

## SECOND INTERIM SETTLEMENT AGREEMENT

This Second Interim Settlement Agreement is made, as of the Effective Date of this Agreement, as defined in Paragraph C(1) below, between the United States Environmental Protection Agency (“EPA”), the West Goshen Sewer Authority (“WGSA”), and the Delaware Riverkeeper Network (“DRN”), collectively referred to as “the Parties,” as defined herein.

WHEREAS, WGSA operates the West Goshen Township Wastewater Treatment Plant (the “Plant”) under a National Pollutant Discharge Elimination System (“NPDES”) permit that contains a seasonal (April through October) effluent limit for total phosphorous of 2.0 mg/l;

WHEREAS, in 2008, EPA established the Goose Creek Total Maximum Daily Load (“Goose Creek TMDL”), which, among other things, established a total phosphorus Waste Load Allocation equivalent to a concentration of 0.04 mg/l for WGSA’s Plant;

WHEREAS, on September 19, 2012, WGSA filed suit challenging EPA’s Goose Creek TMDL in the U.S. District Court for the Eastern District of Pennsylvania, docketed as Civil Action No. 12-5353 (the “Case”);

WHEREAS, on July 30, 2013, DRN was granted intervenor status in the Case;

WHEREAS, the Parties thereafter entered into the 2014 Interim Settlement Agreement, which provided, among other things, that EPA was to conduct a reassessment of the water quality of Goose Creek and reconsideration of the Goose Creek TMDL, taking into account any data collected by WGSA;

WHEREAS, on May 4, 2017, EPA issued its final Reassessment and Reconsideration decision, confirming EPA’s previous conclusion that Goose Creek is impaired for phosphorus and that the TMDL appropriately addresses the phosphorus impairment and will stay in place;

WHEREAS, pursuant to the 2014 Interim Settlement Agreement, WGSA is performing all work that it believes will result in an effluent discharge level for total phosphorous of 0.8 mg/l (monthly average), and believes it will be able to achieve a discharge level for total phosphorous of 0.8 mg/l by September 30, 2018, after its Enhanced Chemical Addition Project is completed;

WHEREAS, WGSA has researched the technologies and methods currently available to further reduce total phosphorous discharge levels and has determined that the CoMag ballasted flocculation system (“CoMag System”) is a technology capable of significantly reducing total phosphorous levels;

WHEREAS, WGSA has run bench scale and pilot tests of the CoMag System, the results of which suggest that the CoMag System will likely enable WGSA to achieve lower discharge levels of total phosphorous;

WHEREAS, the Parties agree that the CoMag System is a technology with potential to result in large reductions in WGSA’s total phosphorous discharge levels;

WHEREAS, given the complexities, uncertainties, and myriad variables involved, the full extent to which the CoMag System will enable WGSA to reduce total phosphorous discharge levels is unknown at this time;

WHEREAS, it will take at least four years for WGSA to bid, build, and run the CoMag System, in order to accurately determine the CoMag System's capability to reliably and consistently achieve maximal total phosphorous reduction;

WHEREAS, once the levels of total phosphorus are significantly reduced in Goose Creek, it may take several years before the impact of phosphorus reductions on water quality is realized;

WHEREAS, the Parties agree that WGSA should proceed with the installation, operation and evaluation of the CoMag System as set forth below;

WHEREAS, the Parties commend WGSA for having researched and undertaken to expand its riparian buffer to improve Goose Creek ecosystem functioning and resilience; and

WHEREAS, the Case is presently on the Court's Civil Suspense Docket pursuant to the Parties' requests;

NOW, THEREFORE, THE PARTIES AGREE AS FOLLOWS:

**A. DEFINITIONS**

Unless otherwise defined below, terms used in this Second Interim Settlement Agreement that are defined in the Clean Water Act ("CWA"), 33 U.S.C. §§ 1251 et seq., or in regulations promulgated pursuant to the CWA, shall have the meanings assigned to them in the CWA and regulations promulgated under the CWA:

1. **Parties.** "Parties" means the parties to the Case.
2. **EPA.** "EPA" means the U.S. Environmental Protection Agency and/or its Regional Office for the Mid-Atlantic Region (Region III).
3. **WGSA.** "WGSA" means the West Goshen Sewer Authority.
4. **DRN.** "DRN" means the Delaware Riverkeeper Network.
5. **PADEP.** "PADEP" means the Pennsylvania Department of Environmental Protection.
6. **Case.** The "Case" means the litigation filed by West Goshen Sewer Authority in the U.S. District Court for the Eastern District of Pennsylvania, on or about September 19, 2012, titled *West Goshen Sewer Authority v. U.S. Environmental Protection Agency, et al.*, docketed as Civil Action No. 12-5353.

7. **Interim Settlement Agreement.** “Interim Settlement Agreement” shall refer to this Second Interim Settlement Agreement.

8. **CoMag System.** The “CoMag System” means a CoMag ballasted flocculation system for treating effluent discharge.

9. **Court.** The “Court” means the U.S. District Court for the Eastern District of Pennsylvania.

10. **TMDL.** “TMDL” means Total Maximum Daily Load, as defined in the federal Clean Water Act and applicable regulations.

11. **Goose Creek.** “Goose Creek” means the waterbody known as Goose Creek, an upstream tributary of Chester Creek, in Chester County, Pennsylvania, into which the West Goshen Sewer Authority’s Publicly Operated Treatment Works discharges.

12. **Goose Creek TMDL.** “Goose Creek TMDL” means the TMDL established by the EPA for Goose Creek on or about June 30, 2008.

13. **NPDES.** “NPDES” means the National Pollutant Discharge Elimination System.

