

**ADDENDUM NO. 1
TO THE
BIDDING DOCUMENTS
FOR
BID NUMBER #24210
WRF IMPROVEMENTS**

PW # 2022.117, 2022.118, 2022.119, 2022.120

**FOR
LAKE COUNTY DEPARTMENT OF PUBLIC WORKS**

DATE: February 15, 2024

TO ALL BIDDERS BIDDING ON THE ABOVE PROJECT:

All Bidders submitting a Bid on the above Contract shall carefully read this Addendum and give it consideration in the preparation of their Bid.

I. The following are revisions to the Specifications:

1. The following revision shall be made to SECTION 31 25 00 – EROSION AND SEDIMENTATION CONTROL:
 - A. Add the following after Subparagraph 1.03.A.1.a:

1.03.A.1.b. Contractor is required to notify Lake County Stormwater Management Commission immediately if the plans are modified to the extent that wetland/water impacts will occur. Any proposed impacts associated with plan modifications will require a wetland determination and report at that time, with the surveyed boundaries added to the plans. Contractor may be required to provide a jurisdictional determination (PJD/AJD) to establish the appropriate wetland permitting authority. A wetland impact approval from the SMC and/or the U.S. Army Corps of Engineers—as well as a modified Watershed Development Permit from the SMC—would be required before work may commence under a modified plan.
2. The following revision shall be made to SECTION 32 92 00 – TURF AND GRASSES:
 - A. Delete SECTION 32 92 00 – TURF AND GRASSES and add a revised SECTION 32 92 00 – TURF AND GRASSES attached to this Addenda:
3. The following revision shall be made to SECTION 33 05 05 – SITE UTILITIES:
 - A. Add the following after Paragraph 2.06:

2.07 UNDERGROUND PIPE TRACE WIRE

 - A. Type: 12-gauge AWG multiple stranded copper wire, insulated for underground installation.
 - B. All tracing wire splices shall be spliced with Direct Bury Splice Kit No. 09053 as manufactured by 3M, or equal.

2.08 DETECTABLE UNDERGROUND LINE WARNING TAPE

- A. Permanent, bright colored, continuous printed polyethylene with a sandwiched aluminum core tape with the following features:
 - 1. Size: Not less than 6 inch wide by .005 inch thick (152 millimeter wide by 0.127 millimeter thick).
 - 2. Resistant to acids, alkalis and other destructive agents found in soil
 - 3. Compounded for permanent direct burial service – 5+ Years buried
 - 4. Storage Durability – 5+ Years
 - 5. Embedded continuous metallic strip or core.
- B. Provide black text over colored background based on service in accordance with APWA Uniform Color Code and as shown below:

| Color Code | Swatch |
|--|--------|
| Electric Power Lines, Cables, Conduit, and Lighting Cables | Red |
| Gas, Oil, Steam, Petroleum or Gaseous Materials | Yellow |
| Communication, Alarm or Signal Lines, Cable or Conduit | Orange |
| Potable Water | Blue |
| Sewers and Drain Lines | Green |
| Reclaimed Water, Irrigation and Slurry Lines | Purple |
| Temporary Survey Marking | Pink |
| Proposed Excavation | White |

- B. Add the following after Paragraph 3.05:

3.06 TRACE WIRE INSTALLATION

- A. Install for all pipe except ductile iron and reinforced concrete.
- B. Secure tracer wire to pipe, including stubs and dead ends, at top of pipe and tape at 10 ft intervals.
- C. Positively electrically connect wire to valve boxes, hydrants, or terminate at structure. Termination at structures shall be in accordance with details shown in drawings.
- D. Where pipe terminates at a structure, bring tracer wire to surface per Detail C490 in the drawings.

3.07 UNDERGROUND MARKING TAPE INSTALLATION

- A. During trench backfilling/topsoil placement, for exterior underground utilities; both direct buried and in raceway, provide continuous detectable underground type plastic line markers located directly above line at 12 inches above the utility.
- B. Where multiple lines are installed in common trench or concrete bank provide multiple underground line warning tapes, one for each 16 inches of width. If lines do not exceed an overall width of 16 inch, use a single line marker.

II. The following are revisions to the Specifications Appendix:

1. The following revisions shall be made to the Table Contents:

A. Add the following:

- | | |
|---|----------|
| 15. Permit NRB-078034-2024 Contract D | 6 pages |
| 16. SMC Watershed Permit Letter WDP-24-652 | 5 pages |
| 17. IEPA NOI Application for DPR WRF UV Upgrades Contract D | 3 pages |
| 18. SWPPP for D DPR WRF UV Upgrades Contract D | 83 pages |

Insert forms attached to this Addendum immediately after the last page of the Permit NRB-078031-2024 Contract C.

III. The following are revisions to the Drawings which pertain to ALL Contracts:

1. Sheet 5, Drawing 001-G-2, delete Drawing 001-G-2 and add a revised Drawing 001-G-2 attached to this Addenda.
2. Sheet 122, Drawing 999-C-1, delete Drawing 999-C-1 and add a revised Drawing 999-C-1 attached to this Addenda.

IV. The following are revisions to the Drawings which pertain to Contract D:

1. Sheet 84, Drawing 002-CFG-1, delete Drawing 002-CFG-1 and add a revised Drawing 002-CFG-1 attached to this Addenda.
2. Sheet 85, Drawing 002-CFG-2, delete Drawing 002-CFG-2 and add a revised Drawing 002-CFG-2 attached to this Addenda.

V. Any revisions to any of the Contract Documents made by this Addendum shall be considered as the same revision to any and all related areas of the Contract Documents not specifically called out in this Addendum.

VI. The Bidder shall acknowledge receipt of this Addendum by inserting the date and number in the spaces provided in the BID FORM.

DONOHUE & ASSOCIATES, INC.
SHEBOYGAN, WISCONSIN

Nathan Cassity, PE



SECTION 32 92 00
TURF AND GRASSES

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Preparing ground surface.
2. Seed and sod.
3. Fertilizer.
4. Maintenance.

B. Except for paved, riprapped, or built-up areas, all areas of site which are disturbed and areas noted on Drawings shall be seeded or sodded.

C. Surfaces on 3H to 1V slope or less may be either seeded or sodded. Surfaces on steeper than 3H to 1V slope shall be sodded.

1.02 DEFINITIONS

A. IDOT Specifications: Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Current Edition, including Supplemental Specifications and Recurring Special Provisions and Highway Standards

1.03 REFERENCES

A. ASTM: American Society for Testing and Materials

1.04 SUBMITTALS

A. General:

1. Submit Product Data in sufficient detail to confirm compliance with requirements of this Section. Submit Product Data and Shop Drawings in one complete submittal package. Partial submittals are unacceptable.
2. Mix analysis and names of seed mixes.

B. Test Results:

1. Topsoil test results including fertilizer and lime requirements.

C. Submit in accordance with Section 01 33 00.

1.05 QUALITY ASSURANCE

A. Meet or exceed specifications of Federal, State, and local laws requiring inspection for plant disease and insect control.

B. Seed shall conform to U.S. Department of Agriculture Rules and Regulations under Federal Seed Act and requirements of state seed laws.

- C. Contractor shall engage certified soils testing laboratory to perform a soils evaluation of existing and/or imported topsoil to determine fertilizer and lime requirements. Provide a minimum of 1 composite soil sample, consisting of 5 test borings, for every 5 acres to be seeded or sodded.

1.06 DELIVERY, STORAGE, AND HANDLING

- A. Provide seed mixture in sealed containers showing percentage of seed mix, year of production, net weight, date of packaging, and location of packaging.
- B. Deliver fertilizer to site in waterproof bags showing weight, chemical analysis, and name of manufacturer.
- C. Deliver sod in rolls on pallets. Protect exposed roots from dehydration. Do not deliver more sod than can be laid within 24 hours.

1.07 WARRANTY

- A. Warranty lawn areas for period of 1 year after acceptance of seeding and sodding to be alive and in satisfactory growth at end of warranty period.
 - 1. For purpose of establishing acceptable standard, scattered bare spots, none larger than 1 square foot, will be allowed up to a maximum of 3% of lawn area.

PART 2 – PRODUCTS

2.01 TOPSOIL

- A. Friable, fertile soil of loamy character, containing an amount of organic matter normal to the region, capable of sustaining healthy plant life, and free from subsoil, roots, heavy or stiff clay, sand and gravel, stones larger than one inch in any dimension, noxious weeds, sticks, brush, litter, and other deleterious matter. Topsoil shall meet the requirements of Article 1081.05 of the IDOT Standard Specifications.
- B. Acidity Range: pH 5.0 minimum, 8.0 maximum.
- C. Obtain topsoil from source stockpiled under Section 31 10 00, or provide imported topsoil obtained from sources outside the project limits, or from both sources. Topsoil shall be screened to remove large roots, sticks, heavy or stiff clay, sand and gravel, stones larger than one inch in any dimension, noxious weeds, sticks, brush, litter and other deleterious material.

2.02 LAWN SEED

- A. Fresh, re-cleaned, new crop seed in specified varieties and proportions indicated.
- B. Weed content shall not exceed 0.25%.

| Common Name | Weight (%) | Minimum Germination (%) |
|---------------------|-------------------|--------------------------------|
| Kentucky Bluegrass | 50 | 85 |
| Perennial Ryegrass | 30 | 85 |
| Creeping Red Fescue | 20 | 95 |

2.03 NATIVE GRASS SEED

- A. Class 4A in accordance with 250.07 of IDOT.

2.04 SOD

- A. Fresh cut, nursery grown, 70% Kentucky Bluegrass, strongly rooted, and free of weeds.
- B. Root zone shall be fertile, natural mineral soil. Peat sod is not acceptable.
- C. 18 inches wide by 6 feet long standard sections not less than 1-1/2 inch thick, strong enough to support its own weight without tearing when suspended from one end.
- D. Minimum 18 months of age.
- E. Mow at least twice with final mowing not more than 7 days before cutting and lifting. Mow height not to exceed 3 inches.

2.05 FERTILIZER

- A. Commercial balanced, uniform in composition, free flowing, conforming to state and federal laws.
- B. Contain percentage by weight as follows, or as modified by topsoil test recommendations.
 - 1. Prior to seeding or sodding: 6-24-24.
 - 2. After seeding or sodding: 18-5-9.
- C. 50% of elements shall be derived from organic sources.

2.05 ACCESSORIES

- A. Mulch: Dry oat or wheat straw or wood cellulose fiber free of weeds and foreign matter detrimental to plant life. Hay or chopped corn stacks are not acceptable.
- B. Water: Furnished by Owner from existing on-site source. Provide pumps, tankage, hose, piping, and attachments as required to bring water to point of use.
- C. Wildlife Friendly Erosion Control Blanket:
 - 1. Short term duration, light duty, organic Erosion Control Revegetative Mat
 - 2. Natural fiber netting
 - 3. Wood staples
 - 4. Manufacturers:
 - a. AEC Premier Straw Single Net Fibre Net, by American Excelsior
 - b. Excel S-1 All Natural, by Western Excelsior
 - c. ECS1B Biodegradable Single Straw, by East Coast Erosion Blankets
 - d. Or Equal
- D. Landscape Mat: Porous non-woven fabric with multiple layers of randomly arranged fibers, min 4.0 ounces per square yard (typical).
 - 1. Manufacturers:
 - a. Mirafi 140N by Mirafi, Inc.

- b. Typar 340I by DuPont.
 - c. Supac 5P by Phillips Fibers Corp.
 - d. Propex 4545 by Amoco Fabrics Co.
 - e. Or Equal.
- E. Steel Edging: 3/16 inch thick by 4 inches deep.
- 1. Manufacturers:
 - a. General Edging by J. T. Ryerson & Son.
 - b. General Edging by Brighton By-Products.
- F. Landscape Stone: Washed, light colored crushed granite or other approved locally available stone conforming to ASTM C33, Size 4.

(ASTM C33 – Size No. 4)

| Sieve Size | % Passing by Weight |
|------------|---------------------|
| 2 inch | 100 |
| 1-1/2 inch | 90 – 100 |
| 1 inch | 20 – 55 |
| 3/4 inch | 0 – 15 |
| 3/8 inch | 0 – 5 |

PART 3 – EXECUTION

3.01 SURFACE CONDITIONS

- A. Examine areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of Work. Do not proceed until unsatisfactory conditions are corrected.

3.02 PLANTING SEASONS

- A. Spring Planting Season: From time soil can be satisfactorily worked until following dates.
 - 1. Seed: April 1st to June 15th.
- B. Fall Planting Season:
 - 1. Seed: August 1st to November 1st.
- C. Dormant Seeding: October 21st to November 15th (Soil at 1”<50 degrees Fahrenheit), seed with cover crop of winterwheat at 20 pounds per acre.
- D. Perform planting of seed or placement of sod only when weather conditions and soil conditions are acceptable.
- E. Planting season limits may be changed when approved by Engineer.

3.03 PREPARATION

- A. Finish grading will be performed under Section 31 22 00.
- B. Do not plant seed or place sod until trees, shrubs, and other landscaping completed.

- C. Scarify existing topsoil where grade is not being raised, or where topsoil is over compacted, to depth of 2 inches.
- D. For topsoil with high acidity, add lime as recommended in topsoil test report.
- E. Grade, rake, and roll with roller weighing not more than 100 pounds per foot or less than 25 pounds per foot.
- F. Maximum variation from correct elevation is 1/2 inch 10 feet.

3.04 FERTILIZING

- A. Before seeding or sodding, apply 6-24-24 fertilizer at uniform rate of 20 pounds/1000 square feet; make 2 passes at right angles. Incorporate fertilizer into soil to depth of at least 2 inches by discing, harrowing, or other approved method.
- B. After completion of required interim mowings, apply 18-5-9 fertilizer at rate of 15 pounds per 1000 square feet; make 2 passes at right angles.
- C. Adjust rate of application and type of fertilizer as recommended in topsoil test report.
- D. Lightly water to aid dissipation of fertilizer.

3.05 SEEDING

- A. Apply lawn seed at a total rate of not less than 5 pounds/1000 square feet; make 2 passes at right angles.
- B. Apply native grass seed at rate specified in 250.07 of IDOT.
- C. Seeding method shall establish smooth, uniform turf.
- D. Cover seed with 1/8 inches of soil by light racking.
- E. Do not seed following rain, if soil has been compacted by rain, or if ground is too dry.
- F. Do not seed when wind velocity exceeds 6 miles per hour.
- G. Do not seed areas in excess of that which can be mulched on same day.
- H. Immediately after seeding, apply mulch to flat areas and erosion control blanket to areas with greater than 3H to 1V slopes.
- I. Place mulch loose to allow some sunlight to penetrate and air to circulate, but thick enough to shade ground, conserve soil moisture, and prevent erosion.
- J. Butt ends and edges of erosion control blanket snugly and staple to ground surface with 6 inch staples.
- K. Apply water with fine spray immediately after area has been mulched or application of erosion control blanket. Leave area thoroughly soaked at close of each working day.

3.06 LAYING SOD

- A. Lay sod by hand in straight lines.

- B. Stagger lateral joints.
- C. Do not stretch or pull to distort length as cut.
- D. Butt joints and edges tightly to prevent voids which would cause drying of sod roots and weed growth.
- E. Bury exposed edges of sod flush with adjacent soil.
- F. On slopes greater than 3H to 1V, lay sod parallel to slope contours and secure with wood stakes; begin laying of sod at toe of slope.
- G. As sodding is completed in an area, roll area with roller weighing 75 to 150 pounds per feet.
- H. Water sod immediately after installation to prevent excessive drying during progress of Work. Leave area thoroughly soaked at close of each working day.

3.07 MOWING STRIPS

- A. Provide 6 inch deep mowing strip of landscape stone at locations shown on Drawings.
- B. Prior to installing landscaping mat, spray subgrade with approved pre-emergent herbicide.
- C. Install steel edging and landscaping mat and pin in place.
- D. Consolidate landscape stone to achieve uniform and level surface.

3.08 PROTECTION

- A. Protect turf areas by erecting temporary fences, barriers, signs, and similar protection as necessary to prevent trampling until acceptance by Owner.
- B. Replace, repair, restake, or replant damaged seeding or sod.
- C. Protect slopes and embankments against erosion until Work is accepted. Repair eroded areas by refilling, resodding, reseeding, and remulching as required.

3.09 FIELD QUALITY CONTROL

- A. Acceptance:
 1. Notify Engineer when lawn areas are ready for final inspection.
 2. Substantial completion will be granted upon conformance with following;
 - a. Turf reasonable free from weeds, diseases or other visible imperfections.
 - b. Turf displays uniform color, quality and coverage.
 - c. Minimum 3 mowings performed.
 - d. Fertilizer application performed after mowing.
 3. After substantial completion, Owner will be responsible for maintenance.

3.10 MAINTENANCE

- A. Maintenance shall begin immediately following installation of each portion of lawn. Continue until substantial completion.

- B. Maintain lawns by watering, mowing, and repairing or replanting as may be necessary to produce uniform stand of grass until Work accepted.
- C. Perform first mowing when average height of grass reaches 3 inches. Perform interim mowings, 2 minimum, as needed to maintain grass height at 2 to 2-1/2 inches. Do not remove more than 1/3 of leaf blade by mowing.
- D. After completion of required interim mowings, apply 18-5-9 fertilizer as specified herein.
- E. Control weed growth; apply herbicide in accordance with manufacturer's instructions.
- F. Top dress or resod excessive cracks appearing upon soil shrinkage.

