

AGRICULTURAL IMPACT STATEMENT



Photo by: MMSD

**DATCP
#4482**

**Pump Station 17 Force Main Relief
Phase 2
Dane County**



**WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION**
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Pump Station 17 Force Main Relief Phase 2

Dane County

WISCONSIN DEPARTMENT OF AGRICULTURE, TRADE AND CONSUMER PROTECTION

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LETTER TO THE READER

Dear Reader,

Through the Agricultural Impact Statement (AIS) program, agricultural operations have the opportunity to provide feedback, document impacts, and suggest alternative solutions when their agricultural lands are affected by an entity with the potential powers of eminent domain. The AIS program also provides affected agricultural landowners time to gather information to make well-informed decisions before a project begins. Lastly, the AIS program makes suggestions and recommendations to project initiators to promote project alternatives and management practices that would reduce potential impacts to agricultural lands and operations.

The AIS program also serves the needs of the project initiator by conducting the AIS analysis and publishing the statement within a timely manner as required by Wis. Stat. § 32.035. In addition, the AIS program provides a continuing presence throughout project development and oversight processes in order to advocate for agricultural operations and support the statewide priority to preserve prime farmland.

The Agricultural Impact Statement program and the WI Department of Agriculture, Trade and Consumer Protection are honored to provide this essential state service to the agricultural landowners and operators of the state.

Thank you,

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ACRONYMS

| | |
|--------|---|
| AEA | Agricultural Enterprise Area |
| AIN | Agricultural Impact Notification |
| AIS | Agricultural Impact Statement |
| CREP | Conservation Reserve and Enhancement Program |
| CRP | Conservation Reserve Program |
| DATCP | Department of Agriculture, Trade and Consumer Protection (the Department) |
| FP | Farmland Preservation Program |
| MFL | Managed Forest Law |
| MMSD | Madison Metropolitan Sewerage District |
| PACE | Purchase of Agricultural Conservation Easement |
| PSC | Public Service Commission of Wisconsin |
| ROW | Right-of-Way |
| USDA | U.S. Department of Agriculture |
| WisDNR | Wisconsin Department of Natural Resources |

TERMS

Terms are *italicized* thought-out the document

| | |
|--------------------------------|--|
| <i>Agricultural Operation</i> | All owned and rented parcels of land, buildings, equipment, livestock, and personnel used by an individual, partnership, or corporation under single management to produce agricultural commodities. |
| <i>Easement</i> | <i>Easements</i> are contracts – bound to the property – which allow another party the right to use or enter a property without owning the property. <i>Easements</i> may be temporary (i.e. time limited) or permanent. |
| <i>Force Main</i> | A pipeline that conveys wastewater under pressure from a pump or pneumatic ejector, located in a lift or pump station, to a discharge point. |
| <i>Mitigation</i> | Avoiding, minimizing, rectifying (repairing), reducing, eliminating, compensating for, or monitoring environmental & agricultural impacts. |
| <i>Open Trench</i> | The excavation of a trench to install individual sections of a pipeline. After each section of pipeline is installed, the trench is backfilled with soil. |
| <i>Prime Farmland</i> | Defined by the U.S. Department of Agriculture as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. |
| <i>Right-of-Way (ROW)</i> | The right to cross another’s property for transportation or transmission purposes, such as roads, powerlines, and pipelines. |
| <i>Severance</i> | Splitting an agricultural parcel into two or more smaller parcels |
| <i>Three-lift Soil Handing</i> | Soil handling method requiring the excavation and stockpiling of 1) <i>topsoil</i> , 2) subsoil and 3) substratum in three separate piles. After excavation and construction is complete, the excavated soils are backfilled in the reverse order from which they were removed (i.e. last removed = first backfilled). |
| <i>Topsoil</i> | The thin, top layer of soil where the majority of nutrients for plants is found. |
| <i>Uneconomic Remnant</i> | The property remaining after a partial taking of property, if the property remaining is of such size, shape, or condition as to be of little value or of substantially impaired economic viability. |
| <i>Wasteland</i> | Small or irregularly shaped areas within a remnant agricultural field that are not able to be cultivated. These areas reduce the amount of tillable acres within a remnant field, which may also impact the economic viability of the remnant field. |

SUMMARY OF AGRICULTURAL IMPACT STATEMENT

The Wisconsin Department of Agriculture, Trade, and Consumer Protection (“Department”) has prepared Agricultural Impact Statement (“AIS”) #4482 for a sanitary sewer *force main* and gravity interceptor proposed by the Madison Metropolitan Sewerage District (“MMSD”). MMSD provides wastewater management to 25 cities, villages and town sanitary districts in Dane County (MMSD, 2022). The proposed *force main* (referred to as “Pump Station 17 Force Main Phase 2 Project” or “Project”) originates near Badger Mill Creek and travels northeasterly before terminating southwest of Goose Lake in the Town of Verona, Dane County as shown in Figure 1. MMSD has indicated the primary reason for the Project is to relieve the existing Pump Station 17 force main which does not have sufficient pipe capacity alone to serve the anticipated growth within the City of Verona and West side of Madison on the southwest side of the MMSD service area. The proposed project is Phase 2 of a multi-year project (DATCP, 2022a).

To construct the Project, MMSD proposes to install approximately 11,297 linear feet of 24-inch diameter *force main* pipe and 36-inch gravity interceptor sewer. The proposed Project will impact one agricultural landowner and approximately 8.08 acres of agricultural lands. The scope of this analysis is limited to agricultural impacts resulting from the installation of an estimated 2,587 linear feet of 24-inch diameter *force main* pipe and required temporary and permanent easements across parcels 060813390010, 060813385001, and 060813380006.

In accordance with [Wis. Stat. §32.035\(3\)](#), MMSD has provided the Department with the necessary information and materials to conduct an AIS. The Department has also contacted the agricultural property owners and operators impacted by the Project route. In accordance with [Wis. Stat. §32.035\(4\)\(b\)](#), the Department has reviewed and analyzed MMSD materials and the comments from the affected agricultural property owners and operators to assess the agricultural impacts of the proposed project. Through the AIS analysis, the Department offers a set of recommendations and conclusions to MMSD and the agricultural landowners and operators to help mitigate current and future impacts on agricultural lands and *agricultural operations* along the Project route.

The set of recommendations are located within the AIS Recommendation Section beginning on page 7. The AIS analysis begins on page 9 with information on the project located in Section 2. Information and conclusions on the agricultural setting of Dane County and impacted areas can be found in Section 3. The agricultural impacts of the project on the impacted land, landowners and operators can be found in Section 4. Appendices for AIS #4482 contain the following information: additional project figures, tables, and data from MMSD (Appendix A: Additional Figures & Appendix B: MMSD Soil Boring Records), a *three-lift soil handling* candidacy key (Appendix C: Three-lift soil Candidate Key), information on the appraisal and compensation process (Appendix D: Appraisal and Compensation Process), a copy of Wisconsin’s agricultural impact statement statute (Appendix

E: Wisconsin Statutes), and various additional sources of related information for agricultural landowners and operators (Appendix F: Additional Information Sources).

If MMSD deviates from the selected alternatives or the selected sites, MMSD shall re-notify the Department. The Department shall review the re-notification for new potential impacts to agricultural lands and may generate an addendum to this AIS, if warranted.