14. **Plant.** The “Plant” means the West Goshen Township Wastewater Treatment Plant which discharges effluent into Goose Creek under NPDES permit no. PA0028584.

## **B. SPECIFIC PROVISIONS**

In consideration of the Parties’ agreement to request that the Court continue to hold the Case on its Civil Suspense Docket, the mutual promises set forth herein, and other good and valuable consideration, the Parties agree to the following:

### **1. Interim Water Quality Improvements.**

a. By November 1, 2018, WGSA shall complete the engineering work, pilot studies, permit applications, retrofits, modifications, and/or upgrades to the Plant to result in an effluent discharge level for total phosphorus of 0.8 mg/l (monthly average). Beginning on November 1, 2018, and through December 1, 2022, WGSA shall ensure that the effluent discharge level for total phosphorus does not exceed 0.8 mg/l (monthly average).

b. WGSA shall install a CoMag System at the Plant by June 1, 2021, and thereafter in accordance with good practices shall take all reasonable steps necessary to maintain and operate the CoMag system to minimize effluent discharge levels for total phosphorus from the Plant.

c. Beginning on December 1, 2022, WGSA shall ensure that the effluent discharge level for total phosphorus does not exceed 0.1 mg/l (monthly average).

d. No later than December 1, 2024, WGSA will commence a review of the monitoring data and prepare a written assessment of whether the monitoring data shows that, by operating CoMag, WGSA can consistently achieve a concentration level lower than 0.1 mg/l (monthly average) without WGSA making any further Plant upgrades. WGSA will submit the assessment to EPA and DRN no later than February 1, 2025.

i. If WGSA concludes that by operating CoMag, it can consistently achieve a concentration level lower than 0.1 mg/l (monthly average) without making any further Plant upgrades, and EPA and DRN accept WGSA's assessment, then WGSA shall take all reasonable steps to ensure that the Plant's effluent discharge level for total phosphorus does not exceed that lower concentration level. Nothing in this paragraph or this Agreement shall require WGSA to achieve a discharge level below .04 mg/l (monthly average).

ii. If WGSA concludes that it cannot consistently achieve a concentration level lower than 0.1 mg/l (monthly average) using CoMag alone, without making any further Plant upgrades, and EPA and DRN accept that assessment in writing, WGSA shall continue to ensure that the effluent discharge level does not exceed 0.1 mg/l (monthly average), as provided by Paragraph B(1)(c).

iii. If EPA and/or DRN do not accept WGSA's assessment, the parties will promptly meet to discuss the monitoring data and the concentration levels achievable by CoMag treatment at the WGSA Plant. The limits established by Paragraph B(1)(c) continue to apply, unless the Parties agree otherwise.

iv. In the event that WGSA is able to consistently achieve a Plant effluent discharge level for total phosphorous that is below 0.1 mg/l (monthly average), EPA shall in good faith consider whether to apply such levels as limits only on a seasonal basis, with notice and opportunity to comment on this consideration by DRN.

e. The deadlines contained in Paragraphs B(1)(b), B(1)(c), and B(1)(d) are contingent upon PADEP issuing WGSA a Water Quality Management Part II Permit for the CoMag System ("Part II Permit") by March 1, 2019. WGSA shall submit its application for the Part II Permit by October 30, 2018. If PADEP does not issue WGSA a Part II Permit by March 1, 2019, the deadlines contained in Paragraphs B(1)(b), B(1)(c), and B(1)(d) shall be extended by the same number of days as the number of days that elapsed between March 1, 2019 and the date on which PADEP issues WGSA a Part II Permit.

f. **Monitoring.**

i. WGSA shall monitor the Plant's effluent discharge for total phosphorus and ammonia at a minimum of twice per week year round, and total nitrogen at a minimum of twice per month, on varying days of the week, year

round. Sampling for monitoring shall be representative of the effluent as provided in 40 C.F.R. § 122.41(j)(1).

ii. Analysis of samples shall be conducted at a facility accredited by Pennsylvania as an environmental laboratory, using test procedures approved under 40 C.F.R. Part 136 or acknowledged by EPA as being satisfactory for the purpose of this agreement, with a sufficiently sensitive minimum level for the discharge levels specified in Paragraphs B(1)(a), B(1)(c), and B(1)(d), including Method Detection Limits at or below 0.02 mg/L for all phosphorus analyses.

g. **Reporting.**

i. WGSA shall provide EPA and DRN with semi-annual reports on March 1<sup>st</sup> and September 1<sup>st</sup> of each year documenting WGSA's improvements and actions toward the above-referenced effluent discharge levels.

ii. Semi-annual reports shall include all effluent monitoring data on total phosphorus, total nitrogen, and ammonia for the preceding six months. If WGSA monitors for phosphates, organic phosphorus, nitrates or nitrites, total Kjeldahl or organic nitrogen, WGSA shall include that data in the report. WGSA shall make these data available in spreadsheet or other compatible electronic format to facilitate data analysis.

h. **Inspection.** WGSA shall allow EPA to conduct annual inspections of the Plant to monitor compliance with the terms of this Agreement.

i. **Buffer Plantings.** WGSA shall implement and maintain buffer plantings on the Plant property as shown on the plan attached as Appendix A.

j. **Access.** WGSA shall allow DRN to access the portion of Goose Creek located adjacent to the Plant property through the Plant, in order to conduct periodic sampling on dates agreed upon by WGSA and DRN. DRN shall release, indemnify, and hold WGSA harmless from and against all claims, liability, causes of action and losses of any kind arising from DRN's entry onto the Plant property, if attributable to DRN's negligence.

k. The rights and obligations specified in Paragraphs B(1)(f)-(h) are in addition to, and in no way limit or otherwise affect, the statutory authorities of the United States to conduct inspections, to require monitoring, and to obtain information from WGSA as authorized by law.