END OF SECTION

STAPLE/FASTEN IN THIS BOX



Lake County Central Permit Facility
500 West Winchester Road
Libertyville, Illinois 60048-1331
Phone: 847.377.2600
E-mail: lcpermits@lakecountyil.gov

LAKE COUNTY, IL

PERMIT

HAS BEEN SECURED FOR PROJECT #
NRB-078034-2024

Project Description: Accessory/Acc. Addn.

Property Address: 800 KRAUSE DR BUFFALO GROVE

PIN: 1534200580

Date Issued: 2/12/2024

Project Permits

Permit # _____

Issued: _____

Project Issued By: _____

Frank Olson, Project Manager

A FAILURE TO CALL FOR THE INSPECTIONS OR MEET THE CONDITIONS LISTED ON THIS PERMIT CARD MAY RESULT IN A VIOLATION. IF THERE ARE ANY QUESTIONS REGARDING THIS PROJECT, THE PROJECT'S ASSOCIATED INSPECTIONS OR CONDITIONS PLEASE CALL THE PROJECT MANAGER LISTED ABOVE AT 847-377-2600.

NOT ALL BUILDING INSPECTIONS ARE REQUIRED. PLEASE CALL 847-377-2600 FOR QUESTIONS ON REQUIRED INSPECTIONS AND TO SCHEDULE INSPECTIONS.

| | | | | | | | |
|--------------------------------------|----------------|----------------------------|-----------------------|-----------------------|---------------------------------------|--|-------------------------|
| 1. FOOTING/ SETBACK | 2. DRAIN TILE | 3. DAMPPROOF FOUNDATION | 4. ROUGH CARPENTRY | 5. ROUGH MASONRY | 6. ROUGH ELECTRICAL | 7. ROUGH ELECTRICAL IN CONC SLAB | 8. ROUGH PLUMBING |
| 9. ROUGH PLUMBING IN CONC SLAB | 10. ROUGH HVAC | 11. INSULATION | 12. WATER SUPPLY | 13. SWIMMING POOLS | 14. OCCUPANCY & USE CERTIFICATE | 15. ELEVATOR | 16. FINAL INSPECTION |

SEE THE BACKSIDE OF THIS CARD FOR ALL PROJECT CONDITIONS.

POST THIS CARD AT THE PROJECT SITE ENSURING IT IS VISIBLE FROM THE STREET AND SUCH THAT THE INSPECTOR CAN RECORD THE OUTCOME OF THE INSPECTIONS ON THIS CARD. DO NOT POST THIS CARD IN THE INTERIOR OF A BUILDING. INSPECTORS AND SHERIFF'S DEPUTIES ARE INSTRUCTED TO STOP ALL WORK WHERE THIS PERMIT CARD IS NOT DISPLAYED.

PERMIT CONDITIONS / NOTICE TO APPLICANT

NOTICE TO APPLICANT

BUILDINGS

All new building, structures and signs shall conform to all applicable requirements of the Unified Development Ordinance (UDO) and the Building Code.

CHANGE OF OCCUPANCY

The use or purpose for which a building is to be used shall not be changed until a Change of use Permit and a Certificate of Occupancy permitting the new use or occupancy is issued by the Building Official.

VIOLATIONS AND PENALTIES

Every permit issued by the Building Official, under the provision of the Building Code shall expire by limitation and become null and void if the authorized work is not commenced within 6 months unless renewed. Before work can again be resumed, a new permit will be required. Any person, firm or corporation violating the provisions of this Ordinance is subject to the fines and penalties as provided by the law.

INSPECTION PROCEDURE

Inspection requests require a 24-hour notice except for footing/pre-pour inspections. Footing/pre-pour inspections require a 4-hour notice. Inspection time frames are AM (8-12) or PM (12-4), Monday through Friday & must be received no later than 12PM for the following AM timeframe and no later than 3PM for the following PM timeframe.

Fill out the inspection request form at: www.lakecountytill.gov/OnlineInspectionRequest or by calling the main office number at 847-377-2600

1. Footing and Setback*
2. Pre-pour (foundation walls, interior slabs, etc.)
3. Drain Tile and Damp Proof
4. Rough Carpentry (framing)
5. Electrical (rough, underground, above-ceiling, etc.)
6. Plumbing (rough, underground, above-ceiling, etc.)
7. HVAC (rough, underground, above-ceiling, etc.)
8. Rough Masonry
9. Insulation
10. Final** (occupancy, temp-use certificate, etc.)

**Iron pipes must be readily visible and accessible with witness stakes in place at the time of footing and setback inspections. If circumstances warrant, a complete and current survey of the property in questions can and may be required by the Building Official.*

***Final Inspections may have additional steps that may be required prior to scheduling. Please check the final inspections section to confirm all requirements have been met.*

NOTE: ADDITIONAL INSPECTIONS MAY BE REQUIRED

INSPECTION PROCEDURE (CONTINUED)

COMMERCIAL INSPECTIONS

Commercial pre-inspections & finals must be called into the office at 847-377-2600. These inspections have a set time scheduled. All other inspections can be scheduled as detailed above.

FINAL INSPECTIONS

Before calling for a Certificate of Occupancy/Final Inspection for your project please ensure that the following steps are completed at least 10 days prior:

1. Projects over 1,500 square feet must complete and submit a Construction & Demolition Debris Report (C&D Report) along with receipts/reports obtained from hauling company.
2. New House Projects – Blower Door/Duct Tightness Test Certificate must be submitted.
3. Septic and/or Well Approval – If your project involves a repair, replacement, or installation of the septic or water well please call 847-377-8020 to schedule a final.
4. Site Development (Engineering) – If a Site Development permit was issued for your project please submit request at www.lakecountyil.gov/OnlineInspectionRequest or call 847-377-2600 to schedule a Site Final.

Once these requirements have been met, if there are no other outstanding issues a Building Permit final may be scheduled.



Lake County Fire Chiefs Association
Northern Illinois Fire Inspectors Association

To: Applicant for Lake County Building Permit

From: Lake County Fire Chiefs Association
Northern Illinois Fire Inspectors Association

Subject: Fire Protection District Fire Prevention Codes

The Lake County Fire Chiefs Association and the Northern Illinois Fire Inspectors Association want to take this opportunity to remind all building permit applicants to check with their local fire protection district for additional fire prevention code requirements. There may be other fire prevention code requirements you need to be aware of as you start your building project. For example, a number of fire protection districts have joined local Municipalities in adopting fire prevention codes requiring residential sprinkler systems for new single family homes.

Your local fire protection district has the legal authority to adopt and enforce its own ordinance. The Illinois Supreme Court has authorized fire protection districts to enforce their fire prevention codes in the unincorporated areas of Lake County even though the code may not be required by the Lake County Building Code.

For assistance in determining the fire protection district for your building project, visit the Lake County Web Site <http://www.co.lake.il.us> → GIS Maps → Interactive GIS Map Application → Property Tax → Report Information.

Lake County fire department contact information is available by visiting the Lake County Fire Chiefs Association Web Site <http://www.lakecountyfirechiefs.org> → Members.

Please join your local fire protection district in their effort to provide life safety protection for you and your family as well as your property.

Thank you for your cooperation.

Lake County Fire Chiefs Association
Northern Illinois Fire Inspectors Association

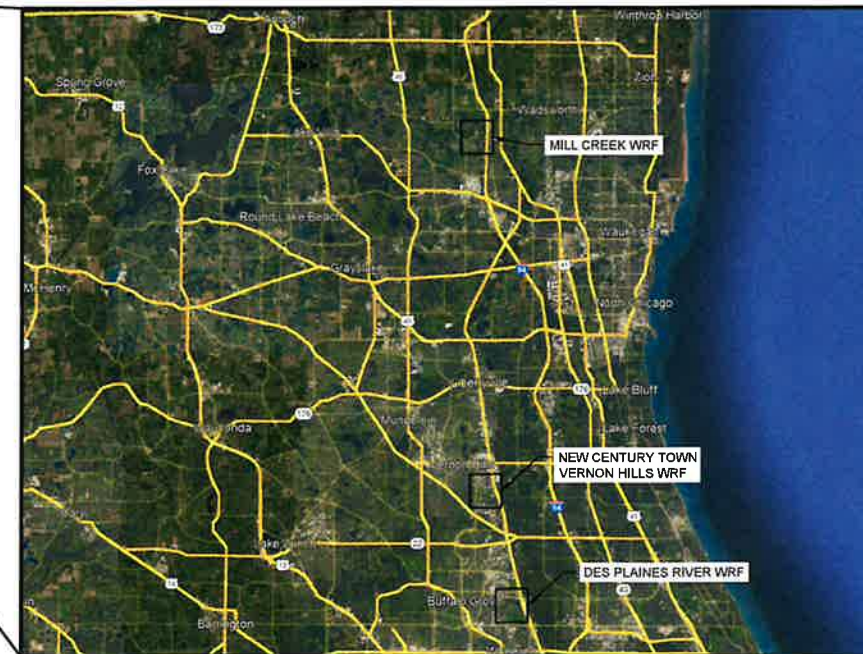
LAKE COUNTY DEPARTMENT OF PUBLIC WORKS WRF IMPROVEMENTS

ALL ELECTRICAL WORK MUST COMPLY WITH ALL REQUIREMENTS OF THE 2017 NATIONAL ELECTRICAL CODE

| CONTRACT INDEX | | | |
|----------------|---|----------------|--------------|
| ALL CONTRACTS | | SHEETS 1-15 | |
| CONTRACT A | FILTER IMPROVEMENTS | SHEETS 16-42 | PW# 2022.119 |
| CONTRACT B | CLARIFIER IMPROVEMENTS | SHEETS 43-62 | PW# 2022.120 |
| CONTRACT C | BLOWER REPLACEMENTS | SHEETS 63-80 | PW# 2022.117 |
| CONTRACT D | UV UPGRADE | SHEETS 81-121 | PW# 2022.118 |
| ALL CONTRACTS | GENERAL NOTES, SCHEDULES AND STANDARD DETAILS | SHEETS 122-138 | |

APPROVED
 Subject to compliance with the I.C.C. Building and Mechanical Code, Illinois State Plumbing Code, and National Electrical Code.
 PERMIT NO. NRB-078034-24
 DATE 2-9-2024
 Lake County Building Division
 By ED

NOTICE: REVIEW AND/OR APPROVAL OF THESE PLANS IS NOT TO IMPLY THAT ALL ERRORS AND OMISSIONS ARE NOTED HEREIN; NOR DOES IT RELIEVE THE APPLICANT FROM ADHERING TO, AND COMPLYING WITH ALL REGULATIONS OF THE BUILDING CODES AND AMENDMENTS ADOPTED BY LAKE COUNTY, AND THE LAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE



THIS APPROVED SET OF PLANS MUST BE KEPT ON THE JOB SITE AT ALL TIMES FOR USE FOR USE BY THE BUILDING OFFICIAL OR HIS AUTHORIZED REPRESENTATIVE PER SECTION 107.3.1 OF THE 2018 INTERNATIONAL BUILDING CODE

ILLINOIS

PROJECT LOCATIONS

| LAKE COUNTY WATER RECLAMATION FACILITY INDEX | | |
|--|--|--------------|
| NAME | ADDRESS | ABBREVIATION |
| DES PLAINES RIVER WATER RECLAMATION FACILITY | 800 KRAUSE DR. BUFFALO GROVE, IL 60089 | DPR |
| MILL CREEK WATER RECLAMATION FACILITY | 16750 WEST ANCONA AVE. OLD MILL CREEK, IL 60083 | MC |
| NEW CENTURY TOWN WATER RECLAMATION FACILITY | 50 SOUTH AMERICAN WAY VERNON HILLS, IL 60061 | NCT |

SECURE A CERTIFICATE OF COMPLETION BEFORE OCCUPYING OR USING THIS STRUCTURE

PREPARED FOR



650 WEST WINCHESTER ROAD
LIBERTYVILLE, IL 60048
847-377-7500

PREPARED BY



3311 WEEDEN CREEK ROAD
SHEBOYGAN, WISCONSIN 53081
920-208-0295



STORMWATER MANAGEMENT COMMISSION

February 13, 2024

Lake County Department of Public Works
Attn: Marc Bourgault
650 W. Winchester Rd.
Libertyville, IL 60048
mbourgault@lakecountyil.gov

Subject: SMC Watershed Development Permit #WDP-24-652
DPR WRF UV Disinfection Building

PERMIT ISSUANCE

Dear Mr. Bourgault:

Accompanying this letter is the required Watershed Development Permit for the proposed process building at the existing wastewater treatment plant in Unincorporated Lake County (42.16370, -87.93050). This approval is subject to the conditions on the back of the permit including the following:

- This permit is being issued prior to receipt of the following fees to facilitate the project schedule. SMC understands that an interfund transfer has been initiated.
 - Non-refundable \$3,280 (Fee Schedule #11060, Major Development – Grading in Floodplain, no detention)
 - Non-refundable \$440 (Fee Schedule #20021, No Impact Determination)
 - Refundable \$240 Pre-construction Meeting Deposit
- Provide prior notification to Mea Blauer (of the SMC) of the pre-construction meeting at least 5 calendar days in advance to enable SMC attendance. The refund for the \$240 pre-construction deposit will be refunded after permanent site stabilization and approval of an as-built submittal.
- Please note that the following items are conditions of this permit.
 - Meeting the requirements of Sections 701.01F of the Watershed Development Ordinance and providing the elevation certificate and flood-proofing certificate once the project is complete.
 - Enhance the plans by adding the silt fence splicing detail IUM-620(B)(W) and appropriate detail(s) for installation of a wildlife friendly (i.e. not prone to wildlife entrapment) turf reinforcement mat product.

500 W. Winchester Road • Libertyville, Illinois 60048 • 847/377-7700 • FAX 847/984-5747

- As it is located at least partly within wetland buffer, SMC recommends the compensatory storage area be landscaped with native plantings rather than turfgrass and that phosphorus fertilizers not be used, and the seeded area covered with a wildlife-friendly erosion control blanket.
- Providing SMC with a copy of the NOI application to the IEPA to comply with NPDES requirements.
- Please note that the erosion control measures indicated on the plans are the minimum requirements. Additional measures may be required, as directed by the engineer, enforcement officer, or other governing agency.
- Please coordinate all SESC modifications to the plan with the SMC Inspector.
- Discussion at the preconstruction meeting will include:
 - Designated Erosion Control Inspector (DECI) contact information
 - Maintenance of the sediment and erosion control measures
 - Ensuring that neighboring streets are kept free of site track-out
 - Notifying the SMC Inspector prior to the start of any dewatering activity
- The DECI shall provide weekly reports to the SMC Inspector. At a minimum, the reports shall include photographs and evaluation of critical areas, as directed by the SMC Inspector, including:
 - Dewatering activities
 - Areas of concentrated flow as it leaves the site (sediment free discharge)

Please be advised that DECI inspections are required until final as-built approval.

- Upon completion, please provide SMC an as-built submittal. If there are no deviations, an email may be acceptable in lieu of an as-built submittal.

This approval is based on the plans entitled:

LAKE COUNTY DEPT. OF PUBLIC WORKS WRF IMPROVEMENTS UV UPGRADE.
 Prepared by Donohue & Associates, Inc. Dated December 2023 and
 Received by SMC 01/22/2024 (16 Sheets Electronic).

We would like to be of assistance. Do not hesitate to contact Mea Blauer at (847)377-7701 if you have questions or would like to set up the pre-construction meeting.

If you have any additional concerns that have not been addressed by the regulatory staff, you may contact Chief Engineer Brian Frank (bfrank@lakecountyil.gov) at (847) 377-7700.

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION



Kelcey Traynoff, P.E.
Regulatory Supervisor



Brian Frank, P.E., CFM
Chief Engineer

Attachment As-Built Checklist

C: Nathan Cassity/ Joe Holzwart – Donohue & Associates, Inc.
Eric Steffen – Lake County PBD/ Unincorporated Lake County
Mea Blauer – LCSMC



STORMWATER MANAGEMENT COMMISSION

As-built Review Checklist
(Revised December 2021)

Please provide the following information as indicated when submitting as-built plans for approval. Please ensure that the as-built information is annotated onto the permitted construction plans and is not a stand-alone current conditions exhibit. Plans should be provided in a digital format (PDF).

- Spot elevations and/or contours for cut and fill areas located in the Regulatory Floodplain.
- Floodplain cut and fill calculations* based on the as-built survey.
(Benchmark – NAVD88 datum)
- Spot elevations and contours for all constructed detention and water quality treatment facilities, including:
 - 2-yr and 100-yr water elevation contours
 - Flared end section and restrictor sizes/invert elevations
 - Detailed topography for the emergency overflow spillway
 - Top of berm spot elevations surrounding detention facility
- Detention volume calculations* and summary (for both the 2-yr and 100-yr events) based on the as-built survey.
- Storm sewer locations, sizes, inverts and rim elevations. Provide storm sewer network information is a digital file (CAD and/or GIS file).
- Top of curb elevations at locations of overland flow paths.
- Overland flow path (swale) as-built cross-section survey (a minimum of two cross-sections, each with at least three points, i.e., one on either bank and one at the invert).
- Low-floor elevations/lowest adjacent grade elevations for structures adjacent to Regulatory Floodplain, overland flow paths, or detention facilities.
- Verification of at least 70% vegetative coverage by perennial species, on an areal basis.
- Plants comprising a minimum of 50% native vegetation per approved seed/plant list on the permitted plan set.
- Verification of required native vegetation planted (seed tags, invoices) listing species by scientific name.

* As-built calculations need to be signed, sealed and dated by an Illinois Licensed Professional Engineer.