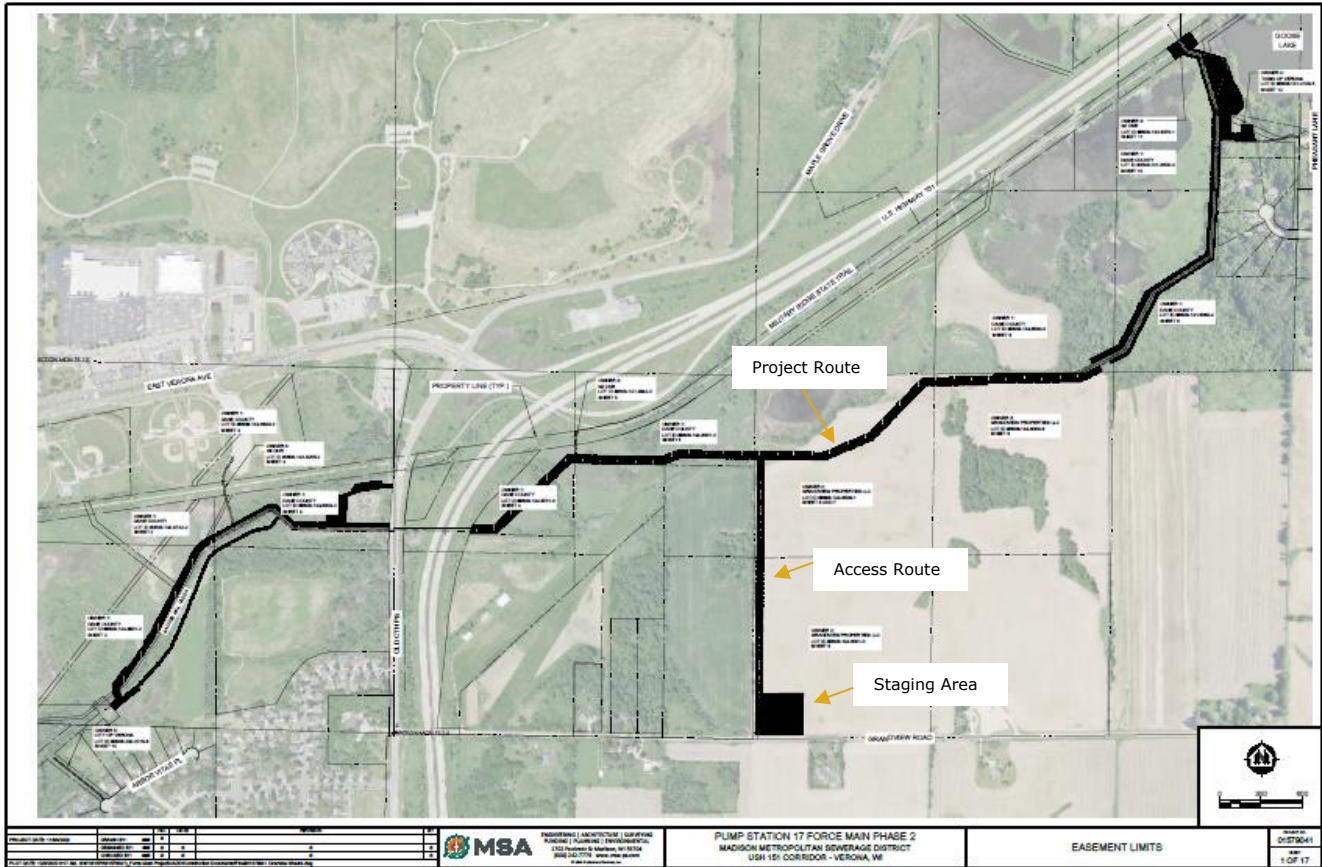


Figure 1: The Pump Station 17 Force Main Phase 2 Project originates in the Southeast Quarter of Section 14, Township 6 North, Range 8 East, near Badger Mill Creek and travels northeasterly before terminating in the Northeast Quarter of Section 13, Township 6 North, Range 8 East, southwest of Goose Lake in the Town of Verona (DATCP, 2022a).

AGRICULTURAL IMPACT STATEMENT RECOMMENDATIONS

The Department has reviewed and analyzed the materials provided by MMSD and comments from the affected agricultural property owners and operators regarding the proposed Pump Station 17 Force Main Project. The Department provides the following recommendations, in accordance with [Wis. Stat. §32.035\(4\)\(b\)](#) to MMSD and agricultural landowners and operators to help mitigate impacts on agricultural lands and *agricultural operations* resulting from the Project.

Recommendations to the Madison Metropolitan Sewerage District

- 1) MMSD should consider implementing the recommended *mitigation* practices described in Section 4.4.1 to mitigate project impacts to or regarding: access, *wasteland*, *topsoil*, soil heath, soil compaction, soil rock content, de-icing and traction control, de-watering and yield and crop loss.
- 2) MMSD should inform the affected agricultural property owners, shown in Table 2, who have soils that are candidates for the *three-lift soil handling* method. At the same time, MMSD should also inform these property owners how *three-lift soil handling* could preserve the productivity of their fields and distribute a copy of [ARM-LWR-294](#) or a similar publication.
- 3) MMSD should monitor for the presence of underground drainage tiles within the construction ROW. Should MMSD damage or break a functional drain tile line, MMSD should repair the drain tile line before backfilling the trench. Repairs should consist of installing a new piece of drain tile or rigid PVC to span the width of the trench and reconnect to the undamaged sections of drain tile. The newly installed drain tile or PVC should also be supported by a steel channel or I-beam to ensure the pre-existing slope of the tile is maintained during backfilling.
- 4) Where construction activities have altered the natural stratification of soils resulting in decreased productivity, MMSD should work with landowners to determine a means to return the agricultural land either in the ROW or adjoining lands to pre-construction function. De-compaction, regrading, or additional fill may be required to correct problems that arise after construction is complete.
- 5) MMSD should clearly mark ground or surface-level structures sited within the permanent easements for its own benefit and that of the landowner and current or future agricultural producers.

Recommendations to Agricultural Landowners and Operators

- 1) Landowners should review the recommended *mitigation* practices described in Section 4.4.2 to mitigate project impacts to or regarding: access, *wasteland*, *topsoil*, soil heath, soil compaction, soil rock content, de-icing and traction control, de-watering and yield and crop loss.
- 2) Landowners who have soils that are candidates for the *three-lift soil handling* method, as shown in Table 2, should request that MMSD use *three-lift soil handling* for those soils. Landowners should also review the Departments *three-lift soil handling* publication [ARM-LWR-294](#) for additional information.
- 3) Landowners concerned about potential impacts to their agricultural land should keep records of the conditions of the ROW before, during, and after construction, including field moisture conditions, historic presence/absence of ponded water prior to the start of construction for post-construction comparisons, crop yield records and photographs taken every season.
- 4) Prior to the start of construction, landowners should identify for MMSD where construction activities may interfere with farm operations, farm building/facilities or farming infrastructure including but not limited to drain tiles, wells, drainage ditches, drainage tile, culverts, or farm access roads.

AGRICULTURAL IMPACT STATEMENT

1. INTRODUCTION

The Wisconsin Department of Agriculture, Trade, and Consumer Protection (“Department”) has prepared Agricultural Impact Statement (“AIS”) #4482 in accordance with [Wis. Stat. §32.035](#) for a *force main* and gravity interceptor proposed by the Madison Metropolitan Sewerage District (“MMSD”). The proposed *force main* and gravity interceptor (referred to as “Pump Station 17 Force Main Project” or “Project”) is located in the City of Verona and Town of Verona in Dane County as shown in (Figure 1). A *force main* is a pipeline that conveys wastewater under pressure from a pump or pneumatic ejector, located within a lift or pump station, to a discharge point. MMSD indicated the Projects’ purpose is to address capacity needs for wastewater within the Lower Badger Mill Creek drainage basin of MMSD’s service area (DATCP, 2022a).

According to [Wis. Stat. §32.035](#), the AIS is designed to be an informational and advisory document that describes and analyzes the potential effects of a proposed project on *agricultural operations* and agricultural resources, but it cannot stop a project. The Department is required to prepare an AIS when the actual or potential exercise of eminent domain powers involves an acquisition of any interest in more than five acres of land from any *agricultural operation*.

The AIS reflects the general objectives of the Department in its recognition of the importance of conserving vital agricultural resources and maintaining a healthy rural economy. The Department is not involved in determining whether or not eminent domain powers will be used or the amount of compensation to be paid for the acquisition of any property.