2. **Reassessment Process.**

a. Unless an intervening action has rendered the Goose Creek TMDL inapplicable or without force, five years after WGSA commences discharging effluent that meets the total phosphorus levels described in Paragraph B(1)(c), EPA shall commence a reassessment of the water quality of Goose Creek, to determine whether Goose Creek is impaired due to nutrients (hereinafter "Reassessment"). Following that

Reassessment, EPA will decide whether to withdraw, revise or retain the Goose Creek TMDL.

b. The Reassessment shall be completed within five years of its commencement under Paragraph B(2)(a).

c. During the Reassessment, EPA shall analyze site-specific physical, chemical and/or biological factors, based on available data, to determine if Goose Creek is impaired by nutrients. EPA retains the right, in the exercise of its discretion, to consider other relevant issues that may arise during the Reassessment.

d. **Data-sharing.**

i. WGSA and DRN may submit information and data to EPA to be considered by EPA in the Reassessment. EPA will also provide PADEP with an opportunity to submit information and data. EPA will request information and data from the public for the purpose of the reassessment. Any such information will be considered and included in the record prepared by EPA supporting its Reassessment.

ii. EPA shall provide to WGSA and DRN all non-privileged, non-confidential data and all relevant water quality reports or evaluations of Goose Creek supplied to it by others with respect to the Reassessment, and shall provide WGSA and DRN the opportunity to comment on that data and those reports or evaluations, prior to EPA's Reassessment decision.

iii. In the event that the staff of any Party conducts additional sampling in Goose Creek for purposes of the Reassessment, that Party shall provide the other Parties an opportunity to review and comment on water sampling plans or water monitoring plans for such data collection. Such plans will be provided to the other Parties at least thirty days prior to the start of data collection, and the other Parties will provide any comments within 21 days of receiving the sampling or monitoring plan. In addition, the Party conducting sampling will offer the other Parties the opportunity to participate in any field visits to conduct the additional sampling.

e. EPA will provide WGSA and DRN the opportunity to meet with technical and legal representatives of EPA annually during the Reassessment to discuss the process of reassessment. The Parties agree to invite PADEP to participate in this meeting.

f. EPA's Reassessment will be documented in a Final Reassessment Report. The Report will be a final agency action, supported by an administrative record.

g. In the event EPA withdraws the Goose Creek TMDL, WGSA shall not argue that its effluent discharge limit for total phosphorus in any NPDES permit issued after the TMDL's withdrawal should exceed 0.1 mg/l, except that WGSA may present an argument to EPA and/or PADEP that, based on the facts and data available at that time, a

higher discharge limit will not lead to the impairment of Goose Creek. EPA agrees to consider any such argument in good faith.

### **3. Effect of Interim Settlement Agreement**

a. Nothing in the terms of this Interim Settlement Agreement shall be construed to affect the rights or responsibilities of any Party hereto to take any lawful action with regard to the Goose Creek TMDL or WGSA's discharge permit, not inconsistent with the specific terms of this Interim Settlement Agreement.

b. Nothing in the terms of this Interim Settlement Agreement shall be construed to affect the rights or responsibilities of any third party, including the PADEP, to take any lawful action with regard to the Goose Creek TMDL or WGSA's discharge permit.

c. Nothing in the terms of this Interim Settlement Agreement shall be construed to limit the Parties' right to engage in further settlement negotiations.

d. This Interim Settlement Agreement does not constitute a waiver or modification of the terms or conditions of the WGSA NPDES Permit. This Agreement does not relieve WGSA of its obligations to comply with any applicable federal, state, or local law, regulation, or permit.

### **4. Remedies.**

a. No Party may seek specific performance as a remedy under this Interim Settlement Agreement, except with respect to Paragraphs B(1) and B(5).

b. Notwithstanding Paragraph B(4)(a), the Parties agree that they may not be held in contempt of court, and therefore agree not to seek such contempt, for failure to perform any obligation in this Interim Settlement Agreement.

c. In the event of a breach of the Interim Settlement Agreement, including a breach of Paragraphs B(1) and B(5), the Parties reserve their rights to request that the Court conduct a status conference to determine whether the case should be returned to the Court's active docket. This shall be a Party's only remedy in the event of a breach of the Interim Settlement Agreement except with respect to Paragraphs B(1) and B(5).

### **5. Non-Use of Interim Settlement Agreement.**

a. The Parties shall not raise the fact of WGSA's agreement to make improvements to its operations as set forth in Paragraph B(1) above as evidence that WGSA has satisfied its obligations under the existing Goose Creek TMDL.

b. The Parties shall not raise the fact of EPA's agreement to perform a Reassessment as set forth in Paragraph B(2) above as evidence that either the Goose Creek TMDL or any new, reconsidered, or revised Goose Creek TMDL is invalid or flawed.

c. The Parties shall not raise the fact that WGSA has entered into this Interim Settlement Agreement or has abided by the Interim Settlement Agreement as an admission by WGSA that: (i) the Goose Creek TMDL or any new, reconsidered, or revised Goose Creek TMDL is valid or necessary; (ii) Goose Creek is impaired due to phosphorous or other nutrients; or (iii) WGSA is contributing in any way to any current or future impairment that may exist in Goose Creek. This paragraph does not limit the use of any monitoring data produced in accordance with this agreement.