STORMWATER MANAGEMENT COMMISSION

**WATERSHED DEVELOPMENT PERMIT NUMBER
Permit #WDP-24-652
HAS BEEN SECURED**

Project: DPR WRF UV Disinfection Building

Date Issued: February 13, 2024

Lat/Long: 42.16370, -87.93050

PIN No.: 15-34-200-580

Conditions:

- Refer to WDP application page 2 of 2 for standard permit conditions.
- Refer to Permit Letter for project specific permit conditions.

Issued By: Kelcey Traynoff, P.E.
Regulatory Supervisor

Notice to Contractors and Owners

**Post this card at the site, visible from the street.
Do not post in the interior of a building.**

Inspectors and sheriff's deputies are instructed to stop all work where this permit card is not displayed.

Always mention the Watershed Development Permit number when referring to this project. If this card becomes mislaid or lost please contact Lake County Stormwater Management Commission for a replacement.

Lake County Stormwater Management Commission (847) 377-7700



Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

Permit Information

This form has not yet been certified.

Master Permit Number: ILR100000

NPDES ID:

State/Territory to which your project/site is discharging: IL

Is your project/site located on federally recognized Indian Country Lands? No

By indicating "Yes" below, I confirm that I understand that this General Permit only authorizes the allowable stormwater discharges in Part I.B.1 and Part I.B.2. Any discharges not expressly authorized in part I.B.3 of this permit cannot become authorized or shielded from liability under CWA Section 402(k) by disclosure to EPA, State, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), during an inspection, etc. If any discharges requiring NPDES permit coverage other than the allowable stormwater discharges listed in Part I.B.1 and Part I.B.2, they must be covered under another NPDES permit.

Yes

Is your construction site less than one acre? No

Owner and Operator Information

Owner (Company) Information

Owner (Company) Name: Lake County Public Works Department

Owner Type: County

Owner (Company) Mailing Address

Address Line 1: 650 W Winchester Rd

Address Line 2:

City: Libertyville

ZIP/Postal Code: 60048

State: IL

Owner (Company) Point of Contact Information

First Name Middle Initial Last Name: Marc , Bourgault

Professional Title: Principal Engineer

Phone: 847-377-7126

Ext.:

Email: mbourgault@lakecountyil.gov

Operator (Contractor) Information

Is the Operator Information the same as the Owner Information? No

Operator (Contractor) Name: To Be Determined Upon Award of Contract

Operator (Contractor) Mailing Address

Address Line 1: TBD

Address Line 2:

City: TBD

ZIP/Postal Code: 00000

State: IL

Operator (Contractor) Point of Contact Information

First Name Middle Initial Last Name: TBD , TBD

Professional Title: TBD

Email:

NOI Preparer Information

This NOI is being prepared by someone other than the certifier.

First Name Middle Initial Last Name: Michelle Madrid

Organization: Donohue & Associates

Phone: 312-583-7212

Ext.:

Email: mmadrid@donohue-associates.com

Project/Site Information

Project/Site Name: Des Plaines River Water Reclamation Facility UV Upgrade

Project/Site Location

Address Line 1: 800 Krause Drive

Address Line 2:

City: Buffalo Grove

ZIP/Postal Code: 60089

State: IL

County or Similar Division: Lake

Latitude/Longitude for the Project

Latitude/Longitude Format: Decimal Degrees

Latitude/Longitude: 42.163613°N, 87.930481°W

Other Project Information

Approximate Construction Start Date: 05/01/2024

Approximate Construction End Date: 05/01/2026

Total Size of Construction Site in Acres: 3.1

Type of Construction: Other

Other: Wastewater Treatment Facility

SIC Code:

Type a detailed description of the Project:

This project consists mainly of the construction of a new UV disinfection building, which will replace Des Plaines River WRF's existing chlorine disinfection, improving disinfection safety, reliability, and operability. In addition to the construction of the UV disinfection building, the project consists of incidental site work, including yard piping, buried electrical utilities, construction of new concrete sidewalk, and removal and replacement of asphalt pavement.

SWPPP Information

Has the SWPPP been prepared in advance of filing this NOI as required? Yes

SWPPP Contact Information

First Name Middle Initial Last Name: Michelle Madrid

Organization:

Professional Title: Civil Engineer

Phone: 312-583-7212

Ext.:

Email: mmadrid@donohue-associates.com

Project Inspector

Is the Project Inspector Information the same as the SWPPP Contact Information? No

First Name Middle Initial Last Name: Marc Bourgault

Organization:

Professional Title: Principal Engineer

Phone: 847-377-7126

Ext.:

Email: mbourgault@lakecountyil.gov

Use the space below to upload a copy of your SWPPP.

| Name | Uploaded Date | Size |
|---|---------------|---------|
|  14212 LCPW DPR WRF UV Upgrades SWPPP.pdf (attachment/1809591) | 02/13/2024 | 6.41 MB |

Receiving Water Information

Does your storm water discharge directly to: Waters of the State

Owner of Storm Sewer System:

Name of closest receiving waterbody to which you discharge: Aptakisic Creek



Historic Preservation Office:

Use the space below to upload a copy of your Historic Preservation Office approval letter.

| Name | Uploaded Date | Size |
|---|---------------|---------|
| 📄 SHPO Application NOI.pdf (attachment/1809589) | 02/13/2024 | 4.44 MB |

IDNR Impact Assessment Section:

Use the space below to upload a copy of your EcoCAT approval letter.

| Name | Uploaded Date | Size |
|---|---------------|-----------|
| 📄 2410391_Lake_02132024_Des Plaines River WRF UV Upgrade.pdf (attachment/1809556) | 02/13/2024 | 180.62 KB |

Certification Information



Form has not been certified yet.



**Storm Water Pollution Prevention Plan
Des Plaines River WRF UV Upgrade Project
Lake County Public Works Department
Lake County, Illinois**

PW#2022.118 Contract D

February 2024



Prepared by:

Donohue & Associates, Inc.

230 W. Monroe Street, Suite 2925 | Chicago, IL 60606

donohue-associates.com

Donohue Project No.: 14212

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APPENDICES

- Appendix A – NPDES Permit Number ILR10
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- Appendix C – Erosion Control Plan Drawings
- Appendix D – Specification Section 31 25 00
- Appendix E – Grading and Stabilization Activities Log
- Appendix F – SWPPP Inspection Report
- Appendix G – SWPPP Amendment Report
- Appendix H – Incidence of Noncompliance (ION) Form
- Appendix I – EcoCat Review
- Appendix J – Project Directory

ABBREVIATIONS

| | |
|-------|---|
| AOI | Area of Interest |
| BMP | Best Management Practice |
| ION | Incidence of Non-Compliance |
| NPDES | National Pollutant Discharge Elimination System |
| NRCS | Natural Resources Conservation Service |
| SWPPP | Storm Water Pollution Prevention Plan |

PART 1 - GENERAL

This Storm Water Pollution Prevention Plan (SWPPP) has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit Number ILR10, the General NPDES permit for Storm Water Discharges from Construction Site Activities, as issued by the Illinois Environmental Protection Agency. A copy of General Permit ILR10 is included in **Appendix A**.

This SWPPP identifies potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the construction site. This plan also describes the practices that will be required to reduce the pollutants in stormwater discharges from the construction site.

The Contractor shall be required to implement the erosion control measures identified as outlined in this plan. The Contract Documents explicitly state that the Contractor shall comply with this SWPPP to minimize the discharge of pollutants in storm water. Plan sheets included in **Appendix C** identify specific erosion control measures to be taken.

This plan is a dynamic document that must be revised as project-specific situations dictate. The Contract Documents require that the Contractor submit to the Engineer on an on-going basis revised project schedules, alternate erosion control details, material data sheets, and locations of specific erosion control measures not explicitly indicated by this plan, as construction activities progress throughout the project. The Contractor's erosion control implementation submittals will be reviewed by the Lake County Public Works Department (Owner) and shall be incorporated into this plan by the Contractor as needed.

The Owner will have the authorization to amend the plan whenever there is a change in the project's design, construction, operation, or maintenance that has a significant effect on the potential for the discharge of pollutants to the waters of the State of Illinois and which have not otherwise been addressed in the plan.

The plan shall also be amended if it proves to be ineffective in eliminating or significantly minimizing pollutants or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction activities on the site.

PART 2 - SITE DESCRIPTION

2.1 Site Location

The project is located at the Des Plaines River (DPR) Water Reclamation Facility (WRF). The physical address of the facility is:

Des Plaines River WRF
800 Krause Drive
Buffalo Grove, IL 60089

The location of the project is shown on Figure 2-1Error! Reference source not found. below and on the relevant drawings included in **Appendix C**.

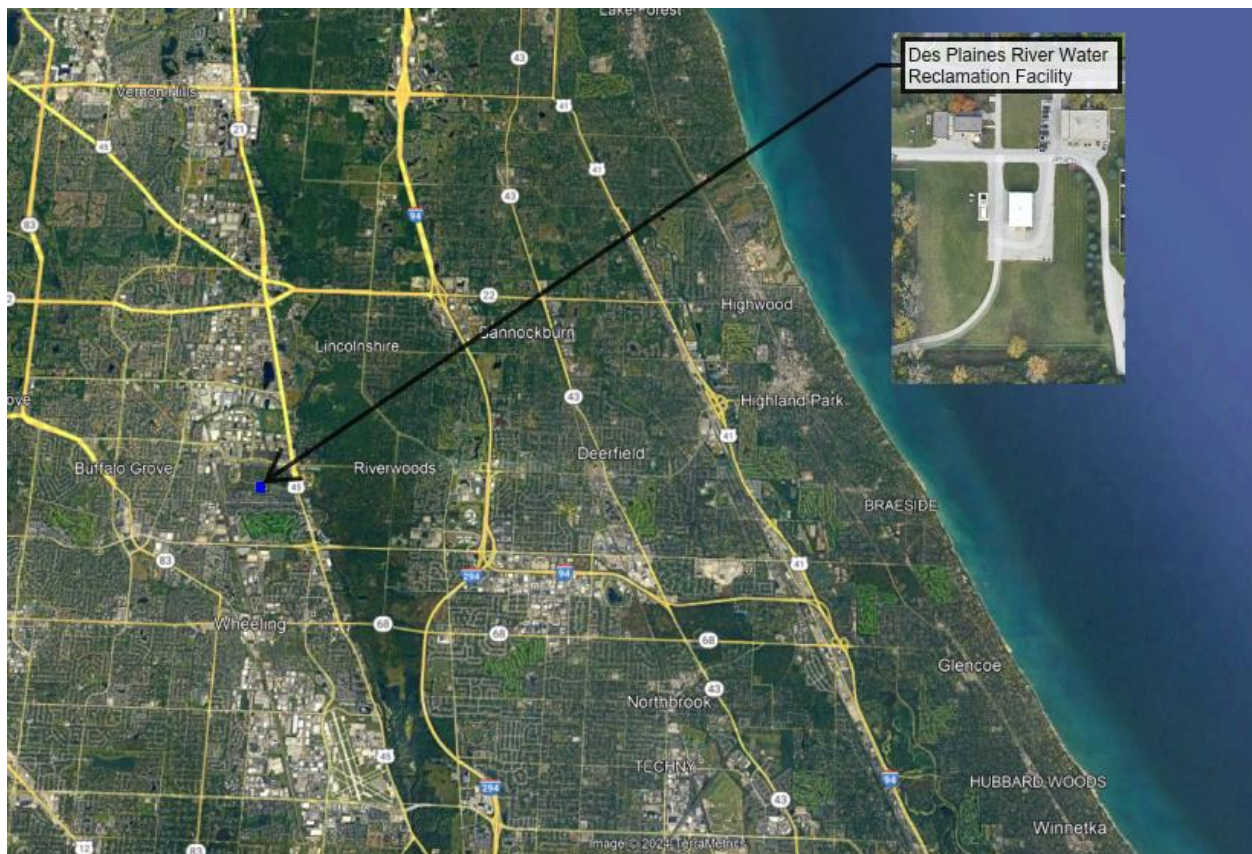


Figure 2-1 - Project Location

2.2 Nature of Construction Activity

The project consists of the construction of an ultraviolet disinfection system at the Des Plaines River Water Reclamation Facility (DPR WRF) which will replace the existing chlorination and dechlorination disinfection system.

In addition to the construction of the UV disinfection building, the project consists of incidental site work, including yard piping, buried electrical utilities, construction of new concrete sidewalk, and removal and replacement of asphalt pavement.

Concurrently with this project, various structural, plumbing, process, and electrical improvements are to be made to several other structures onsite under separate contracts, as shown on sheet 002-CK-1. Minimal site work is expected to be associated with these projects, although these projects will dictate that additional space be allocated onsite for construction staging. See sheets 002-CSE-1 and 002-CSE-2 for the locations of the proposed construction staging areas. Additionally, installation of the proposed improvements for the Battery B Filter Building (Structure 50) require that flow through the building must be temporarily bypassed through an above-ground 36-inch pipe around the outside of the building. Erosion control and restoration provisions shall be made for any ground disturbance caused by construction equipment during these operations.

2.3 Sequence of Work

The general sequence of work to be followed for construction of the improvements is described below.

1. Install temporary erosion control measures as shown on the Drawings. Typical temporary erosion control measures include silt fence, inlet protection, and erosion control mats. Install stabilized construction entrances or provide other means to prevent tracking of sediment from construction vehicles onto public roadways. Temporary erosion control measures shall be installed prior to any land disturbing activities.
2. Remove and temporarily stockpile topsoil from work area(s) where construction will occur first. Do not remove topsoil from inactive work zones or other areas where no construction activities will occur within fourteen (14) days. Provide temporary erosion control measures for topsoil stockpiles.
3. Construct the improvements as detailed in the project plans. Backfill and compact excavations.
4. Complete final grading. Install subbase and pavement where indicated on the Drawings. Seed, mulch, and fertilize unpaved areas as grading activities have been completed.
5. Remove all remaining erosion control devices upon completion of pavement installation and establishment of grass in seeded areas.
6. Installation and continuous maintenance of all erosion control devices will be the sole responsibility of the Contractor. Sediment that collects in low areas of the site and on erosion control devices shall be removed and disposed of prior to final restoration.

A two (2) year construction duration is anticipated. Construction activities are expected to begin in May 2024.

2.4 Construction Site Area

The total estimated disturbed area for this project is approximately 3.1 acres, including temporary disturbed areas where staging and stockpiling will take place.

2.5 Runoff Coefficient

A Natural Resource Conservation Service (NRCS) soils report was generated for the project area to determine the predominant soil types present and their respective Hydrologic Soil Groups for purposes of computing the site runoff coefficient. A copy of the soils report is included in **Appendix B**. Soils in the project area are in Hydrologic Soil Groups B and D. The predominant soil types in the project vicinity are summarized in **Table 2-1** below. Note that the “Area of Interest (AOI)” used in the soils report is approximate and only includes the UV Disinfection Facility work area, which is the only location where impervious area is being added as part of this project. The NRCS web soils reporting tool is not intended to be used for precise measurements. The soils report and values in the table below are intended to provide a generalized characterization of the soils in the project vicinity.

Table 2-1 – Site NRCS Soil Type Summary

| NRCS Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI | Hydrologic Soil Group |
|----------------------|--|--------------|----------------|-----------------------|
| 153A | Pella silty clay loam, 0 to 2 percent slopes | 6.0 | 100% | B/D |

Table 2-2 presents the site runoff coefficient for pre- and post-construction conditions. A total of approximately 2,953 square feet (0.068 acres) of new impervious area is to be added to the site. A rational method runoff coefficient of 0.9 was used for impervious areas and 0.35 was used for pervious (lawn) areas.

Table 2-2 – Runoff Coefficient Summary

| | Impervious Area | Percent Impervious | Pervious Area | Percent Pervious | Weighted Runoff Coefficient |
|--------------------------|-----------------|--------------------|---------------|------------------|-----------------------------|
| Pre-Construction | 1.73 ac | 28.8% | 4.27 ac | 71.2% | 0.508 |
| Post-Construction | 1.80 ac | 30.0% | 4.20 ac | 70.0% | 0.515 |

2.6 Site Map

Post-construction slopes, vegetation, and drainage patterns will match pre-construction conditions. Typical lawn seeding will be used for final stabilization of unpaved areas disturbed by construction. Site conditions are shown on the plan drawings included in **Appendix C**.

2.7 Receiving Waters

Runoff from the project site is conveyed to Aptakistic Creek through on-site stormwater ditches and culverts. **Figure 2-2** below depicts the location of Aptakistic Creek and the project boundary.