In Wisconsin, municipal sewerage systems do not fall within the definition of public utility under Wis. Stat. §196.01(5) and do not require approval from the Public Service Commission of Wisconsin (“PSC”) when setting rates or rules. Regulation of sewer utilities by the PSC is primarily a voluntary decision by the local governing body having jurisdiction (PSC, 2022). Absent the involvement of the PSC, permitting authority over the Project is subject to local and county regulation. MMSD is still required to obtain any necessary permits from the Wisconsin Department of Natural Resources (“WisDNR”) and abide by Wisconsin Agricultural Impact Statement Statute [Wis. Stat. §32.035](#) as an entity vested with the authority to exercise condemnation under [Wis. Stat. §32.05](#) and [Wis. Stat. §200.43](#).

Prior to the release of this AIS, MMSD notified the Department of its intent to complete voluntary contracts without actualizing MMSD’s powers of eminent domain to acquire easements on the impacted agricultural parcels. As MMSD has not actualized its powers of condemnation, at this time, to obtain property or *easements* for this project, the 30-day waiting period for contract negotiations under Wis. Stat. §32.035(4)(d) is not applicable for this project. If MMSD does actualize its powers of condemnation at any point during the project, MMSD may not negotiate with

an owner or make a jurisdictional offer until 30 days after the AIS has been published. If MMSD deviates from the selected plans or site alternatives, MMSD shall re-notify the Department in accordance with Wis. Stat. §32.035(3). The Department shall review the re-notification for new potential impacts to agricultural lands and may determine to generate an addendum to this AIS.

Should MMSD actualize its powers of condemnation for this acquisition, information on the appraisal and compensation process under eminent domain is provided within Appendix D: Appraisal and Compensation Process. The full text of [Wis. Stat. §32.035](#) is included in Appendix E: Wisconsin Statutes. Additional references to statutes that govern eminent domain and condemnation processes and other sources of information are also included in Appendix E: Wisconsin Statutes and Appendix F: Additional Information Sources.

2. PROJECT DESCRIPTION

2.1. Project Summary

MMSD has provided the Department with an agricultural impact notification (“AIN”) and requested spatial materials for analysis for the proposed project (DATCP, 2022a). The AIN and materials from MMSD serve as the main reference documents for the Project. The proposed project route represented here is MMSD’s preferred route, but the route may still be subject to minor changes by MMSD. As the scope of [Wis. Stat. §32.035](#) is limited to agricultural impacts, this analysis will only examine and evaluate the aspects of the Project that affect agricultural lands.

2.2. Project Purpose

MMSD indicated the purpose of the Project is to address relief capacity needs for wastewater management based on projected growth within the Lower Badger Mill Creek drainage basin on the southwest site of MMSD’s service area. According to MMSD, in late 2024, the City of Madison’s temporary lift station on Midtown Road will reach capacity and will be relieved by the proposed project. Additional wastewater flow will travel to Pumping Station 17, requiring an upgrade of the pumping station and *force main*. The Project will complete the relief *force main* and provide additional wastewater conveyance capacity (DATCP, 2022a).

2.3. Preferred Project Design

To construct the complete Project, MMSD proposes to install approximately 11,297 linear feet of 24-inch diameter *force main* pipe and 36-inch gravity interceptor sewer. The scope of this analysis is limited to agricultural impacts resulting from the installation of an estimated 2,587 linear feet of 24-inch diameter *force main* pipe and required temporary and permanent easements across parcels 060813390010, 060813385001, and 060813380006.

2.3.1. *Installation Methods*

MMSD reported in the majority of areas the Project contractor would determine the trenching method used to install the pipe across the Project (Rachel Feil, Personal Communication, January 2023), but expects *open trenching* across the impacted agricultural lands (DATCP, 2022a). MMSD and MSA expect the trench will be backfilled at the end of each day, with the exception for a pit where construction resumes the following day (MMSD and MSA, Pre-construction Meeting, January 2023). The typical dimension of the *open trench* in the agricultural areas is anticipated to be approximately 7-20 feet deep and 8-10 feet wide. In agricultural lands, trench depth will be deep enough to allow a minimum of 7 feet of soil cover over the top of the pipe to avoid possible interference with farming equipment. (DATCP, 2022a).

2.3.2. *Above Ground Facilities*

MMSD has indicated that manhole structures will be staggered along the Project route for maintenance and access. Within the agricultural area, MMSD will site three 6-foot inside diameter concrete manhole structures near the surface (Rachel Feil, Personal Communication, January 2023).

2.4. Project Right-of-Way

MMSD proposes to utilize new right-of-way ("ROW") to site the proposed project corridor within the agricultural lands. MMSD plans to acquire approximately 2.26 acres of permanent easement and 5.82 acres of temporary easement. Typical widths for permanent and temporary *easements* will be 30 feet and 30-40 feet respectively. Where the project crosses farmed wetlands, typical widths for permanent and temporary easements will be 30 feet and 25 feet respectively (DATCP, 2022a).

2.5. Project Location

The proposed project is located within Dane County, WI and originates in the Southeast Quarter of Section 14, Township 6 North, Range 8 East, near Badger Mill Creek and travels northeasterly before terminating in the Northeast Quarter of Section 13, Township 6 North, Range 8 East, southwest of Goose Lake in the Town of Verona. The scope of this AIS is limited to the impacted agricultural parcels 060813390010, 060813385001, and 060813380006 located in Section 13, Township 6 North, Range 8 East, in the Town of Verona (Figure 1).

2.6. Project Schedule

Pending issuance of all state agency and local permits, MMSD plans to begin construction in summer or fall 2023 with a projected construction timeline of 18 months (DATCP, 2022a). MMSD plans to continue Project construction activities through winter months as well. The project is

scheduled to be in service by summer of 2025 (Rachel Feil, Personal Communication, January 2023).

2.7. Alternative Routes

MMSD considered multiple route alternatives for the Project. Dismissed alternatives raised concerns about rock blasting, proximity to an existing landfill, construction access, long-term access and future needs for upgrades within the service area (DATCP, 2022a).

2.8. Access Roads and Staging Area

MMSD will acquire a 2,008 foot long permanent access easement off Grandview Road and through parcels 060813390010 and 060813385001 to access the Project corridor (Figure 1). MMSD will also acquire a 2.66 acre temporary construction easement in parcel 060813390010, as seen in Figure 1, for use as a staging area for the Project (DATCP, 2022a).

3. AGRICULTURAL SETTING

3.1. Farmland Preservation

Wisconsin's Farmland Preservation ("FP") program provides local governments and landowners with tools to aid in protecting agricultural land for continued agricultural use and to promote activities that support the larger agricultural economy. Lands that are planned for FP by the county and included in a certified zoning district or located within an Agricultural Enterprise Area (AEA) are afforded land use protections intended to support agriculture and are eligible for the farmland preservation tax credit.

3.1.1. FP (Planning, Zoning and Agreements) and Agricultural Enterprise Areas

Dane County's current FP plan was certified by the Department in 2022 and is set to expire in 2032. Impacted agricultural parcels 060813390010, 060813385001, and 060813380006 are not planned for FP within Dane County's current FP plan area (DATCP, 2022b). As the impacted agricultural parcels have not been planned for FP, they are not eligible to be zoned for FP within the county's certified FP zoning district nor are they eligible to be located within a designated AEA.

The use restrictions of general zoning apply to the project area and the project initiator should consult with all applicable local zoning authorities to determine what restrictions apply and to ensure compliance with local zoning regulations.

Prior to 2009, owners of eligible farmland could sign 10 to 25-year FP agreements outside of AEA boundaries. There are no effective pre-2009 FP agreements located in the Town of Verona, Dane County.

3.2. Conservation Programs

Voluntary conservation programs such as the USDA Conservation Reserve Enhancement Program (“CREP”) and the USDA Conservation Reserve Program (“CRP”) are financial incentive programs to help agricultural landowners meet their conservation goals. The State of Wisconsin also manages other agricultural programs to conserve farmland for future agricultural use.