6. **Reservation of Rights.** In addition to the reservation of rights in Paragraph B(4)(c), the Parties state as follows:

a. The Parties reserve their rights to request that the Court transfer the Case from the Civil Suspense Docket back onto the Court's active docket in the event that PADEP issues WGSA an NPDES permit with an effluent discharge limit for total phosphorus below 0.1 mg/l while this Agreement remains in effect, or below 0.8 mg/l prior to December 1, 2022.

b. EPA reserves its right to terminate the Reassessment in the event that WGSA or DRN requests that the Court transfer the Case from the Civil Suspense Docket back onto the Court's active docket, or in the event EPA is sued, or threatened with suit, by a third party on any aspect of the Interim Settlement Agreement, the Goose Creek TMDL, or the Reassessment.

c. This Interim Settlement Agreement does not alter or create rights to EPA's records under federal law, nor does it alter any right WGSA or DRN may have under federal law to challenge EPA's determination regarding privilege or confidentiality with respect to any withheld data and/or information relating to the Goose Creek TMDL, nor does this Interim Settlement Agreement alter EPA's ability to defend against such a challenge.

d. Each Party agrees to notify the others not less than thirty days before taking any action pursuant to B(4)(c), B(6)(a), or B(6)(b) so that the Parties may have an opportunity to meet and confer on any disagreements.

## C. MISCELLANEOUS PROVISIONS

1. **Effective Date.** The Effective Date of this Interim Settlement Agreement shall be the date of last signature on this document.

2. **Execution in Counterparts.** The Interim Settlement Agreement may be executed in one or more counterparts which, taken together, shall be deemed to constitute one and the same document.

3. **Authority to Sign.** The undersigned are authorized to execute this Interim Settlement Agreement on behalf of their respective Parties and have read, understood and agreed to all of the terms and conditions of this Interim Settlement Agreement.



4. **Facsimile Signatures.** The Parties' signatures to this Interim Settlement Agreement transmitted by facsimile, including scans of original documents transmitted over email, shall be deemed binding.

5. **Integrated Interim Settlement Agreement.** All agreements, covenants, representations and warranties, express or implied, oral or written, of the Parties concerning the subject matter of this Interim Settlement Agreement are contained herein.

6. **Modification.** Any term set forth in this Interim Settlement Agreement (including deadlines and other terms) may be modified only by written agreement of all Parties.

7. **Severability.** In the event that any of the provisions of this Interim Settlement Agreement are held by a court to be unenforceable, the validity of the enforceable provisions shall not necessarily be adversely affected.

8. **Construction.** The language in all parts of this Interim Settlement Agreement, unless otherwise stated, shall be construed according to its plain and ordinary meaning and, because the agreement was drafted jointly, shall not be construed to favor any party.

9. **Governing Law.** This Interim Settlement Agreement shall be governed by and construed under federal law.

10. **Third-Party Beneficiaries.** Nothing in this Interim Settlement Agreement shall be construed to make any other person or entity not executing this Interim Settlement Agreement a third-party beneficiary to this Interim Settlement Agreement.

11. **No Admission of Law or Fact.** Nothing in this Interim Settlement Agreement shall constitute an admission of fact or law by any Party. This Interim Settlement Agreement shall not be used or admitted in any third-party proceeding against a Party over the objection of that Party.

12. **No Waiver of Claims.** Except as provided in Paragraphs B(4), B(5), and B(6), no party waives or limits any claim, argument, or defense it may have in this Case in the event that the Case is transferred from the Civil Suspense Docket back onto the Court's active docket.

13. **No Limitation on Exercise of Discretion.** Nothing in the terms of this Interim Settlement Agreement shall be construed to affect the rights of the United States as against persons not parties to this Interim Settlement Agreement, or to limit or modify the discretion accorded to EPA or PADEP by the Clean Water Act, the Administrative Procedure Act, or by general principles of administrative law.

14. **Anti-Deficiency.** Any obligations of the United States to expend funds under this Interim Settlement Agreement are subject to the availability of funds legally available for such purposes. This Interim Settlement Agreement shall not be construed as a commitment or requirement that the United States obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable provision of law.

15. **Impossibility of Performance.** No Party shall be considered to be in default in the performance of any of its obligations under this Interim Settlement Agreement when performance becomes impossible due to circumstances beyond the Party's control, or when failure to perform is materially contributed to by circumstances beyond the Party's control, including without limitation any Force Majeure event, including any act of God, war, fire, earthquake, windstorm, flood or natural catastrophe; civil disturbance, vandalism, sabotage or terrorism; restraint by court order or public authority; or action or non-action by, or inability to obtain the necessary authorizations or approvals from, any governmental agency. With regard to EPA, such circumstances further include, but are not limited to, an environmental disaster that would require EPA employees to divert resources away from performance of EPA's obligations under this Interim Settlement Agreement, or a government shutdown. "Circumstances beyond the Party's control" shall not include normal inclement weather, economic hardship or inability to pay. Any Party seeking to rely upon this Paragraph shall have the burden of establishing that it could not reasonably have been expected to avoid, and which by exercise of due diligence has been unable to overcome, the failure of performance.

16. **Termination.** This Interim Settlement Agreement shall terminate either (i) in the event that the Case is transferred to the Court's active docket pursuant to Paragraphs B(4)(c), B(6)(a), or B(6)(b); (ii) by written agreement of all Parties; or (iii) 2 years after the issuance to WGSA and DRN by EPA of the Final Reassessment Report described in Paragraph B(2)(f).

17. **Delivery or Notice of Documents.** Any notices or other documents required or provided for by this Interim Settlement Agreement or related thereto that are to be provided to any of the Parties pursuant to this Interim Settlement Agreement shall be sent by e-mail transmission or first-class mail to each of the following representatives of the Parties.