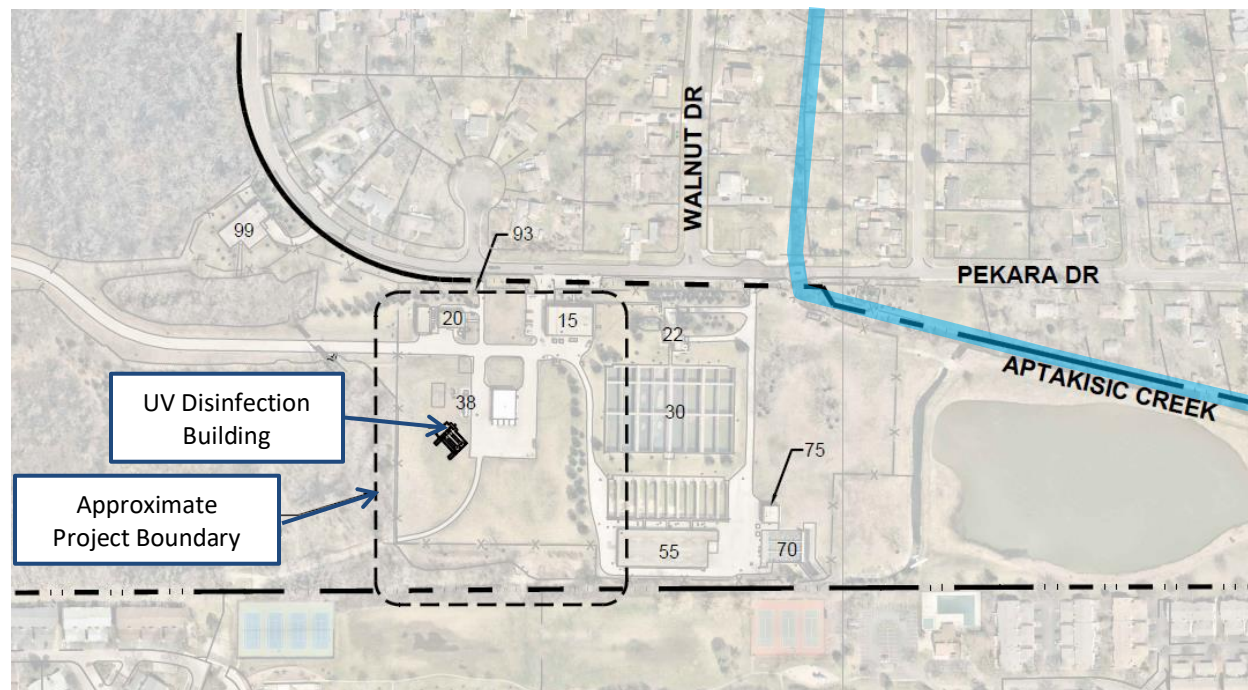


Figure 2-2 - Project Boundary and Creek Location

2.8 Wetlands

A natural resource consultation was completed by a project location submission to EcoCAT. The consultation performed by EcoCAT is included in **Appendix I**. While the consultation found no wetlands near the project location, the Lake County Wetland Inventory indicates that there are wetlands near the project location. **Figure 2-3** shows the location of wetlands near the project according to the Lake County Wetland Inventory. Work will not occur within wetland limits.

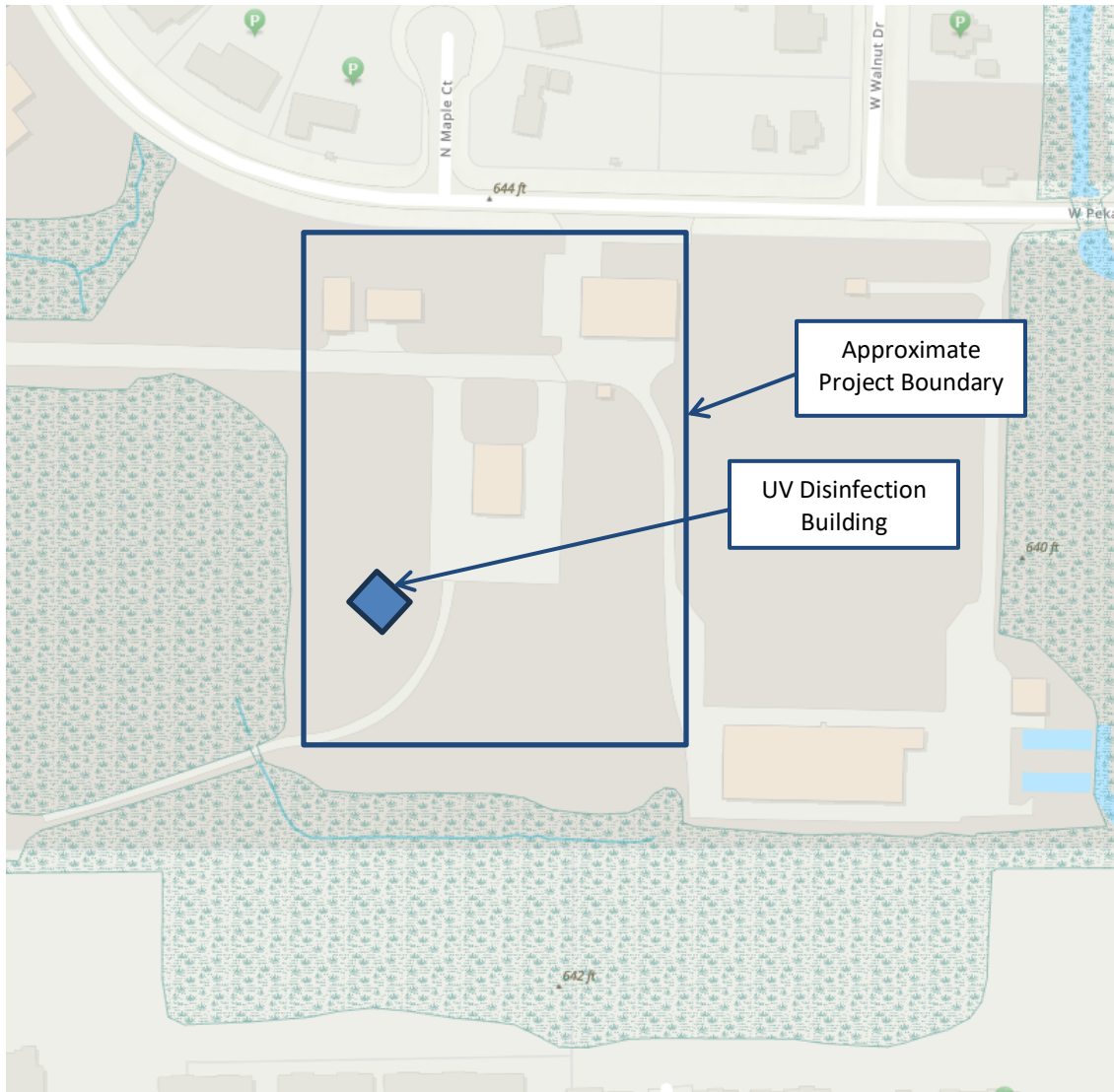


Figure 2-3 – Wetlands in Proximity to Project

PART 3- EROSION AND SEDIMENT CONTROLS

3.1 Erosion and Sediment Controls

Erosion control measures are depicted on plan drawings included in **Appendix C**. Erosion control measures are further described in Section 31 25 00 of the Technical Specifications, which are included in **Appendix D**. Section 31 25 00 of the Technical Specifications requires the Contractor to implement erosion control measures in accordance with the current edition of the Illinois Urban Manual. To remain consistent with the intent of this Storm Water Pollution Prevention Plan, additional controls shall be installed and maintained by the Contractor to accommodate changing project conditions as necessary.

The Contractor shall manage storm water runoff at the site throughout construction. Silt fence shall be installed at any disturbed area perimeter in any area where stormwater runoff will drain off-site, as indicated on the Drawings.

Disturbed earth surfaces may be drained to the storm sewer or to paved surfaces on-site and off-site only after the runoff has passed through a stabilization measure or a structural measure such as vegetative strips, silt fences, or inlet protection.

3.2 Stabilization Practices

Section 31 25 00 of the Technical Specifications requires that sand, dirt, and similar materials must be stabilized or contained to prevent them from entering storm drains. See **Appendix D** for Section 31 25 00 of the Technical Specifications. Said section also states that the Contractor shall stabilize disturbed areas of the site as soon as practical. Stabilization practices are to include temporary seeding; mulching or erosion control blankets; permanent seeding; or pavement installation.

Site stabilization measures shall be initiated whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or have temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization measures shall be initiated no later than one (1) working day after temporary or permanent cessation of construction activities, except when stabilization is precluded by snow cover. Once initiated, stabilization measures shall be completed as soon as practicable, but no more than 14 days from the initiation of stabilization work in an area.

The Contractor shall record and provide to the Engineer the dates when major grading activities occurred, when construction activities temporarily or permanently ceased on a portion of the site, and when stabilization measures were initiated. This record shall be incorporated into the SWPPP in the section entitled Grading and Stabilization Activities Log under **Appendix E**.

3.3 Structural Practices

The Contractor shall implement structural practices as appropriate to limit erosion such as diverting runoff from exposed soils, detaining runoff, or otherwise limiting the discharge of pollutants from exposed areas. Structural practices identified for use on this project are shown on the erosion control drawings included in **Appendix C** and described in Section 31 25 00 of the Technical Specifications included in **Appendix D**.

3.4 Use of Treatment Chemicals

Contractor shall identify the use of all polymer flocculants or treatment chemicals at the site. Contractor shall provide Material Safety Data Sheets for treatment chemicals and describe the location of all chemical storage areas. Contractor shall amend the SWPPP as required to describe procedures of use for treatment chemicals. Staff responsible for use and application of the treatment chemicals must be trained on established procedures as determined by the manufacturer.

3.5 Other Controls

In addition to erosion control the Contractor shall take measures to properly manage solid wastes, hazardous wastes, dust generation, and all other activities that generate wastes during construction.

Dust

Water trucks or other dust control agents shall be used as needed during construction to reduce dust generated on the site. Wet saw cut concrete pavement. Slurry runoff prohibited – vacuum or dam up and remove.

Wash Water

Wash water from vehicle washing, wheel washing, and other washing practices shall be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge.

Solid Waste Materials

All waste material shall be collected on site in accordance with local and state solid waste management regulations. The waste shall be emptied and hauled off site at regularly scheduled intervals or as necessary. No construction waste materials shall be buried on site. All personnel shall be instructed regarding the correct procedures for waste disposal.

Sanitary Waste

All sanitary waste shall be collected by temporary sanitary facilities provided at the site through construction. Temporary sanitary facilities shall be serviced by a commercial operator.

Petroleum Products

All on-site vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled.

Fertilizers

Fertilizers shall be applied only in the amounts specified. Once applied, fertilizer shall be worked into the soil to limit exposure to storm water. Fertilizer shall be stored in a covered location.

Spill and Leak Prevention

In order to reduce the risk of spills of hazardous materials, the following practices shall be followed:

1. An effort shall be made to store only enough product required in the Work.

2. All materials stored on-site shall be stored in a neat, orderly manner in their original containers with the original manufacturer's label. If the material is hazardous and the container cannot be resealed, the original label and material safety data shall be retained.
3. Products shall not be mixed with one another unless recommended by the manufacturer.
4. Whenever possible, all of a product shall be used before disposing of the container.
5. The manufacturer's recommendations for proper use and disposal shall be followed.
6. If surplus product must be disposed of, manufacturer's or state and local recommended methods for proper disposal shall be followed.

The following practices shall apply for spill prevention and cleanup:

1. Manufacturer's recommended methods for spill cleanup shall be clearly posted and site personnel shall be made aware of the procedures and the location of cleanup supplies.
2. All spills shall be cleaned up immediately after discovery.
3. Personnel performing the spill cleanup shall be properly trained and shall wear appropriate protective clothing.
4. The Contractor shall immediately notify the appropriate state or local government agency as required.

3.6 Post-Construction Best Management Practices

Post-construction best management practices (BMPs) are not required on this project.

PART 4 - INSPECTIONS AND MAINTENANCE

The Contractor shall provide qualified personnel to inspect disturbed areas of the construction site that have not been permanently stabilized; areas used for storage of materials, fuel, paints, etc. that are exposed to precipitation; structural control measures; soil stockpiles; adjacent streets and gutters; on-site and adjacent storm sewer inlets; and locations where vehicles enter or exit the site. The Contractor shall inspect the site on a weekly basis and within 24 hours of the site receiving any rainfall that is 0.5 inches or greater or in the event of an equivalent snowfall.

4.1 Inspection Reports

Erosion Control Inspection Reports shall be prepared by the Contractor on each date of inspection. The Contractor's inspector shall complete and sign the inspection report after each inspection. Completed Inspection Reports shall be retained to become part of the SWPPP. See **Appendix F** for a blank copy of the inspection report. Contractor shall furnish Engineer and Owner with PDF copies of inspection reports on a monthly basis.

The Contractor shall adjust its construction practices and implementation of the SWPPP based on the results of the inspections and notification of recommendations or further requirements within 7 days. To modify the SWPPP, the Contractor shall complete a "SWPPP Amendment Report". A blank copy of this report is included as **Appendix G**.

4.2 Incidence of Non-Compliance

Any violation of the SWPPP observed during an inspection shall be recorded by the Contractor on an "Incidence of Noncompliance (ION)" form that is to be filed with the Engineer within 5 days of the observation. A blank copy of this form is included in **Appendix H**.

The ION report must include specific information on the cause of the noncompliance, actions which were taken to prevent any further incidents of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority and retained to become part of the SWPPP.

4.3 Maintenance

The Contractor shall perform ongoing maintenance as described in Section 31 25 00. The Contractor shall adjust, realign or rebuild erosion control devices as required throughout the life of the project as necessary to maintain their intended function. The Contractor shall maintain the measures in place or adjust its practices and implementation of the SWPPP as appropriate to accommodate the situation as observed by the inspector.

PART 5 - RETENTION OF RECORDS

A copy of the SWPPP shall be retained at the construction site from the date of project initiation to the date of final stabilization. At the termination of the project, the SWPPP shall become property of the Owner. The Owner will retain the SWPPP, inspection reports, and all other information for a period of at least three (3) years.

PART 6 - CONTRACTOR'S CERTIFICATION

The NPDES permit applicable to this Project requires that the Contractor and/or subcontractors responsible for maintaining specific erosion control measures be clearly identified. The Contractor will be responsible for site management and temporary facilities. The Contractor may wish to share responsibility for certain measures and dictate responsibility for erosion control measures among particular contractors and subcontractors, in accordance with the contract documents. All contractors and sub-contractors identified in the Plan must sign a copy of the certification statement below. A Project Directory shall be included in **Appendix J**.

Certification Statement:

I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) Permit ILR10 that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification. See the Signatory Requirements in Part VI. G. of the NPDES Permit No. ILR10(**Appendix A**).

General Contractor Information:

Name: _____

Telephone Number: _____

Mailing Address: _____

Signed: _____

Title: Project Manager

Date: _____

Sub-Contractor Information:

Name: _____

Telephone Number: _____

Mailing Address: _____

Signed: _____

Title: _____

Date: _____

Sub-Contractor Information:

Name: _____

Telephone Number: _____

Mailing Address: _____

Signed: _____

Title: _____

Date: _____

APPENDIX A

General NPDES Permit No. ILR10

NPDES Permit No. ILR10

General NPDES Permit No. ILR10

Illinois Environmental Protection Agency
Division of Water Pollution Control
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
www.epa.state.il.us

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

General NPDES Permit
For
Storm Water Discharges From Construction Site Activities

Expiration Date: August 31, 2028

Issue Date: September 13, 2023

Effective Date: September 22, 2023

In compliance with the provisions of the Illinois Environmental Protection Act, the Illinois Pollution Control Board Rules and Regulations (35 Ill. Adm. Code, Subtitle C, Chapter I), and the Clean Water Act, and the regulations thereunder the following discharges are authorized by this permit in accordance with the conditions and attachments herein.



Darin E. LeCrone, P.E.
Manager, Permit Section
Division of Water Pollution Control

Part I. COVERAGE UNDER THIS PERMIT

A. **Permit Area.** The permit covers all areas of the State of Illinois with discharges to any Waters of the United States.

B. **Eligibility.**

1. This permit shall authorize all discharges of storm water associated with industrial activity from a construction site that will result in the disturbance of one or more acres total land area or a construction site less than one acre of total land that is a part of a larger common plan of development or sale if the larger common plan will ultimately disturb one or more acres total land area. This permit may authorize discharges from other construction site activities that have been designated by the Agency as having the potential to adversely affect the water quality of Waters of the United States. Where discharges from construction sites were initially covered under the previous version of the ILR10, the Notice of Intent and Storm Water Pollution Prevention Plan must be updated/revised as necessary to ensure compliance with the provisions of this reissued ILR10 permit.
2. This permit may only authorize a storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
 - a. the industrial source other than construction is located on the same site as the construction activity;
 - b. storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 - c. storm water discharges associated with industrial activity from the areas of the site where industrial activities other than construction are occurring (including storm water discharges from dedicated asphalt plants and dedicated concrete plants) are covered by a different NPDES general permit or an individual permit authorizing such discharges.
3. **Limitations on Coverage.** The following storm water discharges from construction sites are not authorized by this permit:
 - a. storm water discharges associated with industrial activities that originate from the site after construction activities have been completed and the site has undergone final stabilization;
 - b. discharges that are mixed with sources of non-storm water other than discharges identified in Part III.A (Prohibition on Non-Storm Water Discharges) of this permit and in compliance with paragraph IV.D.5 (Non-Storm Water Discharges) of this permit;

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- c. storm water discharges associated with industrial activity that are subject to an existing NPDES individual or general permit or which are issued a permit in accordance with Part VI.N (Requiring an Individual Permit or an Alternative General Permit) of this permit. Such discharges may be authorized under this permit after an existing permit expires provided the existing permit did not establish numeric limitations for such discharges;
- d. storm water discharges from construction sites that the Agency has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard;
- e. storm water discharges that the Agency, at its discretion, determines are not appropriately authorized or controlled by this general permit; and
- f. storm water discharges to any receiving water specified under 35 Ill. Adm. Code 302.105(d) (6).

C. Authorization.

- 1. In order for storm water discharges from construction sites to be authorized to discharge under this general permit a discharger must submit a Notice of Intent (NOI) in accordance with the requirements of Part II below.
- 2. Where a new contractor is selected after the submittal of an NOI under Part II below, or where site ownership is transferred, the Notice of Intent (NOI) must be modified by the owner in accordance with Part II within 30 days of commencement of work of the new contractor.
- 3. Unless notified by the Agency to the contrary, dischargers who submit an NOI and a stormwater pollution prevention plan (SWPPP) in accordance with the requirements of this permit are authorized to discharge storm water from construction sites under the terms and conditions of this permit in 30 days after the date the NOI and SWPPP are received by the Agency.
- 4. The Agency may deny coverage under this permit and require submittal of an application for an individual NPDES permit based on a review of the NOI or other information.