3.2.1. Conservation Reserve Enhancement Program

A review of the Department’s CREP records indicate that the proposed Project would not directly impact any current CREP fields or *easements*.

3.2.2. Conservation Reserve Program

As CRP enrollment information is privileged to the USDA and CRP program participants, the Department cannot independently verify if any of the impacted agricultural parcels are enrolled within the CRP program.

3.2.3. Managed Forest Law (“MFL”)

A review of the WisDNR MFL program database indicates that the Project will not impact lands enrolled within the MFL program.

3.2.4. Purchase of Agricultural Conservation Easement (“PACE”) Programs

A review of the Department’s PACE Program shows the Project would not impact any state-held PACE *easements*. Counties and private non-governmental organization such as land trusts may also hold agricultural conservation *easements*. Based on a review of publicly available online resources, the Department could not find any record of a county held or non-governmental organization held agricultural conservation *easement* that would be impacted by the Project (Groundswell, 2022).

3.3. Drainage Districts

Drainage districts are local governmental entities governed under Wis. Stat. Ch. 88 and organized under a county drainage board and for the primary purpose of draining lands for agricultural use (DATCP, 2019). Landowners who benefit from drainage pay assessments to cover the cost to construct, maintain, and repairing the district’s drains. According to the Department, approximately 190 active districts exist within 27 of Wisconsin’s 72 counties.

A review of the Department’s Drainage Program database indicates that Dane County has 28 active drainage districts and six inactive districts. An “inactive” designation signifies a lack of maintenance or administrative functions by a drainage district over an extended period. The project area is not connected to any known drainage flow pathways that would impact an active drainage district. For additional information contact the Department’s State Drainage Engineer.

4. AGRICULTURAL IMPACTS

In addition to being a key component of [Wis. Stat. §32.035](#), documenting the agricultural impacts of a project provides the project initiator and the agricultural landowner the opportunity to better understand the project in its own right as well as learn how the project will impact agriculture. Furthermore, the documentation of agricultural impacts by agricultural landowners and operators creates the opportunity for them to consider alternatives that may reduce impacts to agricultural lands. To promote the opportunity for alternatives, the Department has used information provided by MMSD for this AIS and information gathered from agricultural landowners to analyze the potential agricultural impacts of the Pump Station 17 Force Main Project (“Project”) in Dane County, WI. The analysis of the agricultural impacts and conclusions drawn from it form the basis of the Department’s recommendations within the AIS Recommendation Section above.

4.1. Farmland Acquisitions

The proposed project will require the acquisition of approximately 2.26 acres of permanent easement and 5.82 acres of temporary easement of agricultural land, from parcels 060813390010, 060813385001, and 060813380006, owned by Grandview Properties LLC (Figure 1). The Department was able to contact a representative of Grandview Properties LLC, who declined to provide feedback on the proposed Project (Tim Bischoff, Personal Communication, January 2023). The following section documents information submitted as a part of the AIN by MMSD. The information helps inform the Department’s analysis of agricultural impacts to specific agricultural landowners and agricultural lands in general.

4.1.1. *Madison Metropolitan Sewerage District (“MMSD”)*

MMSD has approached Grandview Properties LLC regarding the acquisition of permanent and temporary limited easements for the construction of the project on agricultural parcels 060813390010, 060813385001, and 060813380006, and the parties intend to voluntarily reach an agreement, but have not yet begun negotiations. MMSD reported that cropland will be affected during construction of the Project, however following restoration, farming activities may be resumed with the exception of areas around the three manhole structures located at the surface (DATCP, 2022a).

MMSD reported that it has worked with Grandview Properties LLC to site the project on the impacted cropland and has made modifications to the alignment based on the landowner’s input. The Project will require erosion control permits from Dane County and the WisDNR (DATCP, 2022a). As of December 2022, MMSD conducted two informational and listening sessions related to the project, and had two more planned. At the time of this analysis, MMSD had not received any public input related to the affected cropland (Rachel Feil, Personal Communication, December 2022).

MMSD and their contracted engineering firm – MSA Professional Services (“MSA”) – consulted with the Department regarding the information and recommendations contained within this AIS, prior to publication. MMSD stated their willingness to consider each of the Departments recommendations (MMSD and MSA, Pre-construction Meeting, January 2023).

4.1.2. Grandview Properties, LLC

Grandview Properties LLC declined to provide feedback as a part of the Department’s agricultural impact analysis for the propose Project (Tim Bischoff, Personal Communication, January 2023).

4.2. Severance, Access and Wasteland

The acquisitions of agricultural property can result in agricultural parcel *severance*, removal of existing field access points and potentially the creation of *wastelands* and *uneconomic remnant* parcels. The circumstances (i.e. loss of access, *severance*, *wasteland* etc.) surrounding the impacts to each impacted remnant agricultural parcel are unique, thus some agricultural parcels may remain economically viable, while others may not. The following analysis will document the potential for *severance*, loss of access and potential creation of *wastelands* and *uneconomic remnant* parcels for agricultural lands impacted by the Project (Figure 1).

4.2.1. Severance

Severing an agricultural parcel to accommodate a project effectively splits the existing parcel into two or more smaller parcels. Severing an agricultural parcel may also remove existing access points, create agricultural *wastelands* or *uneconomic remnant* parcels, divide the operation of a farm or potential result in farmland conversion. Based on the proposed project boundaries (Figure 1), the Department does not believe the Project will sever any of the impacted agricultural parcels.

4.2.2. Access

Acquisitions of farmland may remove existing points of access utilized by *agricultural operations* to enter their remaining farmland. Access to farmland may also be temporarily lost within the project ROW while the project is under construction. When agricultural lands and operations lose access, even temporarily, agricultural productivity may be impacted if crops, livestock or other agricultural products cannot be tended. Lost access may also directly result in lost income if a field cannot be planted or harvested, or if an entire *agricultural operation* is hindered.

Based on the location of the proposed Project ROW, construction may temporarily affect field access points to the cropland north of the selected route. MMSD reported a willingness to work with their contractor, upon request of the landowner, to allow access to cropland north of the Project route, in parcels 060813380006 and 060813385001, can be accessed by crossing the construction zone with farm equipment (DATCP, 2022a). To mitigate access impacts, the Department recommends MMSD coordinate with the landowner and inform the landowner of projected

construction timelines well in advance of when and where construction will occur and for how long they could potentially lose access to the impacted farm fields.

4.2.3. Wasteland

Acquisitions and *easements* that sever farmland frequently create small remnant fields that may be difficult to access or are irregularly shaped. Small remnant fields that are irregularly shaped can make it difficult for agricultural equipment to navigate and reduce the amount of tillable acres. This in turn reduces agricultural productivity and decreases the economic viability of the land, which increases the potential of creating undeveloped land ([Wis. Stat. § 70.32\(2\)\(a\)\(5\)](#)) or what is commonly referred to as *wasteland*. Compensation for the reduction in the value of parcels that are small and/or irregularly shaped and the potential creation of *uneconomic remnant* parcels according to [Wis. Stat. 32.05\(3m\)](#) should be addressed in the appraisal of each affected parcel.

Above ground or surface-level structures in crop fields, such as manholes, have the potential to alter travel patterns for agricultural equipment operators to maneuver around and may also create fragments of *wasteland* as shown in Figure 2. Manholes along the Project route should be clearly marked for the benefit of MMSD, the landowner and any other current or future agricultural producers. MMSD acknowledges that the land the manholes occupy is not farmable and the manholes could make it more difficult to farm the directly adjacent soil (DATCP, 2022a).

The Department’s analysis found that the Project is unlikely to create significant agricultural *wastelands* and should not create any *uneconomic remnant* fields. This determination is based on two main findings: 1) the Project proposes limited surface structures on agricultural lands for the foreseeable future and 2) the impacted agricultural lands can largely be returned to the pre-existing agricultural use.