Steven T. Miano  
Hangley Aronchick Segal Pudlin & Schiller  
One Logan Square, 27th Floor  
Philadelphia, PA 19103  
215-496-7025 (phone)  
215-568-0300 (fax)  
smiano@hangley.com

Ross Unruh  
Unruh, Turner, Burke & Frees  
17 W. Gay Street  
P.O. Box 515  
West Chester, PA 19381  
610-692-1371 (phone)  
610-918-1361 (fax)  
runruh@utbf.com

Michael Moffa  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382

610-696-0900 (phone)  
610-429-9360 (fax)  
mmoffa@westgoshen.org

Deanna Tanner  
Senior Attorney, Delaware Riverkeeper Network  
925 Canal Street  
7<sup>th</sup> Floor, Suite 3701  
Bristol, PA 19007  
215-369-1188 x124 (phone)  
215-369-1181 (fax)  
deanna@delawareriverkeeper.org

Chloe H. Kolman  
Environment & Natural Resources Division  
Environmental Defense Section  
P.O. Box 7611  
Washington, DC 20044  
202-514-9277 (phone)  
202-514-8865 (fax)  
Chloe.Kolman@usdoj.gov

Nina Rivera  
Office of Regional Counsel  
U.S. Environmental Protection Agency, Region 3  
1650 Arch Street  
Philadelphia, PA 19103  
215-814-2667 (phone)  
215-814-2603 (fax)  
Rivera.Nina@EPA.gov

James Curtin  
Office of General Counsel-2355A  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue N.W.  
Washington, D.C. 20460  
202-564-5482 (phone)  
202-564-5477 (fax)  
Curtin.James@EPA.gov

Notice shall be deemed to be given and received on the date received by e-mail transmission or first-class mail, if such notice is given by e-mail transmission or first-class mail to all recipients between 9:00 a.m. and 5:00 p.m. Eastern Standard Time or Eastern Daylight Time, as applicable, on a business weekday. If notice is given by e-mail transmission or first-

class mail after 5:00 p.m. on a weekday or on a weekend day, notice shall be deemed received on the next business weekday.

For West Goshen Sewer Authority:

Date: \_\_\_\_\_

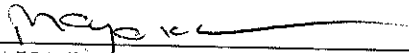
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THEODORE MURPHY  
Chairman  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266

Date: \_\_\_\_\_

\_\_\_\_\_  
SHAUN WALSH  
Secretary  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266

For Delaware Riverkeeper Network:

Date: 10/23/18

\_\_\_\_\_  
  
MAYA K. van ROSSUM  
the Delaware Riverkeeper  
925 Canal Street  
7<sup>th</sup> Floor, Suite 3701  
Bristol, PA 19007  
215-369-1188 x102 (phone)

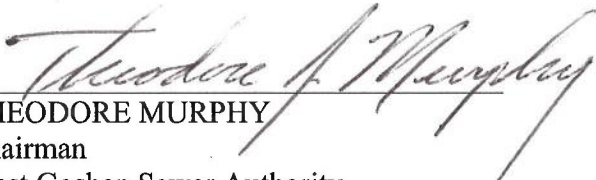
For United States Environmental Protection Agency:

Date: \_\_\_\_\_


\_\_\_\_\_  
CHLOE KOLMAN  
Trial Attorney  
United States Department of Justice  
Environment & Natural Resources Division  
Environmental Defense Section  
601 D Street, NW  
Suite 8000  
Washington, DC 20004  
(202) 514-9277

For West Goshen Sewer Authority:

Date: 10/23/2018

  
THEODORE MURPHY  
Chairman  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266

Date: 10/23/2018

  
SHAUN WALSH  
Secretary  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266

For Delaware Riverkeeper Network:

Date: \_\_\_\_\_

\_\_\_\_\_  
MAYA K. van ROSSUM  
the Delaware Riverkeeper  
925 Canal Street  
7<sup>th</sup> Floor, Suite 3701  
Bristol, PA 19007  
215-369-1188 x102 (phone)

For United States Environmental Protection Agency:

Date: \_\_\_\_\_

\_\_\_\_\_  
CHLOE KOLMAN  
Trial Attorney  
United States Department of Justice  
Environment & Natural Resources Division  
Environmental Defense Section  
601 D Street, NW  
Suite 8000  
Washington, DC 20004  
(202) 514-9277

For West Goshen Sewer Authority:

Date: \_\_\_\_\_

\_\_\_\_\_  
THEODORE MURPHY  
Chairman  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266

Date: \_\_\_\_\_

\_\_\_\_\_  
SHAUN WALSH  
Secretary  
West Goshen Sewer Authority  
848 S. Concord Road  
West Chester, PA 19382  
(610) 696-5266


For Delaware Riverkeeper Network:

Date: \_\_\_\_\_

\_\_\_\_\_  
MAYA K. van ROSSUM  
the Delaware Riverkeeper  
925 Canal Street  
7<sup>th</sup> Floor, Suite 3701  
Bristol, PA 19007  
215-369-1188 x102 (phone)

For United States Environmental Protection Agency:

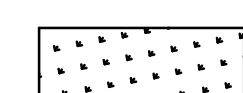
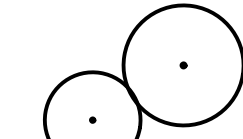
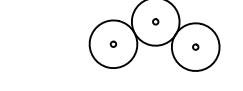
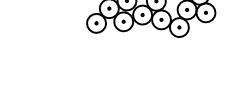
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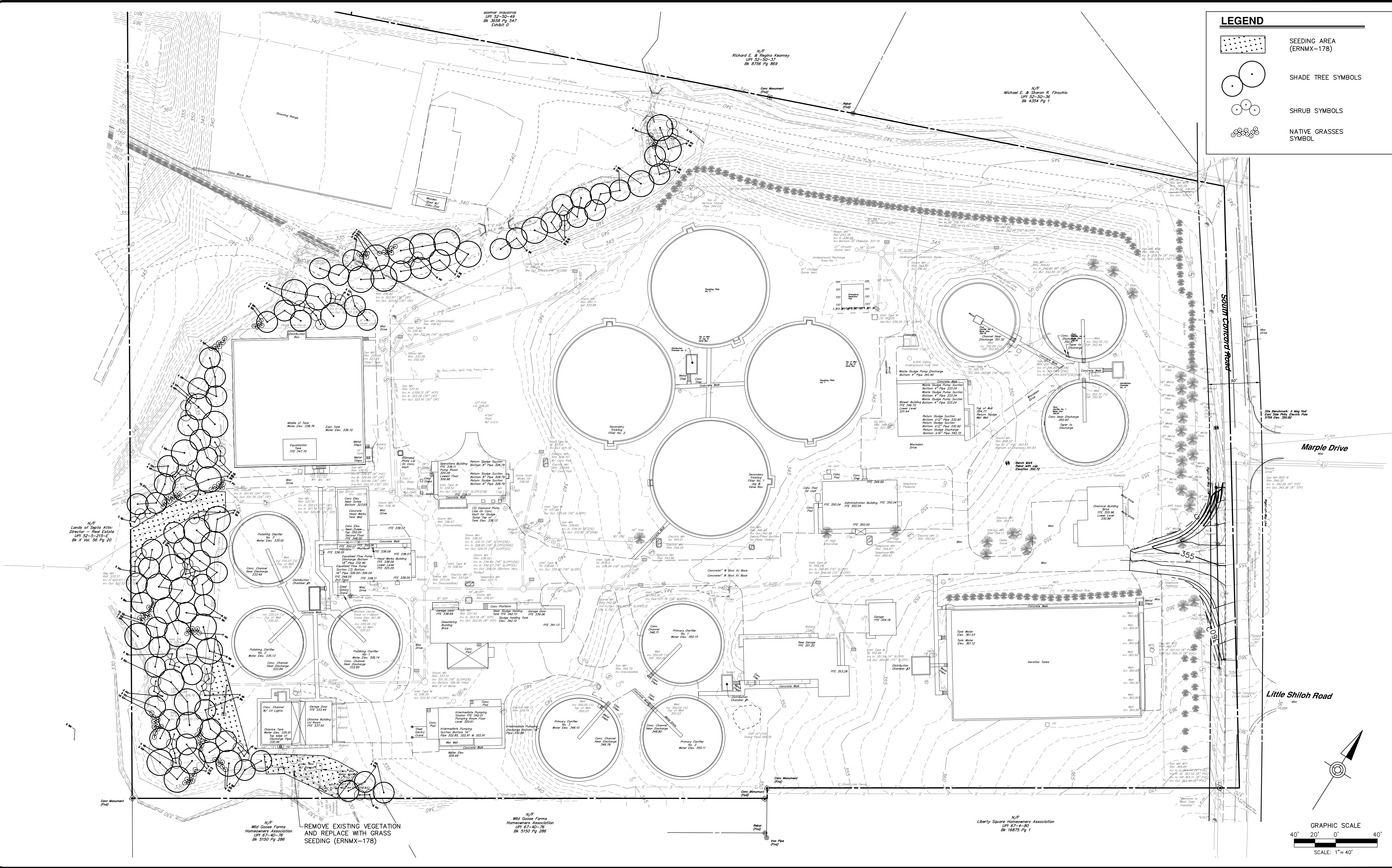
  
\_\_\_\_\_  
CHLOE KOLMAN  
Trial Attorney  
United States Department of Justice  
Environment & Natural Resources Division  
Environmental Defense Section  
601 D Street, NW  
Suite 8000  
Washington, DC 20004  
(202) 514-9277

# APPENDIX A



**LEGEND**

-  SEEDING AREA (ERNMX-178)
-  SHADE TREE SYMBOLS
-  SHRUB SYMBOLS
-  NATIVE GRASSES SYMBOL



NO.	REVISION	DATE	BY

REMOVE EXISTING VEGETATION AND REPLACE WITH GRASS SEEDING (ERNMX-178)

