyzing maps using "Light Detection and Ranging" (LiDAR) along with visually viewing the project area. Meetings were held with landowners, and Goodhue County staff. We viewed the County Assessor's records to determine the number of acres of land in each parcel of each 40-acre tract of land. Other sources of information used were USDA-Natural Resources Conservation Service Web Soil Survey, 12 years of USDA satellite imagery, US Fish and Wildlife Service National Wetland Inventory (NWI) maps, and Goodhue County Assessors' sales data and annual report.

We have determined the extent and basis of benefits and damages as prescribed under MS 103E.315 and MS 103E.321. We have indicated in tabular form, for each lot, 40-acre tract, and fraction of a lot or tract under separate ownership that is benefited or damaged (see Exhibit A).

Right of way damages and grass strip easements, having been determined and paid in the original proceedings for establishment of the drainage system and subsequent redetermination of benefit, based on the area contemplated and included in the proceeding for the establishment or subsequent improvement of the drainage system, were not considered.

We have determined the following direct drainage benefits and indirect (outlet) benefits on and related to the improvement of Goodhue CD1. Benefits were determined based on a comparison of the benefits of the drainage system operating in its as constructed condition, which were redetermined on March 24<sup>th</sup>, 2021, and the benefits of the drainage system

operating with the capacity of the proposed improvement, which were determined on September 15<sup>th</sup>, 2021.

#### Direct Benefits – Class 1 (Mapped as Red)

Using the direct market value approach, giving consideration for the lands' geographic location in the watershed, location relative to the proposed improvement, location relative to the outlet, proximity to the ditch bottom elevation, soil types, as well as analyzing direct sales data for competitive properties in the market place, we determined the existing market values of land in a pre-establishment condition in an as originally constructed condition, and in a condition that reflects the proposed improvement. Though this description may not describe your lands exactly, your lands fell broadly under this category.

Class 1 lands, prior to the existence of the drainage system, consisted mostly of lowlands that may have been farmed, but not without substantial risk. With the establishment of adequate drainage to these lands, the production value and/or market value has increased. These lands consist of soils that benefit greatly from good drainage. These lands are now more suitable for intense crop production.

#### Direct Benefits – Class 2 (Mapped as Yellow)

Using the direct market value approach, giving consideration for the lands' geographic location in the watershed, location relative to the proposed improvement, location relative to the outlet, proximity to the ditch bottom elevation, soil types, as well as analyzing direct sales data for competitive properties in the market place, we determined the existing market values of land in a pre-establishment condition in an as originally constructed condition, and in a condition that reflects the proposed improvement. Though this description may not describe your lands exactly, your lands fell broadly under this category.

Class 2 lands, prior to the existence of the drainage system, were suitable for row crop agriculture, but not without substantial risk of loss to the grower. Now that adequate drainage has been established through these lands, the production value and/or market value has increased. These lands typically consist of soils that benefit from good drainage to increase crop production.

#### Direct Benefits – Class 3 (Mapped as Green)

Using the direct market value approach, giving consideration for the lands' geographic location in the watershed, location relative to the proposed improvement, location relative to the outlet, proximity to the ditch bottom elevation, soil types, as well as analyzing direct sales data for competitive properties in the market place, we determined the existing market values of land in a pre-establishment condition in an as originally constructed condition, and in a condition that reflects the proposed improvement. Though this description may not describe your lands exactly, your lands fell broadly under this category.

Class 3 lands, prior to the existence of the drainage system, were mostly utilized to produce row crops, although over saturation of the soil and surrounding lands did not allow for these lands to realize their full production potential. Now that the drainage system has been established, the land is able to utilize the system as an outlet to drainage tile systems and increased the production potential. As a result, the production value and/or market value has increased.

#### Indirect Benefits – Class 4 (Mapped as Blue)

Class 4 lands are lands which have not had an increase in market value after the construction of the drainage system. However, they have been altered from their pre-settlement state in such a manner that they are now tilled and farmed. As a result, they burden the drainage system's capacity, thus increasing a sediment load and causing a need for increased maintenance. Taking into consideration the percentage of Class 4 acres in the watershed, regular ditch maintenance, and sediment loading, we determined the rate per acre that Goodhue CD1 provides as an outlet or contribution benefit to these lands. Though this description may not describe your lands exactly, your lands fell broadly under this category.

Example of how benefits were calculated:

Production and/or Market Value Before Improvement:	\$1,000
Production and/or Market Value After Improvement:	\$3,000
Increase in Production and/or Market Value:	\$2,000
Net Change in Benefits:	\$2,000

#### Road Benefits

The viewers have determined outlet as well as reduced maintenance cost benefits for all State, County, and Township roads located within the watershed of Goodhue CD1.

#### Residential Land Benefits

Outlet benefits were applied to residential lands within the watershed of Goodhue CD1. The outlet benefit was calculated based on runoff burden to the drainage system and use of the drainage system as an outlet.

#### Woodlot Benefits

Benefits were applied to woodlot lands within the watershed of Goodhue CD1. These lands receive a benefit because the ditch conveys their water burden away from adjacent landowners and adds to the need for system capacity and system maintenance.

### Benefit Variables

Based on criteria used to determine the likelihood of future improvements, each sub catchment within the watershed of the public drainage system has been given a grade of its as constructed condition relative to its ability to utilize the public drainage system efficiently. This grading system varies the benefit amount according to the aforementioned ability within each sub catchment. The difference between the capacity of the system in its as constructed condition and the capacity of the proposed improvement may significantly impact how the proposed improvement affects the assessment of landowners benefited by the improvement.

### Non-benefiting Acres

Based on current land use and regulatory restrictions, permanent program restrictions (i.e. RIM or CREP) or other permanent restriction and restoration to pre-settlement landscape conditions or creation of wetland areas, we determined some areas to be non-benefited from the drainage system and restricted from taking future benefit from the drainage system. For example, we determined that lands restored to pre-settlement conditions and permanently restricted from future modification would not drain in any altered manner such that the drainage system would be burdened by the land other than such burden as nature would have provided. Further, for example, nonconverted wetlands that are so restricted from conversion by regulation that conversion is unlikely, were not determined to benefit from the system.

We further examined and determined benefits for each classification within all sub catchments in the CD 1 system. These benefit numbers were used to establish the benefits that existed in the drainage system in its as constructed condition. These numbers were also used to calculate the benefit increase due to the planned improvement to the drainage system. Consideration of the increased hydraulics to each sub catchment was used to apply benefits to each tract of land represented as a line in the "Exhibit A" portion of the viewers' report. We the viewers also carefully considered the benefits to all lands within the drainage system due to improvements to the drainage system as a whole. These improvements include but are not limited to improvements to the mains, establishments of impoundment areas, and implementation of control structures within the drainage system.

At the completion of our examination, we summed up the total benefits for the proposed improvement to Goodhue CD1. We found that the total benefits are \$133,773.21, permanent damages are \$0.00, and temporary damages are \$5,443. (See Exhibit A for tabular report of benefits.)

We recommend that the Goodhue County Drainage Authority hold a final hearing on the report and confirm the benefits and damages for the improvement of Goodhue CD 1.

Dated this 15<sup>th</sup> day of September, 2021.

*[Signature Page to Follow]*

Respectfully submitted,



Bryan Murphy



Aaron Goemann



Larry Murphy