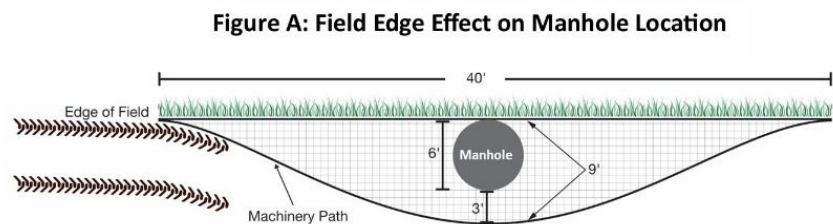
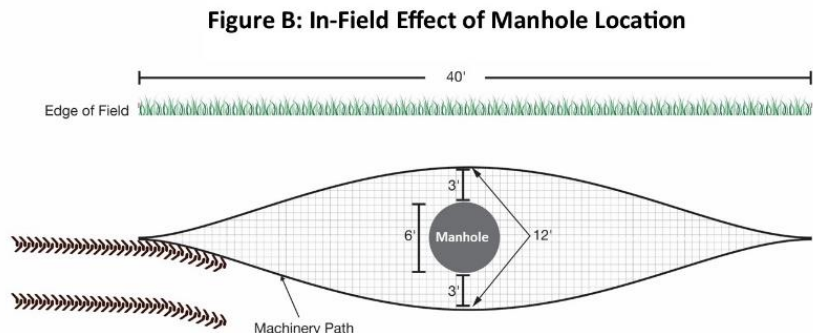


Figure 2: Examples of agricultural wastelands created by altering the pathway of agricultural machinery to navigate around manholes along a field edge (Figure A) and within a field (Figure B).



4.3. Prime Farmland and Soils

As proposed, the Project will impact 8.08 acres of agricultural lands and soils. The soils impacted by the proposed Project were cataloged and analyzed by farmland classification, for the proposed route, using the NRCS *prime farmland* soils GIS layer. Farmland soil classifications impacted by the Project include *prime farmland* and *prime farmland if drained* (Table 1). *Prime farmland* is designated by the USDA according to section 622.3 of the National Soil Survey Handbook (USDA, 2017) and is based on the ability of the land and soil to produce crops. Definitions of *prime farmland*, *prime farmland if drained* and farmlands of statewide/local importance are provided under Table 1. The soil texture of agricultural soils impacted by the Project was analyzed, in general terms, across the project ROW.

89.6% of the agricultural lands impacted by the Project hold some level of Federal or State priority designation, with 41.0% being federally designated as *Prime farmland* or *Prime farmland if Drained* (Table 1). Within the boundary of the permanent pipeline easement, 85.4% of soils hold some level of priority designation and 73% have been designated as *Prime farmland* or *Prime farmland if Drained*. The agricultural soils across the Project ROW, when classified by texture, are primarily silt loam soils of various soil series. In general, silt loam soils are medium-textured soils (Cornell, 2017) with good soil structure, possess an ideal ability to hold onto water without becoming excessively wet and are usually best suited for crop production (UW-Extension, 2005).

Table 1: Agricultural soils, by farmland classification, impacted by the proposed Project in Dane County, WI.

| Soil Texture | Prime Farmland* (acre) | Prime Farmland if Drained ^o (acre) | Farmland of Statewide Importance [‡] (acre) | Not Prime Farmland ^φ (acre) | Total (acre) |
|--|------------------------|---|--|--|--------------|
| Loam | 0.00 | 0.00 | 0.00 | 0.60 | 0.60 |
| Silt Loam | 2.62 | 0.70 | 3.93 | 0.24 | 7.48 |
| <i>Project Total</i> | | | | | 8.08 |
| <p>*Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and may be utilized for cropland, pastureland, rangeland, forest land, or other lands excluding urban built-up land or water. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.</p> <p>^oPrime farmland if drained, indicates that if farmland is drained it would meet prime farmland criteria.</p> <p>[‡]Farmlands of statewide importance are set by state agency(s). Generally, these farmlands are nearly prime farmland and economically produce high yields of crops when treated and managed according to acceptable farming methods. Some may produce yields high as prime farmlands under proper conditions.</p> <p>^φNot Prime farmland, indicates farmland is neither prime farmland nor of designated importance.</p> | | | | | |

4.4. Soil Health

Soil structure, texture, organic matter and microorganisms are all important factors that influence soil health (Wolkowski and Lowery, 2008). Project construction activities with the potential to impact soil health include excavation and the movement of heavy equipment through the Project

ROW that may compact soil. UW-Extension report A3367 states that heavy equipment with axle loads that exceed 10 tons increase the risk of soil compaction into subsoil layers that cannot be removed by conventional tillage (Wolkowski and Lowery, 2008). This construction-caused soil compaction may also damage drain tiles leading to ponded water where none existed prior to construction. Construction activities may also disrupt and/or mix soil profiles within the Project ROW as well as the surrounding area. Research has also shown that construction related impacts (e.g. equipment axle weight, use of excavation, intermixing of soil layers etc.) have the potential to negatively impact crop yields from two years up to a decade within the ROW depending on construction methods, severity of the construction impacts, and mitigation practices (Culley and DOW 1988; Soon et al., 2000; Shi et al., 2014).

4.4.1. Three-Lift Soil Handling

The *three-lift soil handling* procedure is recommended for cropland and pasture where the mixing of the subsoil layers from construction practices such as pipeline trenching, may result in persistent crop yield reductions. For agricultural soils, the typical pipeline construction practice is to remove and stockpile only the *topsoil* (usually the top 12 inches) from the entire pipeline trench. In contrast, the *three-lift soil handling* method requires the stockpiling of the 1) *topsoil*, 2) subsoil and 3) substratum in three separate piles. After the pipe has been placed within the trench, the excavated soils would be backfilled in the reverse order from which they were removed (i.e. last soil removed is the first soil backfilled). For more information on the *three-lift soil handling* method, refer to the Departments Three-Lift Soil Management publication [ARM-LWR-294](#) available at [agimpact.wi.gov](#).

The *three-lift soil handling* method is useful when the proposed trench will intersect both the B and C horizons of a soil profile and the C horizon is of poorer quality (gravel, rock, and/or sand) than the B horizon (silt, clay, and/or loam). Alternatively, this practice may be applicable to soil profiles with a distinct upper and lower B horizon, as opposed to a B and C horizon. Additional factors such as slope, soil drainage, thickness of the soil horizons, and acres of soil units crossed by the project are important in determining soil candidates for which the three-lift method could be beneficial for protection of crop yields. A key for identifying soil candidates for *three-lift soil handling* is provided in Appendix C: Three-lift soil Candidate Key.

To conduct an analysis of *three-lift soil handling* candidates, the Department collected and compiled relevant soil characteristics (slope, drainage, soil horizon textures, soil horizon thickness etc.) and descriptions from the USDA Natural Resources Conservation Services (NRCS) Web Soil Survey for the agricultural lands impacted by the Project. MSA also provided the Department with records of soil borings collected along the permanent pipeline easement as seen in Appendix B: *MMSD Soil Boring Records* (Kevin Lord, Personal Communication, January 2023). The Department excluded project areas outside of the permanent pipeline easement where *open trenching* will not occur, resulting in a total study area of 1.80 acres. Using the Three-Lift Soil Candidacy Key shown

in Appendix C: Three-lift soil Candidate Key, the Department reviewed the soil characteristics for each unique NRCS soil map unit impacted by permanent *easements* to identify candidates for *three-lift soil handling*. From this review, the Department identified two soil map units as candidates shown in Figure 3, representing 0.73 acres or 40.7% of the study area, for *three-lift soil handling* procedures. These candidate soils were cross-referenced by agricultural landowner as shown in Table 2, to create the slate of soils that are candidates for *three-lift soil handling*.