**HRG**  
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LANDSCAPE SITE PLAN  
FOR  
GOOSE CREEK RIPARIAN BUFFER

WEST GOSHEN TOWNSHIP    CHESTER COUNTY    PENNSYLVANIA

PROJ. MGR. - JTF  
DESIGN- LRB  
CADD- LRB  
CHECKED-JTF  
SCALE- AS NOTED  
DATE- JUNE 2018

DRAWING NO.  
**LP-1**  
SHEET NO.  
1 OF 2  
PROJECT 007608.0433

**LANDSCAPE NOTES**

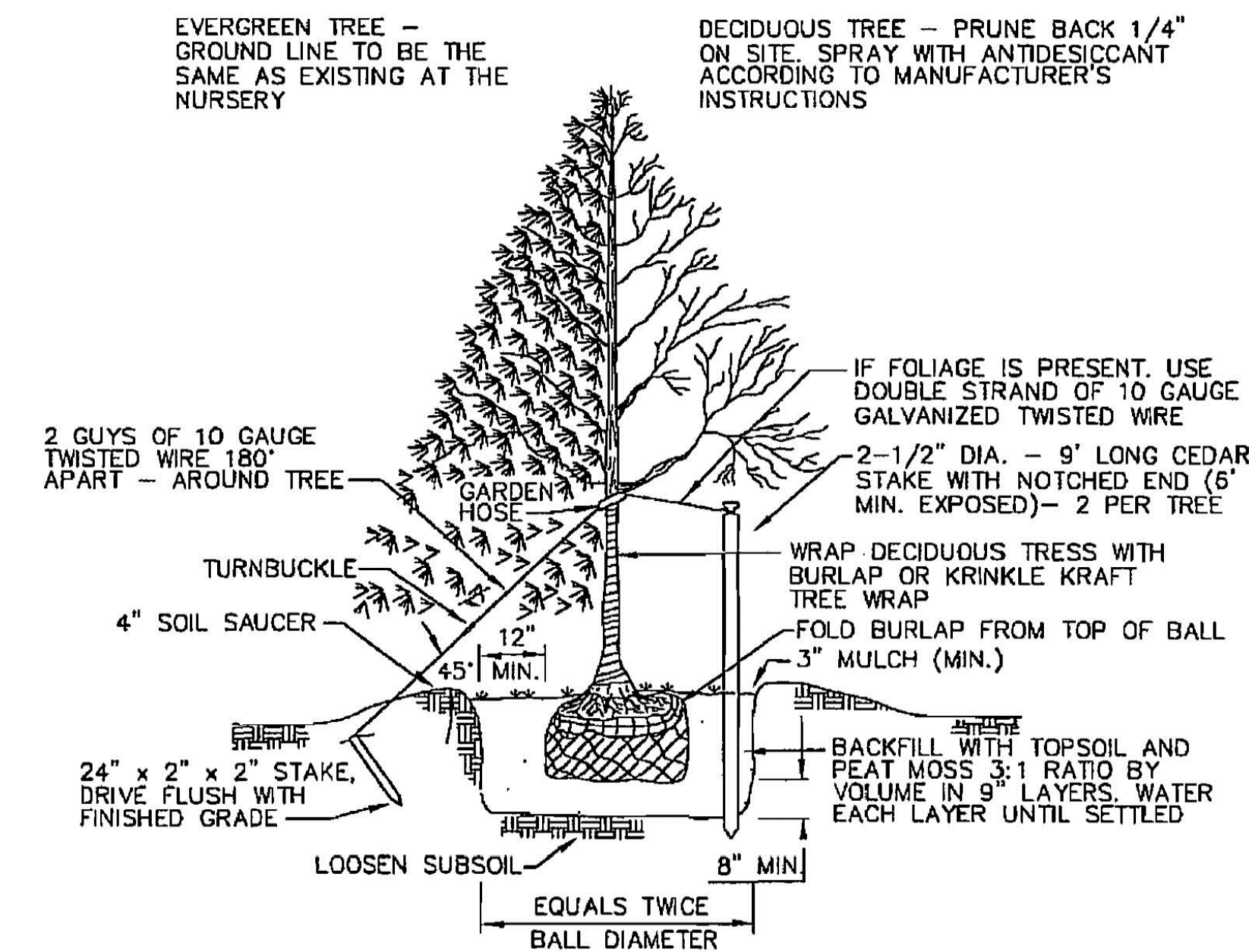
- SUMMARY: FURNISH ALL LABOR, MATERIALS, SERVICES, EQUIPMENT, AND OTHER NECESSARY ITEMS REQUIRED FOR ESTABLISHING LANDSCAPED AREAS IN ACCORDANCE WITH THESE LANDSCAPE NOTES.
- FERTILIZER AND LIME: UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWING, SPREAD COMMERCIAL 10-10-10, AS RECOMMENDED BY A LOCAL AMERICAN ASSOCIATION OF NURSERYMEN (ANN) AND/OR PENNSYLVANIA NURSERYMEN ASSOCIATION (PNA) CERTIFIED NURSERY. SOIL PH SHALL BE DETERMINED BY ELECTRONIC OR CHEMICAL SOIL TEST. PH SHALL BE ADJUSTED AS REQUIRED FOR SPECIFIC PLANT MATERIAL TO BE GROWN.
- THE SUBGRADE IN PLANTING AREAS SHALL BE LOOSENEED AND MIXED TO A DEPTH OF THREE INCHES (3") AND LIGHTLY COMPACTED. DISTRIBUTE TOPSOIL OVER AREAS TO BE PLANTED TO A MINIMUM DEPTH OF SIX INCHES (6"). SPREAD FERTILIZER AT A RATE OF SIX (6) POUNDS PER THOUSAND SQUARE FEET (UNLESS SOIL ANALYSIS REQUIRES OTHERWISE) AND RAKE INTO SOIL.
- TREES: CONTRACTOR SHALL INSTALL ALL TREES AS RECOMMENDED BY AN EXPERIENCED LOCAL AAN/PNA-CERTIFIED NURSERY, UNLESS NOTED OTHERWISE ON DRAWINGS. THE STANDARD WARRANTY IS FOR A ONE (1) YEAR PERIOD, COMMENCING ON THE DATE OF FINAL PAYMENT. PLANTS SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE WARRANTY PERIOD.
- TREES SHALL BE PLANTED IN ACCORDANCE WITH THE DETAILS SHOWN IN THIS PLAN SET. IF EXCESSIVE ROCK OR STONE IS ENCOUNTERED WHILE DIGGING PLANTING HOLES, THE CONTRACTOR SHALL REPLACE THE UNSUITABLE MATERIAL WITH SUITABLE BACKFILL AT NO ADDITIONAL COST.
- THE LANDSCAPE CONTRACTOR SHALL REVIEW THE ENTIRE SET OF THE CONTRACT DRAWINGS TO BECOME AWARE OF ANY POSSIBLE CONFLICTS WITH UTILITIES (INCLUDING COMPLIANCE WITH ACT 187 REGULATIONS) AND TO DETERMINE MEASURES REQUIRED TO PROTECT EXISTING AND PROPOSED UTILITIES.
- ANY NYLON ROPE USED IN BALLING THE TREE MUST BE CUT AND REMOVED FROM THE ROOT BALL.
- IF PLANT QUANTITIES ON THE PLANT SCHEDULE DO NOT CONFORM TO THE PLANTING PLAN, THE PLANTING PLAN SHALL TAKE PRECEDENCE. NO FEWER PLANTS MAY BE INSTALLED WITHOUT PRIOR APPROVAL BY THE ENGINEER.
- ON-SITE LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION AT ALL TIMES BY THE CONTRACTOR UNTIL THE OWNER OF RECORD OR HIS DELEGATED REPRESENTATIVE HAS INSPECTED AND ACCEPTED ALL LANDSCAPE IMPROVEMENTS AT THE BEGINNING OF THE ONE-YEAR WARRANTY PERIOD. ONCE ACCEPTED, DURING THE ONE-YEAR WARRANTY PERIOD, IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PROPERLY MAINTAIN AND CARE FOR ANY LANDSCAPING IN ACCORDANCE WITH THE CARE AND MAINTENANCE SCHEDULE PROVIDED TO THE OWNER BY THE LANDSCAPE CONTRACTOR.
- INSPECTION BY THE LANDSCAPE CONTRACTOR OF ALL PLANT MATERIAL SHALL OCCUR SEASONALLY DURING THE WARRANTY PERIOD. IF THE OWNER HAS FOLLOWED THE CARE AND MAINTENANCE SCHEDULE AND PLANT MATERIAL HAS BECOME DISEASED, IS DYING, OR DEAD, THE CONTRACTOR SHALL REPLACE ALL DISEASED, DYING, OR DEAD PLANT MATERIAL. IF THE OWNER HAS NOT FOLLOWED THE CARE AND MAINTENANCE SCHEDULE AND PLANT MATERIAL HAS BECOME DISEASED, IS DYING, OR IS DEAD, THE CONTRACTOR IS NOT RESPONSIBLE FOR REPLACING THE DISEASED, DYING, OR DEAD PLANT MATERIAL.
- IF THE CONTRACTOR BELIEVES A REPLACEMENT PLANT WILL NOT GROW BECAUSE OF IDENTIFIED ENVIRONMENTAL CONDITIONS, THEN THE CONTRACTOR MAY REPLACE THE ORIGINALLY SPECIFIED PLANT WITH A SIMILAR SPECIES UPON PRIOR APPROVAL BY THE ENGINEER AND OWNER.