Part II. NOTICE OF INTENT REQUIREMENTS

A. Deadlines for Notification.

- 1. To receive authorization under this general permit, a discharger must submit a completed Notice of Intent (NOI) in accordance with Part VI.G (Signatory Requirements) and the requirements of this Part in sufficient time to allow a 30 day review period after the receipt of the NOI by the Agency and prior to the start of construction. In compliance with the Federal Electronic Reporting Rule, the Agency has transitioned all General Storm Water Permits for Construction Site Activities to the Central Data Exchange (CDX) system. NOIs shall be submitted electronically at <https://cdx.epa.gov>. More information, including registration information for the CDX system, can be obtained on the IEPA website, <https://epa.illinois.gov/topics/forms/water-permits/storm-water/construction.html>.
- 2. Where discharges associated with construction activities were initially covered under the previous version of ILR10 and are continuing, a new NOI and updated/revised Storm Water Pollution Prevention Plan must be submitted within 180 days of the effective date of this reissued permit, as necessary to ensure compliance with the provisions of the reissued ILR10. Updating of the SWPPP is not required if construction activities are completed and a Notice of Termination is submitted within 180 days of the effective date of this permit.
- 3. A discharger may submit an NOI in accordance with the requirements of this Part after the start of construction. In such instances, the Agency may bring an enforcement action for any discharges of storm water associated with industrial activity from a construction site that have occurred on or after the start of construction.

B. **Failure to Notify.** Dischargers who fail to notify the Agency of their intent to be covered, and discharge storm water associated with construction site activity to Waters of the United States without an NPDES permit are in violation of the Environmental Protection Act and Clean Water Act.

C. **Contents of Notice of Intent.** The Notice of Intent shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit by all of the entities identified in paragraph 2 below and shall include the following information as prompted by the CDX system:

- 1. The mailing address, and location of the construction site for which the notification is submitted. Where a mailing address for the site is not available, the location can be described in terms of the latitude and longitude of the approximate center of the facility to the nearest 15 seconds, or the nearest quarter section (if the section, township and range is provided) that the construction site is located in;
- 2. The owner's name, address, telephone number, and status as Federal, State, private, public or other entity;
- 3. The name, address and telephone number of the general contractor(s) that have been identified at the time of the NOI submittal;
- 4. The name of the receiving water(s), or if the discharge is through a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water(s), the latitude and longitude of the discharge point, and any known impairments and completed TMDLs for the receiving water;
- 5. The number of any NPDES permits for any discharge (including non-storm water discharges) from the site that is currently authorized by an NPDES permit;
- 6. A description of the project, detailing the complete scope of the project, estimated timetable for major activities, an estimate of the number of acres of the site on which soil will be disturbed, an indication of whether or not the installation of stormwater controls will require subsurface earth disturbance, an indication of whether or not the pre-development land was used for agriculture, and an indication of whether or not the project will include demolition of structures built or renovated before January 1, 1980;
- 7. For projects that have complied with State law on historic preservation and endangered species prior to submittal of the NOI, through coordination with the Illinois Historic Preservation Agency and the Illinois Department of Natural Resources or through fulfillment of the terms of interagency

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agreements with those agencies, the NOI shall indicate that such compliance has occurred.

8. An indication of whether or not polymers, flocculants, cationic treatment chemicals, or other treatment chemicals will be used at the construction site;
9. An electronic copy of the storm water pollution prevention plan that has been prepared for the site in accordance with Part IV of this permit.
10. The notice of intent shall be modified using the CDX system for any substantial modifications to the project such as: address changes, new contractors, area coverage, additional discharges to Waters of the United States, or other substantial modifications. The notice of intent shall be modified within 30 days of the modification to the project.

D. Where to Submit.

Construction activities which discharge storm water that requires a NPDES permit submit an NOI to the Agency. The applicable fee shall also be submitted. NOIs must be signed in accordance with Part VI.G (Signatory Requirements) of this permit. The NOI and SWPPP must be submitted to the Agency electronically using the CDX system with digital signature at the following website address: <https://cdx.epa.gov>. Registration specific to the permittee is required in order to file electronically.

Submit the appropriate fee with the permit ID number assigned during completion of the NOI to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control, Mail Code #15
Attention: Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

- E. **Additional Notification.** Construction activities that are operating under approved local sediment and erosion plans, land disturbance permits, grading plans, or storm water management plans, in addition to filing copies of the Notice of Intent in accordance with Part D above, shall also submit signed copies of the Notice of Intent to the local agency approving such plans in accordance with the deadlines in Part A above. See Part IV.D.2.d (Approved State or Local Plans). A copy of the NOI shall be sent to the entity holding an active General NPDES Permit No. ILR40 if the permittee is located in an area covered by an active ILR40 permit.
- F. **Notice of Termination.** Where a site has completed final stabilization and all storm water discharges from construction activities that are authorized by this permit are eliminated, the permittee must submit a completed Notice of Termination (NOT) that is signed in accordance with Part VI.G (Signatory Requirements) of this permit. All Notices of Termination are to be submitted to the Agency electronically using the CDX system with digital signatures, at the web address listed in Part II.D.

Part III. SPECIAL CONDITIONS, MANAGEMENT PRACTICES, AND OTHER NON-NUMERIC LIMITATIONS

A. Prohibition on Non-Storm Water Discharges.

1. Except as provided in Part I paragraph B.2 and paragraphs 2, 3 or 4 below, all discharges covered by this permit shall be comprised entirely of storm water.
2.
 - a. Except as provided in paragraph b below, discharges of materials other than storm water must be in compliance with a NPDES permit (other than this permit) issued for the discharge.
 - b. The following non-storm water discharges may be authorized by this permit provided the non-storm water component of the discharges is in compliance with Part IV.D.5 (Non-Storm Water Discharges): discharges from fire fighting activities; fire hydrant flushings; waters used to wash vehicles where detergents are not used; waters used to control dust; potable water sources including uncontaminated waterline flushings; landscape irrigation drainages; routine external building washdown which does not use detergents; pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; uncontaminated air conditioning condensate; uncontaminated spring water; uncontaminated ground water; and foundation or footing drains where flows are not contaminated with process materials such as solvents.
3. The following non-storm water discharges are prohibited by this permit: concrete and wastewater from washout of concrete (unless managed by an appropriate control), wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance, soaps, solvents, or detergents, toxic or hazardous substances from a spill or other release, or any other pollutant that could cause or tend to cause water pollution.
4. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are allowable if managed by appropriate controls.
 - a. Dewatering discharges shall be routed through a sediment control (e.g., sediment trap or basin, pumped water filter bag) designed to minimize discharges with visual turbidity;
 - b. The discharge shall not include visible floating solids or foam;
 - c. The discharge must not cause the formation of a visible sheen on the water surface, or visible oily deposits on the bottom or shoreline of the receiving water. An oil-water separator or suitable filtration device shall be used to treat oil, grease, or other similar products if dewatering water is found to or expected to contain these materials;
 - d. To the extent feasible, use well-vegetated (e.g., grassy or wooded), upland areas of the site to infiltrate dewatering water before discharge. You are prohibited from using receiving waters as part of the treatment area;
 - e. To minimize dewatering-related erosion and related sediment discharges, use stable, erosion-resistant surfaces (e.g., well-vegetated

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grassy areas, clean filter stone, geotextile underlayment) to discharge from dewatering controls. Do not place dewatering controls, such as pumped water filter bags, on steep slopes (15% or greater in grade);

- f. Backwash water (water used to backwash/clean any filters used as part of stormwater treatment) must be properly treated or hauled off-site for disposal; and
- g. Dewatering treatment devices shall be properly maintained.

B. Discharges into Receiving Waters with an Approved Total Maximum Daily Load (TMDL):

Discharges to waters for which there is a TMDL allocation for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation) are not eligible for coverage under this permit unless the owner/operator develops and certifies a SWPPP that is consistent with wasteload allocations in the approved TMDL. To be eligible for coverage under this general permit, operators must incorporate into their SWPPP any conditions and/or Best Management Practices applicable to their discharges necessary for consistency with the TMDL within any timeframes established in the TMDL. If a specific numeric waste load allocation has been established that would apply to the project's discharges, the operator must incorporate that allocation into its SWPPP and implement necessary steps to meet that allocation.

Please refer to the Agency website at: <https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls/reports.html>

- C. In the absence of information demonstrating otherwise, it is expected that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, that discharges are not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part IV.D.5 of this Permit. Discharges covered by this permit, alone or in combination with other sources, shall not cause or contribute to a violation of any applicable water quality standard.

Part IV. STORM WATER POLLUTION PREVENTION PLANS

A storm water pollution prevention plan shall be developed for each construction site covered by this permit. Storm water pollution prevention plans shall be prepared in accordance with good engineering practices. The plan shall identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with construction site activity from the facility. In addition, the plan shall describe and ensure the implementation of best management practices which will be used to reduce the pollutants in storm water discharges associated with construction site activity and to assure compliance with the terms and conditions of this permit. The permittee must implement the provisions of the storm water pollution prevention plan required under this part as a condition of this permit.

A. Deadlines for Plan Preparation and Compliance.

The plan shall:

- 1. Be completed prior to the start of the construction activities to be covered under this permit and submitted electronically to the Agency at the time the Notice of Intent is submitted; and
- 2. Provide for compliance with the terms and schedules of the plan beginning with the initiation of construction activities.

B. Signature, Plan Review and Notification.

- 1. The plan shall be signed in accordance with Part VI.G (Signatory Requirements), and be retained at the construction site which generates the storm water discharge in accordance with Part VI.E (Duty to Provide Information) of this permit. If an on-site location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of the construction site.
- 2. Prior to commencement of construction, the permittee shall provide the plan to the Agency.
- 3. The permittee shall make plans available upon request from this Agency or a local agency approving sediment and erosion plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system. A list of permitted municipal separate storm sewer systems is available at: <https://epa.illinois.gov/topics/forms/water-permits/storm-water/urbanized-area-list.htm>
- 4. The Agency may notify the permittee at any time that the plan does not meet one or more of the minimum requirements of this Part. Such notification shall identify those provisions of the permit which are not being met by the plan, and identify which provisions of the plan require modifications in order to meet the minimum requirements of this part. Within 7 days from receipt of notification from the Agency, the permittee shall make the required changes to the plan and shall submit to the Agency a written certification that the requested changes have been made. Failure to comply shall terminate authorization under this permit.
- 5. A copy of the letter of notification of coverage along with the General NPDES Permit for Storm Water Discharges from Construction Site Activities or other indication that storm water discharges from the site are covered under an NPDES permit shall be posted at the site in a prominent place for public viewing (such as alongside a building permit).
- 6. All storm water pollution prevention plans and all completed inspection forms/reports required under this permit are considered reports that shall be available to the public within 30 days upon request. If a storm water pollution prevention plan or inspection form/report cannot be provided, the permittee shall respond to the request within 30 days with a statement that explains why the document cannot be provided. However, the permittee may claim any portion of a storm water pollution prevention plan as confidential in accordance with 40 CFR Part 2.

- C. **Keeping Plans Current.** The permittee shall amend the plan whenever there is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to Waters of the United States and which has not otherwise been addressed in the plan or if the storm water pollution prevention plan proves to be ineffective in eliminating or significantly minimizing pollutants from sources identified under paragraph D.2 below, or in otherwise achieving the general objectives of controlling pollutants in storm water discharges associated with construction site activity. In addition, the plan shall be amended to identify any new contractor and/or subcontractor that will implement a measure

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of the storm water pollution prevention plan. Amendments to the plan may be reviewed by the Agency in the same manner as Part IV.B above. The SWPPP and site map must be modified within 7 days for any changes to construction plans, stormwater controls or other activities at the site that are no longer accurately reflected in the SWPPP. Any revisions of the documents for the storm water pollution prevention plan shall be kept on site at all times.

D. Contents of Plan. The storm water pollution prevention plan shall include the following items:

1. **Site Description.** Each plan shall provide a description of the following:
 - a. A description of the nature of the construction activity or demolition work;
 - b. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils, on-site or off-site storage of materials);
 - c. An estimate of the total area of the site and the total area of the site that is expected to be disturbed by clearing, grubbing, excavation, grading, on-site or off-site stockpiling of soils and storage of materials, or other activities;
 - d. An estimate of the runoff coefficient of the site after construction activities are completed and existing data describing the soil or the quality of any discharge from the site;
 - e. A site map indicating drainage patterns and approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking, areas of soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, locations of on-site or off-site soil stockpiling or material storage, surface waters (including wetlands), and locations where storm water is discharged to a surface water or MS4. For sites discharging to an MS4, a separate map identifying the location of the construction site and the location where the MS4 discharges to surface water must also be included; and
 - f. The name of the receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site.
2. **Controls.** Each plan shall include a description of appropriate controls that will be implemented at the construction site and any off-site stockpile or storage area unless already authorized by a separate NPDES permit. The plan shall include details or drawings that show proper installation of controls and BMPs. The Illinois Urban Manual <https://illinoisurbanmanual.org/> or other similar documents shall be used for developing the appropriate management practices, controls or revisions of the plan. The plan will clearly describe for each major activity identified in paragraph D.1 above, appropriate controls and the timing during the construction process that the controls will be implemented. For example, perimeter controls for one portion of the site will be installed after the clearing and grubbing necessary for installation of the measure, but before the clearing and grubbing for the remaining portions of the site. Perimeter controls will be actively maintained and/or repaired until final stabilization of those portions of the site upward of the perimeter control. Temporary perimeter controls will be removed after final stabilization. The description of controls shall address as appropriate the following minimum components:
 - a. **Erosion and Sediment Controls.** The permittee shall design, install and maintain effective erosion controls and sediment controls to minimize the discharge of pollutants. At a minimum, such controls must be designed, installed and maintained to:
 - (i) Control storm water volume and velocity within the site to minimize soil erosion;
 - (ii) Control storm water discharges, including both peak flowrates and total storm water volume, to minimize erosion at outlets and to minimize downstream channel and streambank erosion;
 - (iii) Minimize the amount of soil exposed during construction activity through the use of project phasing or other appropriate techniques;
 - (iv) Minimize the disturbance of steep slopes;
 - (v) Minimize sediment discharges from the site. The design, installation and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity and duration of precipitation, the nature of resulting storm water runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site. Install sediment controls along any perimeter areas of the site that are downslope from any exposed soil or other disturbed areas, with both ends of the perimeter control installed upslope (e.g., at 45 degrees) to prevent stormwater from circumventing the edge of the perimeter control. After a storm event, if there is evidence of stormwater circumventing or undercutting the perimeter control, extend controls and/or repair undercut areas to fix the problem;
 - (vi) Provide and maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infiltration would be inadvisable due to the underlying geology (e.g. karst topography) and ground water contamination concerns, or infeasible due to site conditions;
 - (vii) Minimize soil compaction and, unless infeasible, preserve topsoil;
 - (viii) Minimize sediment track-out. Where sediment has been tracked-out from your site onto paved roads, sidewalks, or other paved areas outside of your site, remove the deposited sediment by the end of the same business day in which the track-out occurs or by the end of the next business day if track-out occurs on a non-business day. Remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any Water of the U.S., or to any stormwater conveyance or storm drain inlet, or constructed or natural site drainage features, unless the feature is connected to a sediment basin, sediment trap, or similarly effective control; and,
 - (ix) Minimize dust. On areas of exposed soils, minimize the generation of dust through the appropriate application of water or other dust suppression techniques.
 - b. **Stabilization Practices.** The storm water pollution prevention plan shall include a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans should ensure that existing vegetation is preserved where practicable and that disturbed portions of the site are stabilized. Stabilization practices may include: temporarily seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, staged or staggered development, and other appropriate measures. A record of the dates when major grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated, shall be included in the plan. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating or other earth disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization of disturbed areas must be initiated within 1 working

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day of permanent or temporary cessation of earth disturbing activities and shall be completed as soon as possible but not later than 14 days from the initiation of stabilization work in an area. Exceptions to these time frames are specified as provided in paragraphs (i) and (ii) below:

- (i) Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (ii) On areas where construction activity has temporarily ceased and will resume after 14 days, a temporary stabilization method can be used. Temporary stabilization techniques and materials shall be described in the SWPPP.
 - (iii) Stabilization is not required for exit points at linear utility construction sites that are used only episodically and for very short durations over the life of the project, provided other exit point controls are implemented to minimize sediment track-out.
- c. **Structural Practices.** A description of structural practices utilized to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Structural practices should be placed on upland soils to the degree practicable. The installation of these devices may be subject to Section 404 of the CWA.
- (i) The following design requirements apply to sediment basins if such structural practices will be installed to reduce sediment concentrations in storm water discharges:
 - a. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge.
 - b. Minimize erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), at the inlet and outlet using erosion controls and velocity dissipation devices:
 - c. Sediment basins shall be designed to facilitate maintenance, including sediment removal from the basins, as necessary.
 - (ii) The following requirements apply to protecting storm drain inlets:
 - a. Install inlet protection measures that minimize sediment from discharges prior to entry into any storm drain inlet that carries stormwater flow from your site to a water of the U.S., provided you have authority to access the storm drain inlet; and
 - b. Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, remove the deposited sediment by the end of the same business day in which it is found or by the end of the following business day if removal by the same business day is not feasible.
 - c. Where inlet protection measures are not required because the storm drain inlets to which your site discharges are conveyed to a sediment basin, sediment trap, or similarly effective control, include a short description of the control that receives the stormwater flow from the site.
- d. **Use of Treatment Chemicals.** Identify the use of all polymer flocculants or treatment chemicals at the site. Dosage of treatment chemicals shall be identified along with any information from any Material Safety Data Sheet. Describe the location of all storage areas for chemicals. Include any information from the manufacturer's specifications. Treatment chemicals must be stored in areas where they will not be exposed to precipitation. The SWPPP must describe procedures for use of treatment chemicals and staff responsible for use/application of treatment chemicals must be trained on the established procedures.
- e. **Best Management Practices for Impaired Waters.** For any site which discharges directly to an impaired water identified on the Agency's website for 303(d) listing for suspended solids, turbidity, or siltation the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations or the Illinois Urban Manual, the storm water pollution prevention plan shall adhere to a more restrictive design criteria. Please refer to the Agency's website at: <https://epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list.html>
- f. **Pollution Prevention.** The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:
- (i) Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
 - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to storm water. Minimization to exposure is not required for any products or materials where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or when exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use);
 - (iii) Minimize the exposure of fuel, oil, hydraulic fluids, other petroleum products, and other chemicals by storing in covered areas or containment areas. Any chemical container with a storage of 55 gallons or more must be stored a minimum of 50 feet from receiving waters, constructed or natural site drainage features, and storm drain inlets. If infeasible due to site constraints, store containers as far away as the site permits and document in your SWPPP the specific reasons why the 50-foot setback is infeasible and how the containers will be stored; and
 - (iv) Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.
- g. **Other Controls.**
- (i) **Waste Disposal.** No solid materials, including building materials, shall be discharged to Waters of the United States, except as authorized by a Section 404 permit.
 - (ii) The plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
 - (iii) For construction sites that receive concrete or asphalt from off-site locations, the plan must identify and include appropriate controls and measures to reduce or eliminate discharges from these activities.
 - (iv) The plan shall include spill response procedures and provisions for reporting if there are releases in excess of reportable quantities.
 - (v) The plan shall ensure that regulated hazardous or toxic waste must be stored and disposed in accordance with any applicable State

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and Federal regulations.