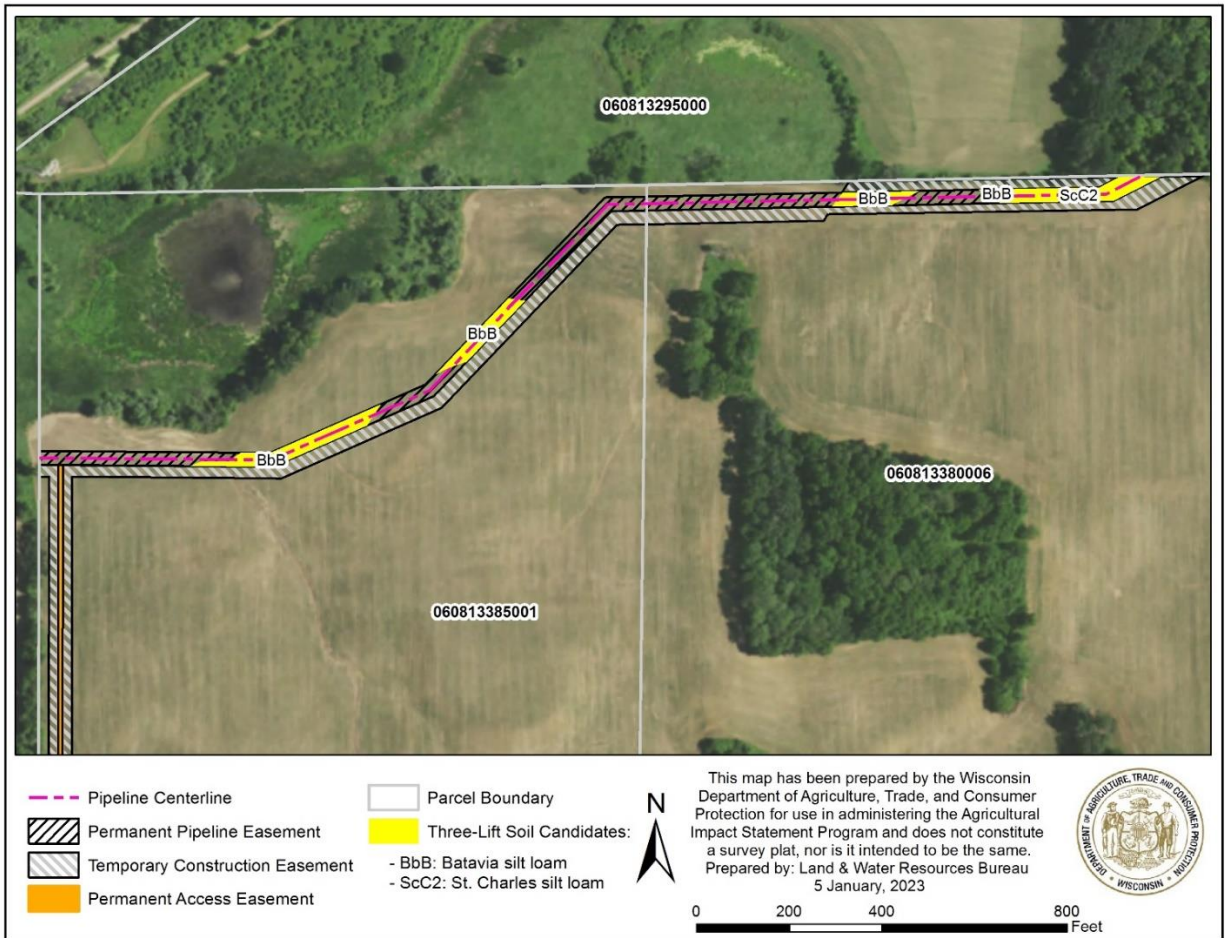


Figure 3: Locations of soil candidates for three-lift soil handling along the Pump Station 17 Force Main Phase 2 Project in the Town of Verona, Dane County, WI. The Department’s analysis excluded areas outside of the permanent pipeline easement where trenching will not occur.

Table 2: The agricultural soils along the Pump Station 17 Force Main Phase 2 Project route, seen in Figure 3, that are candidates for the three-lift soil handling method.

| Landowner(s) | Soil Map Unit Symbol* | Soil Map Unit Name | Impacted Land (Acres) |
|---------------------------|-----------------------|-----------------------|-----------------------|
| Grandview Properties, LLC | BbB | Batavia silt loam | 0.51 |
| | ScC2 | St. Charles silt loam | 0.22 |
| Total | | | 0.73 |

*The third letter within the soil map unit symbol (e.g. the C, within symbol ScC) represents the percent slope of the soil as follows: A = 0 - 3%, B = 2 - 6%, C = 6 - 12%, D = 12 - 20%, E = 20 - 30%

The slate of soil candidates shown in Table 2 were cross-referenced to the soil boring data collected along the permanent pipeline easement. Soil boring data from boring numbers 16, 17, and 18 confirm that the pipeline trench will encounter a gravelly/rocky C soil horizon along parts of the permanent pipeline easement. This reaffirms that MMSD should use *three-lift soil handling* to ensure the higher quality B soil horizon doesn't mix with the lower quality C horizon. Soil bore 15 also documented that some areas along the permanent pipeline easement may contain a B soil horizon that is deeper than the pipeline trench. In these areas, there may be no need for MMSD to use *three-lift soil handling*.

Given the variable locations of the three-lift soil candidates shown in Figure 3, the Department recommends that MMSD offer Grandview Properties LLC *three-lift soil handling* along the specific segments of the permanent pipeline easement as documented in Table 3 and Figure 3. As the soil boring data has shown variability within the soil profiles, the Department defers the final determination of candidate soils for *three-lift soil handling* to MMSD and the contractors employed to excavate the pipeline trench. MMSD and its contractors should follow the Department's protocol in Appendix C: *Three-lift soil Candidate Key*, when making the final determination of soil candidacy.

During a pre-construction meeting with the Department, MMSD stated that they would evaluate the potential for *three-lift soil handling* on the Grandview Properties LLC parcels. MSA believed the current width of the ROW, which is less than the 100 foot width typically used for *three-lift soil handling*, would be sufficient. MSA also stated the contractor may need to transport excavated materials a short distance on site if there is not sufficient space within the immediate area to separate the three soil horizons (MMSD and MSA, Pre-construction Meeting, January 2023).

Table 3: Locations, as indicated by project station numbers, of agricultural soils that are candidates for three-lift soil handling along the Pump Station 17 Force Main Phase 2 Project route as seen in Figure 3. Refer to Appendix A-Figure 1 for a diagram of project station numbers.

| <u>Three-Lift Soil Candidate Locations</u> | | Soil Map Unit Symbol* | Impacted Land (Acres) |
|--|------------------------------|------------------------------|------------------------------|
| Start (Station Number) | Stop (Station Number) | | |
| 731+15 | 735+60 | BbB | 0.24 |
| 737+00 | 739+40 | BbB | 0.14 |
| 746+80 | 748+75 | BbB | 0.10 |
| 750+00 | 753+80 | BbB & ScC2 | 0.25 |
| | | | 0.73 |
| *The third letter within the soil map unit symbol (e.g. the C, within symbol ScC) represents the percent slope of the soil as follows: A = 0 - 3%, B = 2 - 6%, C = 6 - 12%, D = 12 - 20%, E = 20 - 30% | | | |

4.4.2. Topsoil Segregation

Agricultural *topsoil* is an invaluable resource that should be preserved. Excavation activities required to create the *open trench* needed to install the project have the potential to mix highly productive *topsoil* with underlying less productive and potentially rocky subsoils. Deep rutting also has the potential to intermix *topsoil*. If intermixing of *topsoil* occurs, the resulting soils are generally known to be less productive, and in-turn reduce the agricultural productivity of the impacted area. MMSD has reported that it intends to strip top soil prior to construction and replace following construction.