**PLANTING SCHEDULE**

ID	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	NOTES
SHADE TREE					
AR	13	<i>Acer rubrum</i>	Red Maple	2.5" Cal.	
AS	14	<i>Acer saccharinum</i>	Silver Maple	2.5" Cal.	
BN	15	<i>Betula nigra</i>	River Birch	2.5" Cal.	
CC	19	<i>Cercis canadensis</i>	Eastern Redbud	2.5" Cal.	
NS	11	<i>Nyssa sylvatica</i>	Black Gum	2.5" Cal.	
SN	14	<i>Salix nigra</i>	Black Willow	2.5" Cal.	
QA	13	<i>Quercus palustris</i>	White Oak	2.5" Cal.	
SHRUBS					
HV	17	<i>Hamamelis virginiana</i>	Common Witchhazel	3 gal.	
VD	16	<i>Viburnum dentatum</i>	Arrowwood Viburnum	3 gal.	
VP	21	<i>Viburnum prunifolium</i>	Blackhaw Viburnum	3 gal.	
GRASSES					
AH	25	<i>Andropogon gerardii</i>	Big Bluestem	1 gal.	
EV	27	<i>Elymus virginicus</i>	Virginia Wild Rye	1 gal.	
PV	21	<i>Panicum virgatum</i>	Switchgrass	1 gal.	
SS	22	<i>Schizachyrium scoparium</i>	Little Bluestem	1 gal.	
SEEDING					
	115 LBS	ERNMX-178	RIPARIAN BUFFER MIX		115 lbs. of Ernst-178 Seeding to supplement all plant material

NOTES:

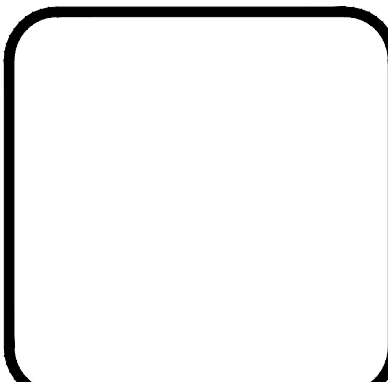
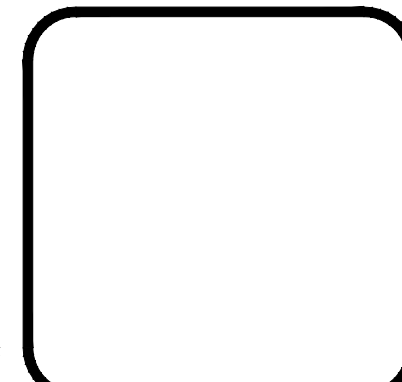
- A MIX OF SHADE TREES, NATIVE GRASSES, AND ERNST MIX (ERNMX-178) SHALL BE USED.
- SHRUB MASSINGS SHALL SUPPLEMENT THE EDGE OF GRASSY AREAS.
- THE STREAM SHALL BE STABILIZED WITH GRASSES AND SUPPLEMENTED WITH ERNST SEED MIX (ERNMX-178).
- SHADE TREES, SHRUBS, AND GRASSES SHALL BE PLANTED PRIOR TO SEEDING.



NOT TO SCALE

REFERENCE RC-91 PENNDOT PUB. 72

NO.	REVISION	DATE	BY



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DRAWING NO. <b>LP-2</b>
SHEET NO. <b>2 OF 2</b>
PROJECT 007608.0433

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