- h. **Best Management Practices for Post-Construction Storm Water Management.** Describe the measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. The installation of these devices may be subject to Section 404 of the CWA. This permit only addresses the installation of storm water management measures, and not the ultimate operation and maintenance of such structures after the construction activities have been completed and the site has undergone final stabilization. Permittees are responsible for only the installation and maintenance of storm water management measures prior to final stabilization of the site, and are not responsible for maintenance after storm water discharges associated with industrial activity have been eliminated from the site.

- (i) While not mandatory, it is advisable that the permittee consider including in its storm water pollution prevention plan and design and construction plans methods of post-construction storm water management to retain the greatest amount of post-development storm water run-off practicable, given the site and project constraints. Such practices may include but are not limited to: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). Technical information on many post-construction storm water management practices is included in the Illinois Urban Manual (2017).

The storm water pollution prevention plan shall include an explanation of the technical basis used to select the practices to control pollution where post-construction flows will exceed predevelopment levels.

- (ii) Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).
- (iii) Unless otherwise specified in the Illinois Urban Manual (2017), the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

i. **Approved State or Local Plans.**

- (i) The management practices, controls and other provisions contained in the storm water pollution prevention plan must be at least as protective as the requirements contained in the Illinois Urban Manual, (2017). Construction activities which discharge storm water must include in their storm water pollution prevention plan procedures and requirements specified in applicable sediment and erosion control plans or storm water management plans approved by local officials. Requirements specified in sediment and erosion control plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under this permit, incorporated by reference and are enforceable under this permit. The plans shall include all requirements of this permit and include more stringent standards required by any local approval. This provision does not apply to provisions of master plans, comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit that is issued for the construction site.
- (ii) Dischargers seeking alternative permit requirements are not authorized by this permit and shall submit an individual permit application in accordance with 40 CFR 122.26 at the address indicated in Part II.D (Where to Submit) of this permit, along with a description of why requirements in approved local plans or permits should not be applicable as a condition of an NPDES permit.

j. **Natural Buffers.** For any stormwater discharges from construction activities within 50 feet of a Waters of the United States, except for activities for water-dependent structures authorized by a Section 404 permit, the permittee shall:

- (i) Provide a 50-foot undisturbed natural buffer between the construction activity and the Waters of the United States; or
(ii) Provide additional erosion and sediment controls within that area.

3. **Maintenance.**

- a. The plan shall include a description of procedures to maintain in good and effective operating conditions, all erosion and sediment control measures and other Best Management Practices, including vegetation and other protective measures identified in the Storm Water Pollution Prevention Plan.
- b. Where a basin has been installed to control sediment during construction activities, the Permittees shall keep the basin(s) in effective operating condition and remove accumulated sediment as necessary. Sediment shall be removed in accordance with the Illinois Urban Manual (2017) or more frequently. Maintenance of any sediment basin shall include a post construction clean out of accumulated sediment if the basin is to remain in place.
- c. Other erosion and sediment control structures shall be maintained and cleaned as necessary to keep structure(s) in effective operating condition, including removal of excess sediment as necessary.

4. **Inspections.** Qualified personnel (provided by the permittee) shall inspect disturbed areas of the construction site that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm or by the end of the following business or work day that is 0.50 inches or greater. Qualified personnel means a person knowledgeable in the principles and practices of erosion and sediment controls measures, such as a licensed Professional Engineer (P.E.), a Certified Professional in Erosion and Sediment Control (CPESC), a Certified Erosion Sediment and Storm Water Inspector (CESSWI), a Certified Stormwater Inspector (CSI), a person that has successfully completed the Federal CGP Inspector Training offered by USEPA, or other knowledgeable person who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the construction activities. Areas inaccessible during inspections due to flooding or other unsafe conditions shall be inspected within 72 hours of becoming accessible.

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- a. Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions (when ground and/or air temperatures are at or below 32 degrees Fahrenheit). Weekly inspections will recommence when construction activities are conducted, or if there is a 0.50 inches or greater rain event, or a discharge due to snowmelt occurs.
- b. Disturbed areas, areas used for storage of materials that are exposed to precipitation and all areas where stormwater typically flows within the site shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. All locations where stabilization measures have been implemented shall be observed to ensure that they are still stabilized. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking.
- c. For sites discharging dewatering water, you must conduct an inspection during the discharge, once per day on which the discharge occurs and record the following in a report within 24 hours of completing the inspection:
 - (i) The inspection date;
 - (ii) Names and titles of personnel performing the inspection;
 - (iii) Approximate times that the dewatering discharge began and ended on the day of inspection;
 - (iv) Estimates of the rate (in gallons per day) of discharge on the day of inspection;
 - (v) Whether or not any of the following indications of pollutant discharge were observed at the point of discharge: a sediment plume, suspended solids, unusual color, presence of odor, decreased clarity, or presence of foam; and/or a visible sheen on the water surface or visible oily deposits on the bottom or shoreline of the receiving water.
- d. Based on the results of the inspection, the description of potential pollutant sources identified in the storm water pollution prevention plan in accordance with Part IV.D.1 (Site Description) of this permit and the pollution prevention control measures identified in the plan in accordance with Part IV.D.2 (Controls) of this permit shall be revised as appropriate as soon as practicable after such inspection to minimize the potential for such discharges. Such modifications shall provide for timely implementation of any changes to the plan and pollution prevention control measures within 7 calendar days following the inspection.
- e. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with paragraph b above shall be made and retained as part of the storm water pollution prevention plan for at least three years from the date that the permit coverage expires or is terminated. All inspection reports shall be retained at the construction site. The report shall be signed in accordance with Part VI.G (Signatory Requirements) of this permit. Any flooding or other unsafe conditions that delay inspections shall be documented in the inspection report.
- f. The permittee shall notify the appropriate Agency Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax (see Attachment A) within 24 hours of any incidence of noncompliance for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. The permittee shall complete and submit within 5 days an "Incidence of Noncompliance" (ION) report for any violation of the storm water pollution prevention plan observed during any inspection conducted, or for violations of any condition of this permit. Submission shall be on forms provided by the Agency and include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. Corrective actions must be undertaken immediately to address the identified non-compliance issue(s).
- g. All reports of noncompliance shall be signed by a responsible authority as defined in Part VI.G (Signatory Requirements).
- h. After the initial contact has been made with the appropriate Agency Field Operations Section Office, all reports of noncompliance shall be mailed to the Agency at the following address:

Illinois Environmental Protection Agency
 Division of Water Pollution Control
 Compliance Assurance Section
 1021 North Grand Avenue East
 Post Office Box 19276
 Springfield, Illinois 62794-9276

5. Corrective Actions. You must take corrective action to address any of the following conditions identified at your site:

- a. A stormwater control needs repair or replacement; or
- b. A stormwater control necessary to comply with the requirements of this permit was never installed, or was installed incorrectly; or
- c. Your discharges are causing an exceedance of applicable water quality standards; or
- d. A prohibited discharge has occurred.

Corrective Actions shall be completed as soon as possible and documented within 7 days in an Inspection Report or report of noncompliance. If it is infeasible to complete the installation or repair within seven (7) calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as feasible after the 7-day timeframe.

In the event that maintenance is required for the same stormwater control at the same location three or more times, the control shall be repaired in a manner that prevents continued failure to the extent feasible, and you must document the condition and how it was repaired in your records. Alternatively, you must document in your records why the specific recurrence of this same issue should continue to be addressed as a routine maintenance fix.

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6. **Non-Storm Water Discharges.** Except for flows from fire fighting activities, sources of non-storm water listed in Part III.A.2 of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.
- E. **Additional requirements for storm water discharges from industrial activities other than construction, including dedicated asphalt plants, and dedicated concrete plants.** This permit may only authorize any storm water discharge associated with industrial activity from a construction site that is mixed with a storm water discharge from an industrial source other than construction, where:
1. The industrial source other than construction is located on the same site as the construction activity;
 2. Storm water discharges associated with industrial activity from the areas of the site where construction activities are occurring are in compliance with the terms of this permit; and
 3. Storm water discharges associated with industrial activity from the areas of the site where industrial activity other than construction are occurring (including storm water discharges from dedicated asphalt plants [other than asphalt emulsion facilities] and dedicated concrete plants) are in compliance with the terms, including applicable NOI or application requirements, of a different NPDES general permit or individual permit authorizing such discharges.
- F. **Contractors.**
1. The storm water pollution prevention plan must clearly identify for each measure identified in the plan, the contractor(s) or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in paragraph 2 below in accordance with Part VI.G (Signatory Requirements) of this permit. All certifications must be included in the storm water pollution prevention plan except for owners that are acting as contractors.
 2. **Certification Statement.** All contractors and subcontractors identified in a storm water pollution prevention plan in accordance with paragraph 1 above shall sign a copy of the following certification statement before conducting any professional service at the site identified in the storm water pollution prevention plan:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature in accordance with Part VI.G of this permit: the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

Part V. RETENTION OF RECORDS

- A. The permittee shall retain copies of storm water pollution prevention plans and all reports and notices required by this permit, records of all data used to complete the Notice of Intent to be covered by this permit and the Agency Notice of Permit Coverage letter for a period of at least three years from the date that the permit coverage expires or is terminated. This period may be extended by request of the Agency at any time.
- B. The permittee shall retain a copy of the storm water pollution prevention plan and any revisions to said plan required by this permit at the construction site from the date of project initiation to the date of final stabilization. Any manuals or other documents referenced in the SWPPP shall also be retained at the construction site.

Part VI. STANDARD PERMIT CONDITIONS

- A. **Duty to Comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Illinois Environmental Protection Act and the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. Failure to obtain coverage under this permit or an individual permit for storm water releases associated with construction activities is a violation of the Illinois Environmental Protection Act and the CWA.
- B. **Continuation of the Expired General Permit.** This permit expires five years from the date of issuance. An expired general permit continues in force and effect until a new general permit or an individual permit is issued. Only those construction activities authorized to discharge under the expiring general permit are covered by the continued permit.
- C. **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- D. **Duty to Mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- E. **Duty to Provide Information.** The permittee shall furnish within a reasonable time to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, any information which is requested to determine compliance with this permit. Upon request, the permittee shall also furnish to the Agency or local agency approving sediment and erosion control plans, grading plans, or storm water management plans; or in the case of a storm water discharge associated with industrial activity which discharges through a municipal separate storm sewer system with an NPDES permit, to the municipal operator of the system, copies of all records required to be kept by this permit.
- F. **Other Information.** When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the Notice of Intent or in any other report to the Agency, he or she shall promptly submit such facts or information.
- G. **Signatory Requirements.** All Notices of Intent, storm water pollution prevention plans, reports, certifications or information either submitted to the

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Agency or the operator of a large or medium municipal separate storm sewer system, or that this permit requires be maintained by the permittee, shall be signed.

1. All Notices of Intent shall be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) any person authorized to sign documents that has been assigned or delegated said authority in accordance with corporate procedures;
- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. All reports required by the permit and other information requested by the Agency shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- a. The authorization is made in writing by a person described above and submitted to the Agency.
- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).
- c. **Changes to Authorization.** If an authorization under Part I.C (Authorization) is no longer accurate because a different individual or position has responsibility for the overall operation of the construction site, a new authorization satisfying the requirements of Part I.C must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. **Certification.** Any person signing documents under this Part shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- H. **Penalties for Falsification of Reports.** Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. Section 44(j)(4) and (5) of the Environmental Protection Act provides that any person who knowingly makes any false statement, representation, or certification in an application form, or form pertaining to a NPDES permit commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- I. **Penalties for Falsification of Monitoring Systems.** The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by fines and imprisonment described in Section 309 of the CWA. The Environmental Protection Act provides that any person who knowingly renders inaccurate any monitoring device or record required in connection with any NPDES permit or with any discharge which is subject to the provisions of subsection (f) of Section 12 of the Act commits a Class A misdemeanor, and in addition to any other penalties provided by law is subject to a fine not to exceed \$10,000 for each day of violation.
- J. **Oil and Hazardous Substance Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under section 311 of the CWA.
- K. **Property Rights.** The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
- L. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.
- M. **Transfers.** This permit is not transferable to any person except after notice to the Agency. The Agency may require the discharger to apply for and obtain an individual NPDES permit as stated in Part I.C (Authorization).
- N. **Requiring an Individual Permit or an Alternative General Permit.**

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1. The Agency may require any person authorized by this permit to apply for and/or obtain either an individual NPDES permit or an alternative NPDES general permit. Any interested person may petition the Agency to take action under this paragraph. Where the Agency requires a discharger authorized to discharge under this permit to apply for an individual NPDES permit, the Agency shall notify the discharger in writing that a permit application is required. This notification shall include a brief statement of the reasons for this decision, an application form, a statement setting a deadline for the discharger to file the application, and a statement that on the effective date of the individual NPDES permit or the alternative general permit as it applies to the individual permittee, coverage under this general permit shall automatically terminate. Applications shall be submitted to the Agency indicated in Part II.D (Where to Submit) of this permit. The Agency may grant additional time to submit the application upon request of the applicant. If a discharger fails to submit in a timely manner an individual NPDES permit application as required by the Agency under this paragraph, then the applicability of this permit to the individual NPDES permittee is automatically terminated at the end of the day specified by the Agency for application submittal. The Agency may require an individual NPDES permit based on:

- a. information received which indicates the receiving water may be of particular biological significance pursuant to 35 Ill. Adm. Code 302.105(d)(6);
- b. whether the receiving waters are impaired waters for suspended solids, turbidity or siltation as identified by the Agency's 303(d) listing;
- c. size of construction site, proximity of site to the receiving stream, etc.

The Agency may also require monitoring of any storm water discharge from any site to determine whether an individual permit is required.

2. Any discharger authorized by this permit may request to be excluded from the coverage of this permit by applying for an individual permit. In such cases, the permittee shall submit an individual application in accordance with the requirements of 40 CFR 122.26(c)(1)(ii), with reasons supporting the request, to the Agency at the address indicated in Part II.D (Where to Submit) of this permit. The request may be granted by issuance of any individual permit or an alternative general permit if the reasons cited by the permittee are adequate to support the request.

3. When an individual NPDES permit is issued to a discharger otherwise subject to this permit, or the discharger is authorized to discharge under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee is automatically terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit, whichever the case may be. When an individual NPDES permit is denied to a discharger otherwise subject to this permit or the discharger is denied for coverage under an alternative NPDES general permit, the applicability of this permit to the individual NPDES permittee remains in effect, unless otherwise specified by the Agency.

O. **State/Environmental Laws.** No condition of this permit shall release the permittee from any responsibility or requirements under other environmental statutes or regulations.

P. **Proper Operation and Maintenance.** The permittee shall at all times properly operate and maintain all construction activities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit and with the requirements of storm water pollution prevention plans. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance requires the operation of backup or auxiliary facilities or similar systems, installed by a permittee only when necessary to achieve compliance with the conditions of the permit.

Q. **Inspection and Entry.** The permittee shall allow the IEPA, or an authorized representative upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated construction activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

R. **Permit Actions.** This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

S. **Bypasses and Upsets.** The provisions of 40 CFR Section 122.41(m) & (n) are applicable and are hereby incorporated by reference.