The Department recommends that MMSD take the following steps to prevent the mixing of agricultural *topsoil* with subsoil layers within the Project ROW:

- 1) Remove agricultural *topsoil* - to a depth of 12 inches, or the entire original topsoil depth if it is less than 12 inches – from the subsoil storage area, the trench area, and the rest of the temporary right-of-way (work and traffic areas). Segregate and store the removed *topsoil* in designated on-site areas. Replace the *topsoil* during the restoration phase of the project, but after the decompaction of subsoils.
- 2) Prohibit the spreading of mixed soils or segregated subsoils on undisturbed cropland, pastures or other agricultural fields, unless authorized by the landowner.
- 3) Remove any intermixed *topsoil*, within the top 12 inches, from the *right-of-way* (ROW) and replace with new clean *topsoil* that is comparable to the pre-existing *topsoil*.
- 4) Avoid working in areas with recently saturated soils.
- 5) If rutting occurs, allow sufficient time for the soil to dry before repairing the ruts.

4.4.3. Soil Compaction

Equipment used to construct sewage systems has the potential to compact soil and reduce soil productivity on the farmland traversed during construction. Soil compaction is widely known to have a range of potential negative impacts to the productivity of soil, including reduced crop productivity, reduce crop uptake of water and nutrients, restriction of plant rooting depth, decreased water infiltration and increased surface runoff. MMSD has reported an intent to deep till subsoils compacted by equipment following the construction period (DATCP, 2022a). MMSD and MSA reported that temporary road matting may be used within the project ROW with special consideration for wetland and low areas to limit compaction (MMSD and MSA, Pre-construction Meeting, January 2023). MMSD also plans to continue construction activities through the winter months, which would help minimize compaction across agricultural soils.

The Department recommends that MMSD take the following steps to prevent soil compaction and/or de-compact agricultural soils:

- 1) Use deep subsoil ripping on all traffic and work areas of agricultural ROW where the topsoil has been stripped and before the topsoil is replaced in field. This includes the pipeline workspaces, temporary workspaces, and temporary access roads, but not the area over the trench or where drain tiles are located.
- 2) If the subsoil and/or topsoil are traversed during topsoil replacement activities, use a penetrometer to determine if additional decompaction is necessary through the topsoil.
- 3) Use only low-ground pressure and/or wide tracked equipment within ROW to reduce axle weight applied to soils.
- 4) Use construction matting in wet areas or areas prone to rutting within the ROW to spread out pressure.
- 5) Avoid working in areas with recently saturated soils.
- 6) When possible, conduct construction work during winter months when the ground is frozen.

4.4.4. Increased Soil Rock Content

Large stones at the surface can damage farm machinery and lead to added costs to landowners for removal. Many subsoil layers have a greater rock content than the *topsoil*. The planned *open trench* excavation within agricultural areas will have depths of 7 to 20 feet, which will bring up lower soil horizons with rocky subsoil that may mix with upper soil layers. Even where *three-lift soil handling* is used, additional rocks may be spread through the subsoil layer during backfilling. Project initiators may also apply gravel or rock at access points to agricultural fields or access roads which may mix with soil within or adjacent to the ROW.

The Department recommends that MMSD take the following steps to prevent increased rock content in agricultural *topsoil*.

- 1) Ensure the size, density and distribution of rock remaining on the construction work area is the same as adjacent areas not disturbed by construction
- 2) Unearthed rocks or excess rocks for construction activities should not be spread across the ROW, added to the topsoil pile, or added to other farm fields.

4.4.5. De-icing & Traction Control

Construction crews commonly apply various products to improve vehicle traction across temporary road matting within the construction ROW to control for wet, slippery, or icy conditions. The application of chloride based de-icing agents, such as rock salt, to temporary road matting within the construction ROW creates the potential for negative impacts to the soil health, vegetation, ecosystems, and surface waters (Richburg, 2001; Kelly *et al.*, 2008; Corsi *et al.*, 2010). Alternative de-icing products, such as calcium magnesium acetate or agricultural by-products such as beet juice, when combined with another de-icing products, do exist. These products are biodegradable,

non-toxic and can add beneficial minerals to the soil. The application of sand or small lime chips (1/8" to 3/16" diameter), or a combination of the two is another alternative. University of Wisconsin Madison – Extension publication [A3877](#) provides a more extensive list of alternative de-icing products for consideration.

MMSD anticipates construction will continue through the winter months of 2023 and 2024 to minimize impacts to agricultural and natural resources (Rachel Feil, Personal Communication, January 2023). MMSD and MSA reported that temporary road matting may be used within the project ROW with special consideration for wetland and low areas to limit compaction. MMSD also reported a willingness to consider alternatives to chloride based de-icing agents on temporary road matting if winter conditions require de-icing or traction control so that construction may proceed (MMSD and MSA, Pre-construction Meeting, January 2023). If necessary, the Department recommends MMSD consider the following mitigation practices for construction in winter months to address impacts related to chloride applications on temporary road matting over agricultural soils.

- 1) MMSD should use alternatives to chloride based de-icing agents, when safety conditions allow, for de-icing and traction control on temporary road matting when crossing agricultural soils or when crossing farmed wetlands.
- 2) When the application of a chloride based de-icing agent is necessary to resolve a matter of safety an alternative method cannot, MMSD should limit the chloride application rate to the lowest level required to maintain a safe working environment.
- 3) MMSD should prepare a spill response plan in the event a chloride based de-icing agent or an alternative product is over applied or spilled onto agricultural soils.

4.5. Drainage

Maintaining proper field drainage and preserving soil health is vital to the success of an *agricultural operation*. However, pipeline construction activities have the potential to affect both surface and subsurface (i.e. drain tile) drainage patterns and the overall soil health of agricultural fields. Potential drainage impacts from the construction of a pipeline include broken or damaged drainage tile lines, alterations to the topography of existing grassed waterways, or changes to known surface water flowlines. When these impacts happen and go unrepaired, drainage may become impaired, leading to the buildup of standing water on fields. Standing water on agricultural fields has a broad range of negative impacts including crop losses, concentrating mineral salts, flood damage to farm buildings, or causing disease in livestock.

MMSD reported that a representative of Grandview Properties LLC has indicated that they are not aware of existing drain tiles within the impacted agricultural fields (MMSD and MSA, Pre-construction Meeting, January 2023). MMSD should monitor for the presence of underground drainage tiles within the construction ROW. Should MMSD damage or break a functional drain tile

line, MMSD should repair the drain tile line before backfilling the trench. Repairs should consist of installing a new piece of drain tile or rigid PVC to span the width of the trench and reconnect to the undamaged sections of drain tile. The newly installed drain tile or PVC should also be supported by a steel channel or I-beam to ensure the pre-existing slope of the tile is maintained during backfilling.

4.5.1. Stormwater & Erosion Control Permitting

Land disturbance activities in the unincorporated areas of Dane County may be subject to Dane County Code of Ordinances Chapter 14 for regulating Erosion Control and Stormwater Management, except in towns that have adopted a site erosion control and stormwater management zoning ordinance under Wis. Stat. § 60.627. MMSD should consult the Dane County Land and Water Resources Department for applicable construction site erosion control and stormwater management requirements and permits to ensure construction proceeds in a manner minimizing drainage issues and soil erosion for the project site.

4.5.2. De-watering

During excavation, trench dewatering may be necessary. Improper dewatering can result in soil erosion, sedimentation and deposition of gravel, sand, or silt onto adjacent agricultural lands, and the inundation of crops. The discharge of these construction waters must comply with current drainage laws, local ordinances, WisDNR permit conditions, and the provisions of the Clean Water Act. Activities subject to regulation under Dane County Code of Ordinances Chapter 14 for regulating Erosion Control and Stormwater Management require that an applicant have a plan to minimize the discharge of sediment resulting from dewatering activities in an erosion control plan (Dane County, 2021).

The Department recommends the following to mitigate the impacts of construction water discharge on agricultural lands:

- 1) MMSD should identify prior to construction 1) excavation sites with low areas and/or hydric soils where de-watering is likely and 2) suitable upland areas for discharge.
- 2) Discharge locations should be well-vegetated areas with topography that will prevent the water from returning to the ROW, resist soil erosion, and allow for infiltration and settling of gravel and other unwanted sediments prior to entering a field, pasture, or waterbody.
- 3) MMSD should consider using pre-filter bags or other filter devices, prior to discharge, in order to capture sediments, gravel and rocks.
- 4) Cropland, pasturelands and other agricultural areas selected for discharge should not be inundated for more than 24 hours, as longer durations could result in crop damage.
- 5) MMSD should not directly discharge or allow construction waters from non-organic farms to enter an organic farming operation.

4.6. Yield & Crop Loss Compensation

The Department's soil health analysis, seen in Section 4.4, has indicated the potential for the Pump Station 17 Force Main Phase 2 Project to impact soil health and crop yields for an extended period post-construction. As livelihoods of *agricultural operations* are irrevocably linked to the productivity of the soil and crop yields, project initiators have an obligation to compensate impacted agricultural landowners for the future yield reductions across the project ROW. Compensation for yield loss generally occurs at the time of *easement* contract negotiations.

The Department recommends that agricultural landowners request at least 200% of crop value within the ROW for reimbursement. Project initiators may structure this reimbursement over a 2 – 4 year timeframe, but the total reimbursement should be no less than 200%. An example agreement may reimburse an agricultural landowner for 100% crop loss the year of construction, followed by a 60% reimbursement the second year and 40% for the third year. Agricultural landowners should also work with the project initiator to determine the most appropriate way to determine the value of the crop within the ROW during the year of construction, as well as future crop value.

The Department also recommends that agricultural landowners keep records of the conditions of the ROW before, during, and after construction. Records could include keeping crop yield records, beginning once the ROW is known, and photographs taken every season. These measures can help a landowner negotiate for compensation, should project damages occur.

During a pre-construction meeting with the Department, MMSD stated they would consider compensating Grandview Properties LLC for yield and crop losses beyond the losses incurred during the year of construction. MMSD is also considering the Departments' proposal to reimburse Grandview Properties LLC a total of 200% crop value in the ROW (MMSD and MSA, Pre-construction Meeting, January 2023).

4.7. Erosion and Conservation Practices

Pipeline construction activities can destabilize existing erosion control practices such as diversion terraces, grassed or lined waterways, outlet ditches, water and sediment control basins, vegetated filter strips, etc. The destabilization of these erosion control practices have the potential to cause soil erosion within the ROW, but also from upland fields. During wet conditions the risk of soil erosion is increased, as exposed soils, especially areas with increased slope, may more easily erode and move downslope. Wind erosion may also be of concern if existing windbreaks are removed from the ROW, especially when soils are dry. If left unchecked, significant erosion can have an adverse effect on the long-term productivity of agricultural lands.

Activities subject to regulation under Dane County Code of Ordinances Chapter 14 for regulating Erosion Control and Stormwater Management require an erosion control plan (Dane County, 2021). In addition to following an erosion control plan within the affected agricultural parcels, the Department recommends that any existing agricultural facilities, including conservation practices, be restored to preconstruction conditions to the extent feasible. Restoration activities may be regulated by Project permits.

4.7.1. Construction Debris

After construction is complete, there may be construction debris remaining on the field. If large pieces of debris or rocks are left in the field, agricultural machinery may be damaged when the landowner first works the land. MMSD should clear the site of any construction to mitigate the potential impact of construction debris in accordance with applicable permits and restoration plans.

4.7.2. Weed Control

The Project may introduce noxious weeds or other invasive plants species into the Project ROW that compete with agricultural crops. Noxious weeds may also spread from parcel to parcel by construction equipment and project activities. Once weeds establish, they can interfere with agricultural harvesting equipment, attract unwanted insects, and require physical removal or chemical applications to remove.

MMSD and MSA reported that it had not yet discussed weed control with the landowner at the time of this analysis but planned to discuss considerations for weed control on the impacted agricultural lands as well as adjacent lands. MMSD solicited feedback for examples of weed and invasive species control plans from the Department that have been successful in other agricultural project areas (MMSD and MSA, Pre-construction Meeting, January 2023).

The Department believes MMSD may wish to consider implementing the following *mitigation* steps, specific to weed control:

- MMSD should offer agricultural landowners, during *easement* negotiations, the ability to state whether they do or do not give MMSD express written consent for herbicide to be applied within the ROW they own.
- MMSD should use tracking pads at frequently used access points.
- MMSD and its contractors that are applying herbicide or pesticides should utilize the Department's Driftwatch™ [online mapping tool](#) to locate agricultural lands and operations that are susceptible to herbicide or pesticides. If the online mapping tool locates an *agricultural operation* on or near areas that will receive herbicide or pesticide applications, MMSD should contact the operation to discuss the appropriate methods required to minimize the risk of accidental exposure.

- Agricultural landowners and beekeepers should consider using the free online [DriftWatch](#)[™] and [BeeCheck](#)[™] registries, operated by [FieldWatch](#)[™] to communicate areas containing specialty crops or beehives with pesticide applicators, in order to minimize the risk of accidental exposure. For more information on DriftWatch, please visit the [W DATCP DriftWatch website](#) at the provided link or at <https://wi.driftwatch.org/>.

4.7.3. Restoration

Restoration is the final step in assuring an impacted agricultural area is restored as close as possible to preconstruction conditions. In general, restoration activities include the soil restoration, soil grading and seeding. Stockpiled *topsoils* and subsoils removed during construction are returned, in the proper order, and graded to match the existing topography and slopes. All ruts and depressions are restored and new *topsoil* may be brought in where *topsoil* has been lost or seriously mixed with subsoils. Agricultural soils are also monitored for compaction and when required undergo decompaction efforts to return the soil structure to its original condition. In areas where crops are not present, such as roadsides, pastures, old fields or upland woods, native seed mixes (or other appropriate seed mixes approved by the landowner) may be sown. At the time of this analysis, MMSD reported that they were working with Dane County to determine what restoration activities would be required under applicable Project permits.

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DISTRIBUTION LIST

Federal and State Elected Officials

Governor

Governor Tony Evers

State Senators

Honorable Joan Ballweg (Chair - Committee on Agriculture & Tourism; District 14)

Honorable Dianne Hesselbein (District 27)

State Assembly

Honorable Travis Tranel (Chair - Committee on Agriculture; District 49)

Honorable Mike Bare (District 80)

Federal, State and Local Units of Government

Wisconsin Department of Agricultural, Trade and Consumer Protection (DATCP)

Public Information Officer – Madelyn Alder

Legislative Liaison - Patrick Walsh

Director, Bureau of Land and Water - Timothy Anderson

University of Wisconsin-Extension

Dane County Area Extension Director - Carrie Edgar

Dane County

Director, Land Use and Resource Management Dept. – Laura Hicklin

Conservationist, Land Use and Resource Management Dept. – Amy Piaget

Conservation Engineer, Land Use and Resource Management Dept. – Elliott Mergen

Stormwater Engineer, Land Use and Resource Management Dept. – Theresa Nelson

Town of Verona

Chairperson – Mark Geller

Clerk/Treasurer – Teresa Withee

City of Verona

Mayor – Luke Diaz

City Manager – Adam Sayre

Clerk – Holly Licht

News Media, Public Libraries and Repositories

Public Libraries

Verona Public Library

Newspapers

Wisconsin State Journal

Verona Press

Agri-View Newspaper

Country Today Newspaper
Wisconsin Document Depository Program
The Library of Congress

Interest Groups, Entities and Individuals

Madison Metropolitan Sewerage District

Rachel Feil

MSA Professional Services

Kevin Lord

Agricultural Landowners

Grandview Properties LLC



**WISCONSIN DEPARTMENT OF AGRICULTURE,
TRADE AND CONSUMER PROTECTION**

**DIVISION OF
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Agricultural Impact Program

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