Part VII. REOPENER CLAUSE

A. If there is evidence indicating potential or realized impacts on water quality due to any storm water discharge associated with industrial activity covered by this permit, the discharger may be required to obtain an individual permit or an alternative general permit in accordance with Part I.C (Authorization) of this permit or the permit may be modified to include different limitations and/or requirements.

B. Permit modification or revocation will be conducted according to provisions of 35 Ill. Adm. Code, Subtitle C, Chapter I and the provisions of 40 CFR 122.62, 122.63, 122.64 and 124.5 and any other applicable public participation procedures.

C. The Agency will reopen and modify this permit under the following circumstances:

1. the U.S. EPA amends its regulations concerning public participation;

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2. a court of competent jurisdiction binding in the State of Illinois or the 7th Circuit Court of Appeals issues an order necessitating a modification of public participation for general permits; or
3. to incorporate federally required modifications to the substantive requirements of this permit.

Part VIII. DEFINITIONS

"Agency" means the Illinois Environmental Protection Agency.

"Best Management Practices" ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control construction site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Commencement of Construction or Demolition Activities" The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction or demolition activities.

"Common Plan of Development or Sale" A contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under one common plan. The "common plan" of development or sale is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, sales pitch, advertisement, drawing, permit application, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating construction activities may occur on a specific plot.

"Construction Activities" Earth disturbing activities, such as clearing, grading and excavation of land. For purposes of this permit, construction activities also means construction site, construction site activities, or site. Construction activities also include any demolition activities at a site.

"Construction Site" or "Site" The land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether.

"Construction Support Activity" A construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Contractor" means a person or firm that undertakes a contract to provide materials or labor to perform a service or do a job related to construction of the project authorized by this permit,

"CWA" means Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Pub. L. 92-500, as amended Pub. L. 95-217, Pub. L. 95-576, Pub. L. (96-483 and Pub. L. 97-117, 33 U.S.C. 1251 et seq.).

"Dedicated portable asphalt plant" A portable asphalt plant that is located on or contiguous to a construction site and that provides asphalt only to the construction site that the plant is located on or adjacent to. The term dedicated portable asphalt plant does not include facilities that are subject to the asphalt emulsion effluent limitation guideline at 40 CFR 443.

"Dedicated portable concrete plant" A portable concrete plant that is located on or contiguous to a construction site and that provides concrete only to the construction site that the plant is located on or adjacent to.

"Dedicated sand or gravel operation" An operation that produces sand and/or gravel for a single construction project.

"Director" means the Director of the Illinois Environmental Protection Agency or an authorized representative.

"Final Stabilization" means that all soil disturbing activities at the site have been completed, and either of the two following conditions are met:

- (i) A uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or
- (ii) Equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles) have been employed.

For individual lots in residential construction, final stabilization means that either:

- (i) The homebuilder has completed final stabilization as specified above, or
- (ii) The homebuilder has established temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization.

"Impairment" is the status of a surface water in which an applicable water quality standard is not being attained for a particular pollutant.

"Large and Medium municipal separate storm sewer system" means all municipal separate storm sewers that are either:

- (i) Located in an incorporated place (city) with a population of 100,000 or more as determined by the latest Decennial Census by the Bureau of Census (these cities are listed in Appendices F and G of 40 CFR Part 122); or
- (ii) Located in the counties with unincorporated urbanized populations of 100,000 or more, except municipal separate storm sewers that are located in the incorporated places, townships or towns within such counties (these counties are listed in Appendices H and I of 40 CFR Part 122); or
- (iii) Owned or operated by a municipality other than those described in paragraph (i) or (ii) and that are designated by the Director as part of the large or medium municipal separate storm sewer system.

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"NOI" means notice of intent to be covered by this permit (see Part II of this permit.)

"NOT" means notice of termination of coverage by this permit (See Part II of this permit.)

"Point Source" means any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Storm Water" means storm water runoff, snow melt runoff, and surface runoff and drainage.

"Storm Water Control" means any best management practice or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Total Maximum Daily Loads (TMDLs)" The calculation of the maximum amount of a pollutant allowed to enter a waterbody so that the waterbody will meet and continue to meet water quality standards for that particular pollutant. A TMDL determines a pollutant reduction target and allocates load reductions necessary to the source(s) of the pollutant.

"Turbidity" means a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Waters" mean all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon the State of Illinois, except that sewers and treatment works are not included except as specially mentioned; provided, that nothing herein contained shall authorize the use of natural or otherwise protected waters as sewers or treatment works except that in-stream aeration under Agency permit is allowable.

"Work day" for the purpose of this permit, a work day is any calendar day on which construction activities will take place.

Attachment A

**Division of Water Pollution Control
Regions by County**

Des Plaines Region (FOS 2) Manager 847/294-4000

| | | | | | |
|-----------------------|--------------------------------|---------------------------|-----------------------------|---------------|-----------------------|
| Boone Kane Ogle | Cook Kankakee Stephenson | DeKalb Kendall Will | DuPage Lake Winnebago | Grundy Lee | Jo Daviess McHenry |
|-----------------------|--------------------------------|---------------------------|-----------------------------|---------------|-----------------------|

Peoria Region (FOS 3) Manager 309/671-3022

| | | | | | |
|--------------------------------------|-----------------------------------|-----------------------------|----------------------------------|-------------------------------|------------------------------|
| Bureau Knox Putnam Woodford | Carroll LaSalle Rock Island | Fulton Marshall Stark | Hancock McDonough Tazewell | Henderson Mercer Warren | Henry Peoria Whiteside |
|--------------------------------------|-----------------------------------|-----------------------------|----------------------------------|-------------------------------|------------------------------|

Champaign Region (FOS 4) Manager 217/278-5800

| | | | | | |
|---|-------------------------|------------------------------|------------------------------|---------------------------------|----------------------------|
| Champaign Douglas Livingston Vermilion | Clark Edgar Macon | Coles Effingham McLean | Crawford Ford Moultrie | Cumberland Iroquois Piatt | DeWitt Jasper Shelby |
|---|-------------------------|------------------------------|------------------------------|---------------------------------|----------------------------|

Springfield Region (FOS 5) Manager 217/557-8761

| | | | | | |
|---------------------------|------------------------|---------------------------------|---------------------------|------------------------------|---------------------|
| Adams Jersey Morgan | Brown Logan Pike | Calhoun Macoupin Sangamon | Cass Mason Schuyler | Christian Menard Scott | Green Montgomery |
|---------------------------|------------------------|---------------------------------|---------------------------|------------------------------|---------------------|

Collinsville Region (FOS 6) Manager 618/346-5120

| | | | | | |
|------------------|----------------------|-----------------------|---------|--------|--------|
| Bond Randolph | Clinton St. Clair | Fayette Washington | Madison | Marion | Monroe |
|------------------|----------------------|-----------------------|---------|--------|--------|

Marion Region (FOS 7) Manager 618/993-7200

| | | | | | |
|--|----------------------------------|--|---|--------------------------------|-----------------------------|
| Alexander Hardin Perry Wabash | Clay Jackson Pope Wayne | Edwards Jefferson Pulaski White | Franklin Johnson Richland Williamson | Gallatin Lawrence Saline | Hamilton Massac Union |
|--|----------------------------------|--|---|--------------------------------|-----------------------------|

Standard Conditions

Definitions

Act means the Illinois Environmental Protection Act, 415 ILCS 5 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L 92-500, as amended. 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of daily discharges over a calendar week, calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 milliliters collected at a randomly-selected time over a period not exceeding 15 minutes.

24-Hour Composite Sample means a combination of at least 8 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

Flow Proportional Composite Sample means a combination of at least 3 sample aliquots of at least 100 milliliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 milliliters collected at periodic intervals such that either the time interval between each aliquot or the volume of each aliquot is proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- (1) **Duty to comply.** The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirements.
- (2) **Duty to reapply.** If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. If the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) **Need to halt or reduce activity not a defense.** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) **Duty to mitigate.** The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) **Proper operation and maintenance.** The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.
- (6) **Permit actions.** This permit may be modified, revoked and reissued, or terminated for cause by the Agency pursuant to 40 CFR 122.62 and 40 CFR 122.63. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- (7) **Property rights.** This permit does not convey any property rights of any sort, or any exclusive privilege.
- (8) **Duty to provide information.** The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency upon request, copies of records required to be kept by this permit.

(9) **Inspection and entry.** The permittee shall allow an authorized representative of the Agency or USEPA (including an authorized contractor acting as a representative of the Agency or USEPA), upon the presentation of credentials and other documents as may be required by law, to:

- (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- (d) Sample or monitor at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

(10) **Monitoring and records.**

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records, and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. Records related to the permittee's sewage sludge use and disposal activities shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503). This period may be extended by request of the Agency or USEPA at any time.
- (c) Records of monitoring information shall include:
 - (1) The date, exact place, and time of sampling or measurements;
 - (2) The individual(s) who performed the sampling or measurements;
 - (3) The date(s) analyses were performed;
 - (4) The individual(s) who performed the analyses;
 - (5) The analytical techniques or methods used; and
 - (6) The results of such analyses.
- (d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit. Where no test procedure under 40 CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approval. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.

(11) **Signatory requirement.** All applications, reports or information submitted to the Agency shall be signed and certified.

(a) **Application.** All permit applications shall be signed as follows:

- (1) For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

(b) **Reports.** All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a); and

(2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and

(3) The written authorization is submitted to the Agency.

(c) **Changes of Authorization.** If an authorization under (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) **Certification.** Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

(12) **Reporting requirements.**

(a) **Planned changes.** The permittee shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.

Notice is required when:

(1) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source pursuant to 40 CFR 122.29 (b); or

(2) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements pursuant to 40 CFR 122.42 (a)(1).

(3) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

(b) **Anticipated noncompliance.** The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) **Transfers.** This permit is not transferable to any person except after notice to the Agency.

(d) **Compliance schedules.** Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(e) **Monitoring reports.** Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(1) Monitoring results must be reported on a Discharge Monitoring Report (DMR).

frequently than required by the permit, using test procedures approved under 40 CFR 136 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

- (3) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Agency in the permit.
 - (f) **Twenty-four hour reporting.** The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24-hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and time; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24-hours:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
 - (2) Any upset which exceeds any effluent limitation in the permit.
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Agency in the permit or any pollutant which may endanger health or the environment.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.
 - (g) **Other noncompliance.** The permittee shall report all instances of noncompliance not reported under paragraphs (12) (d), (e), or (f), at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12) (f).
 - (h) **Other information.** Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) **Bypass.**
- (a) **Definitions.**
 - (1) Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
 - (2) Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
 - (b) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraphs (13)(c) and (13)(d).
 - (c) **Notice.**
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (12)(f) (24-hour notice).

(c) **Formation of bypass.**

- (1) Bypass is prohibited, and the Agency may take enforcement action against a permittee for bypass, unless:
 - (i) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (ii) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (iii) The permittee submitted notices as required under paragraph (13)(c).
 - (2) The Agency may approve an anticipated bypass, after considering its adverse effects, if the Agency determines that it will meet the three conditions listed above in paragraph (13)(d)(1).
- (14) **Upset.**
- (a) **Definition.** Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
 - (b) **Effect of an upset.** An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (14)(c) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
 - (c) **Conditions necessary for a demonstration of upset.** A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated; and
 - (3) The permittee submitted notice of the upset as required in paragraph (12)(f)(2) (24-hour notice).
 - (4) The permittee complied with any remedial measures required under paragraph (4).
 - (d) **Burden of proof.** In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.
- (15) **Transfer of permits.** Permits may be transferred by modification or automatic transfer as described below:
- (a) **Transfers by modification.** Except as provided in paragraph (b), a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued pursuant to 40 CFR 122.62 (b) (2), or a minor modification made pursuant to 40 CFR 122.63 (d), to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act.
 - (b) **Automatic transfers.** As an alternative to transfers under paragraph (a), any NPDES permit may be automatically transferred to a new permittee if:

- (1) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
 - (2) The notice includes a written agreement between the existing and new permittees containing a specified date for transfer of permit responsibility, coverage and liability between the existing and new permittees; and
 - (3) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement.
- (16) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
 - (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 ug/l);
 - (2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6 dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
 - (4) The level established by the Agency in this permit.
 - (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
 - (17) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
 - (a) Any new introduction of pollutants into that POTW from an indirect discharge which would be subject to Sections 301 or 306 of the Clean Water Act if it were directly discharging those pollutants; and
 - (b) Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
 - (18) If the permit is issued to a publicly owned or publicly regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
 - (a) User charges pursuant to Section 204 (b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
 - (b) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
 - (c) Inspection, monitoring and entry pursuant to Section 308 of the Clean Water Act.
 - (19) If an applicable standard or limitation is promulgated under Section 301(b)(2)(C) and (D), 304(b)(2), or 307(a)(2) and that effluent standard or limitation is more stringent than any effluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and reissued to conform to that effluent standard or limitation.
- (20) Any authorization to construct issued to the permittee pursuant to 35 Ill. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
 - (21) The permittee shall not make any false statement, representation or certification in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
 - (22) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$25,000 per day of such violation. Any person who willfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act is subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than one year, or both. Additional penalties for violating these sections of the Clean Water Act are identified in 40 CFR 122.41 (a)(2) and (3).
 - (23) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.
 - (24) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.
 - (25) Collected screening, slurries, sludges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the wastes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
 - (26) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
 - (27) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 Ill. Adm. Code, Subtitle C, Subtitle D, Subtitle E, and all applicable orders of the Board or any court with jurisdiction.
 - (28) The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and effect.
- (Rev. 7-9-2010 bah)

APPENDIX B
NRCS Soil Resource Report



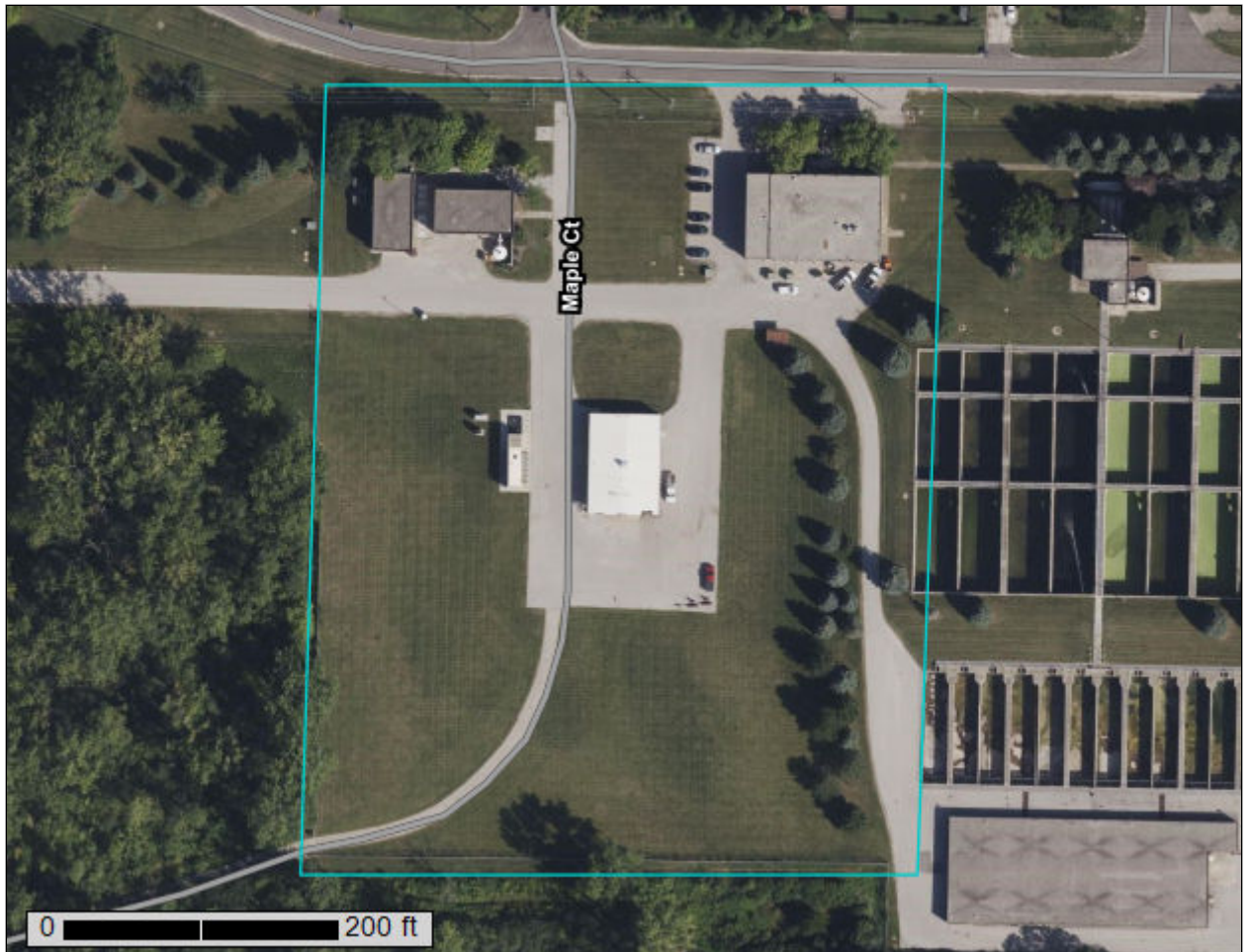
United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Lake County, Illinois



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

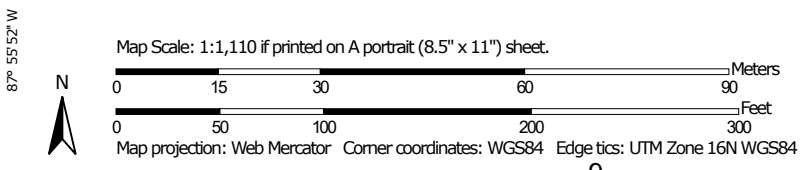
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map


The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map




MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Lake County, Illinois
 Survey Area Data: Version 18, Aug 28, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 19, 2022—Sep 30, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|------------------------------------|--|--------------|----------------|
| 153A | Pella silty clay loam, 0 to 2 percent slopes | 6.0 | 100.0% |
| Totals for Area of Interest | | 6.0 | 100.0% |

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Custom Soil Resource Report

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Lake County, Illinois

153A—Pella silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2smzn
Elevation: 490 to 830 feet
Mean annual precipitation: 34 to 41 inches
Mean annual air temperature: 46 to 54 degrees F
Frost-free period: 150 to 195 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Pella, drained, and similar soils: 96 percent
Minor components: 4 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pella, Drained

Setting

Landform: Till plains, lake plains, outwash plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loess or silty material over calcareous loamy outwash

Typical profile

Ap - 0 to 12 inches: silty clay loam
Bg - 12 to 28 inches: silty clay loam
2Bkg - 28 to 36 inches: silt loam
2Cg - 36 to 60 inches: stratified sandy loam to silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.60 to 2.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Calcium carbonate, maximum content: 40 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B/D
Ecological site: R110XY024IL - Ponded Depressional Sedge Meadow
Hydric soil rating: Yes

Minor Components

Harpster, drained

Percent of map unit: 3 percent

Landform: Depressions on till plains, depressions on outwash plains

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Ecological site: R110XY025IL - Poned Calcareous Sedge Meadow

Hydric soil rating: Yes

Urban land

Percent of map unit: 1 percent

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

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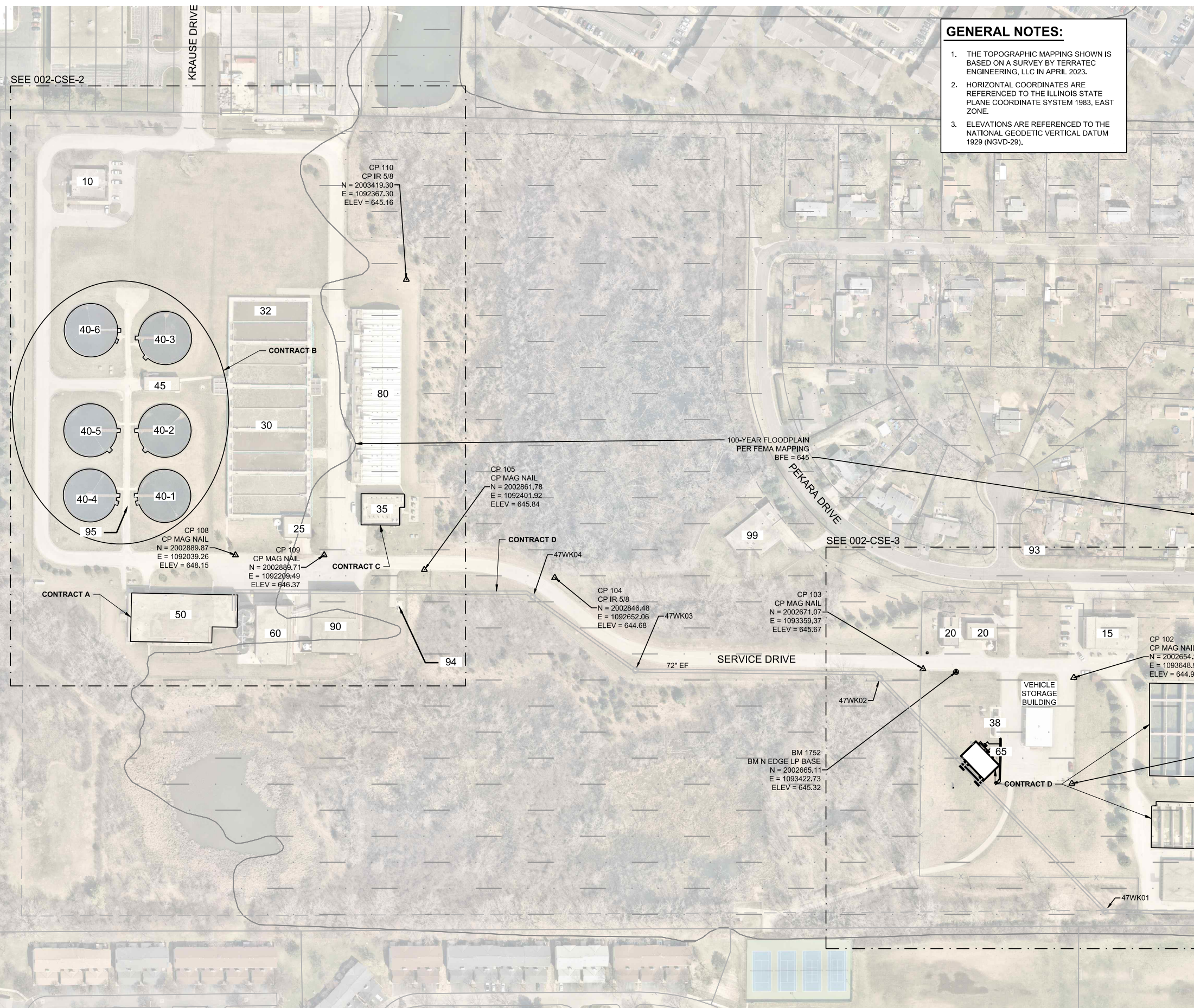
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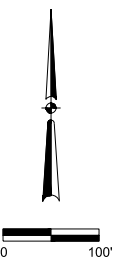
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Appendix C
Erosion Control Plan Drawings



GENERAL NOTES:

- 1. THE TOPOGRAPHIC MAPPING SHOWN IS BASED ON A SURVEY BY TERRATEC ENGINEERING, LLC IN APRIL 2023.
- 2. HORIZONTAL COORDINATES ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM 1983, EAST ZONE.
- 3. ELEVATIONS ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD-29).



STRUCTURE LIST

| | |
|--------------|--|
| 10 | ADMINISTRATION BUILDING |
| 15 | BATTERY A CONTROL BUILDING |
| 20 | BATTERY B RAW WASTEWATER PUMPING STATION |
| 22 | BATTERY A RAW WASTEWATER PUMPING STATION |
| 25 | GRIT REMOVAL BUILDING |
| 29* | EXCESS FLOW BASINS 1-8 |
| 30 | AERATION TANKS |
| 32 | RAS DENITRIFICATION TANK |
| 35* | BATTERY B BLOWER BUILDING |
| 38 | EMERGENCY POWER GENERATOR |
| 39* | EXCESS FLOW BASINS 9-20 |
| 40-1 - 40-6* | FINAL CLARIFIERS 1-6 |
| 45 | RAS/WAS BUILDING |
| 50* | BATTERY B FILTER BUILDING |
| 55 | BATTERY A FILTER BUILDING |
| 60 | BIOSOLIDS DRYING BUILDING |
| 65 | UV DISINFECTION BUILDING |
| 70 | DECHLORINATION/POST AERATION BUILDING |
| 75 | DECHLORINATION/BLOWER BUILDING |
| 80 | SLUDGE STORAGE/FERMENTATION TANKS |
| 90 | SLUDGE DEWATERING BUILDING |
| 93 | INFLUENT JUNCTION BOX |
| 94 | RECYCLE PUMP STATION |
| 95 | SECONDARY EFFLUENT JUNCTION BOX |
| 99 | PEKARA WATER PUMPING STATION |

*EXISTING STRUCTURES WITH WORK INCLUDED IN THIS CONTRACT

| Date | Checked By | Drawn By | Revision Description | Revision Number |
|------|------------|----------|----------------------|-----------------|
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| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 002CK1.DWG |
| Project No. | 14207/14208/ 14212 |
| Project Date | JAN 2024 |

**LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
WRF IMPROVEMENTS**

**SITE DEVELOPMENT
DES PLAINES RIVER WRF KEY AND SURVEY CONTROL PLAN**

**LAKE COUNTY STORMWATER MANAGEMENT COMMISSION
TYPICAL CONSTRUCTION SEQUENCING NOTES**

1. INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL SE/SC MEASURES
 - A. SELECTIVE VEGETATION REMOVAL FOR SILT FENCE INSTALLATION
 - B. SILT FENCE INSTALLATION
 - C. CONSTRUCTION FENCING AROUND AREAS NOT TO BE DISTURBED
 - D. STABILIZED CONSTRUCTION ENTRANCE
2. TREE REMOVAL WHERE NECESSARY (CLEAR & GRUB)
3. CONSTRUCT SEDIMENT TRAPPING DEVICES (SEDIMENT TRAPS, BASINS...)
4. CONSTRUCT DETENTION FACILITIES AND OUTLET CONTROL STRUCTURE WITH RESTRICTOR & TEMPORARY PERFORATED RISER
5. STRIP TOPSOIL, STOCKPILE TOPSOIL AND GRADE SITE
6. TEMPORARILY STABILIZE TOPSOIL STOCKPILES (SEED AND SILT FENCE AROUND TOE OF SLOPE)
7. INSTALL STORM SEWER, SANITARY SEWER, WATER AND ASSOCIATED INLET & OUTLET PROTECTION
8. PERMANENTLY STABILIZE DETENTION BASINS WITH SEED AND EROSION CONTROL BLANKET
9. TEMPORARILY STABILIZE ALL AREAS INCLUDING LOTS THAT HAVE REACHED TEMPORARY GRADE
10. INSTALL ROADWAYS
11. PERMANENTLY STABILIZE ALL OUTLOT AREAS
12. INSTALL STRUCTURES AND GRADE INDIVIDUAL LOTS
13. PERMANENTLY STABILIZE LOTS
14. REMOVE ALL TEMPORARY SE/SC MEASURES AFTER THE SITE IS STABILIZED WITH VEGETATION

* SOIL EROSION AND SEDIMENT CONTROL MAINTENANCE MUST OCCUR EVERY TWO WEEKS AND AFTER EVERY 1/2 OR GREATER RAINFALL EVENT

**LAKE COUNTY STORMWATER MANAGEMENT COMMISSION
SOIL EROSION AND SEDIMENT CONTROL CONSTRUCTION NOTES
(SMC - 2013 REVISION)**

- A. SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- B. FOR THOSE DEVELOPMENTS THAT REQUIRE A DESIGNATED EROSION CONTROL INSPECTOR (DECI), INSPECTIONS AND DOCUMENTATION SHALL BE PERFORMED, AT A MINIMUM:
 - UPON COMPLETION OF SEDIMENT AND RUNOFF CONTROL MEASURES (INCLUDING PERIMETER CONTROLS AND DIVERSIONS), PRIOR TO PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING.
 - AFTER EVERY SEVEN (7) CALENDAR DAYS OR STORM EVENT WITH GREATER THAN 0.5 INCH OF RAINFALL OR LIQUID EQUIVALENT PRECIPITATION.
- C. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION, IF STRIPPING, CLEARING, GRADING, OR LANDSCAPING ARE TO BE DONE IN PHASES, THE PERMITEE SHALL PLAN FOR APPROPRIATE SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- D. A STABILIZED MAT OF CRUSHED STONE MEETING DOT GRADATION CA-1 UNDERLAIN WITH FILTER FABRIC AND IN ACCORDANCE WITH THE ILLINOIS URBAN MANUAL, OR OTHER APPROPRIATE MEASURE(S) AS APPROVED BY THE ENFORCEMENT OFFICER, SHALL BE INSTALLED AT ANY POINT WHERE TRAFFIC WILL BE ENTERING OR LEAVING A CONSTRUCTION SITE. SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- E. TEMPORARY DIVERSIONS SHALL BE CONSTRUCTED AS NECESSARY TO DIRECT ALL RUNOFF FROM HYDROLOGICALLY DISTURBED AREAS TO AN APPROPRIATE SEDIMENT TRAP OR BASIN.
- F. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN SEVEN (7) CALENDAR DAYS FOLLOWING THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- G. ALL STOCKPILES SHALL HAVE APPROPRIATE MEASURES TO PREVENT EROSION. STOCKPILES SHALL NOT BE PLACED IN FLOOD PRONE AREAS OR WETLANDS AND DESIGNATED BUFFERS.
- H. SLOPES STEEPER THAN 3H:1V SHALL BE STABILIZED WITH APPROPRIATE MEASURES AS APPROVED BY THE ENFORCEMENT OFFICER.
- I. APPROPRIATE EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL INTERIOR DETENTION BASIN SIDE SLOPES BETWEEN THE NORMAL WATER LEVEL AND HIGH WATER LEVEL.
- J. STORM SEWERS THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED BY AN APPROPRIATE SEDIMENT CONTROL MEASURE.
- K. IF DEWATERING SERVICES ARE USED, ADJOINING PROPERTIES AND DISCHARGE LOCATIONS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION. DISCHARGES SHALL BE ROUTED THROUGH AN APPROVED ANIONIC POLYMER DEWATERING SYSTEM OR A SIMILAR MEASURE AS APPROVED BY THE ENFORCEMENT OFFICER. DEWATERING SYSTEMS SHOULD BE INSPECTED DAILY DURING OPERATIONAL PERIODS. THE ENFORCEMENT OFFICER, OR APPROVED REPRESENTATIVE, MUST BE PRESENT AT THE COMMENCEMENT OF DEWATERING ACTIVITIES.
- L. IF INSTALLED SOIL EROSION AND SEDIMENT CONTROL MEASURES DO NOT MINIMIZE SEDIMENT LEAVING THE DEVELOPMENT SITE, ADDITIONAL MEASURES SUCH AS ANIONIC POLYMERS OR FILTRATION SYSTEMS MAY BE REQUIRED BY THE ENFORCEMENT OFFICER.
- M. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL BE ULTIMATELY RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- N. ALL TEMPORARY SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.
- O. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER GOVERNING AGENCY.

GENERAL CONSTRUCTION WASTES (DUST, SOLID WASTES, HAZARDOUS WASTES, ETC.)

IN ADDITION TO EROSION CONTROL THE CONTRACTOR SHALL TAKE MEASURES TO PROPERLY MANAGE SOLID WASTES, HAZARDOUS WASTES, DUST GENERATION, AND ALL OTHER ACTIVITIES THAT SHALL GENERATE WASTES DURING THE CONSTRUCTION PHASE.

DUST - THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING DUST PER ILLINOIS URBAN MANUAL CODE 825.

SOLID WASTE MATERIALS - ALL WASTE MATERIAL SHALL BE COLLECTED ON-SITE IN ACCORDANCE WITH LOCAL AND STATE SOLID WASTE MANAGEMENT REGULATIONS. THE WASTE SHALL BE EMPTIED AND HAULED OFF SITE AT REGULARLY SCHEDULED INTERVALS OR AS NECESSARY. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ONSITE. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURES FOR WASTE DISPOSAL. WASHING OF TRUCKS AND OTHER CONSTRUCTION VEHICLES SHALL NOT BE ALLOWED ONSITE.

SANITARY WASTE - ALL SANITARY WASTE SHALL BE COLLECTED BY TEMPORARY SANITARY FACILITIES PROVIDED AT THE SITE THROUGH THE CONSTRUCTION PHASE. THEY MUST BE UTILIZED BY ALL CONSTRUCTION PERSONNEL AND SHALL BE SERVICED BY A COMMERCIAL OPERATOR.

PROPERLY DISPOSE OF ALL WASTE AND UNUSED CONSTRUCTION MATERIALS (INCLUDING GARBAGE, DEBRIS, AND CLEANING WASTES).

SPILL PREVENTION AND CONTROL PRACTICES

IN ORDER TO REDUCE THE RISK OF SPILLS OF HAZARDOUS MATERIALS, THE FOLLOWING PRACTICES SHALL BE FOLLOWED:

1. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE WORK.
2. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL. IF THE MATERIAL IS HAZARDOUS AND THE CONTAINER CANNOT BE RESEALED, THE ORIGINAL LABEL AND MATERIAL SAFETY DATA SHALL BE RETAINED.
3. PRODUCTS SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
4. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER.
5. THE MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
6. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURER'S OR STATE AND LOCAL RECOMMENDED METHODS FOR PROPER DISPOSAL SHALL BE FOLLOWED.

THESE PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:

1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF CLEANUP SUPPLIES.
2. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
3. PERSONNEL PERFORMING THE SPILL CLEAN-UP SHALL BE PROPERLY TRAINED AND SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING.
4. SPILL REPORTING - THE PERMITEE SHALL IMMEDIATELY NOTIFY THE ILLINOIS EMERGENCY MANAGEMENT AGENCY (IEMA) AND THE LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) IN ACCORDANCE WITH TITLE 41, CHAPTER 1, SECTION 178.300 OF THE ILLINOIS ADMINISTRATIVE CODE, IN THE EVENT THAT A SPILL OR ACCIDENTAL RELEASE OF ANY MATERIAL OR SUBSTANCE RESULTS IN THE DISCHARGE OF POLLUTANTS TO THE WATERS OF THE STATE. ANY SPILLS ABOVE THE REPORTABLE QUANTITIES LIMITS IN THE CODE OF FEDERAL REGULATIONS (CFR) TITLE 40, PART 302 SHALL BE REPORTED TO THE EPA NATIONAL RESPONSE CENTER (1-800-424-8802).

PETROLEUM PRODUCTS - ALL ONSITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED.

FERTILIZERS - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE AMOUNTS SPECIFIED. ONCE APPLIED, FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. FERTILIZER SHALL BE STORED IN A COVERED LOCATION.

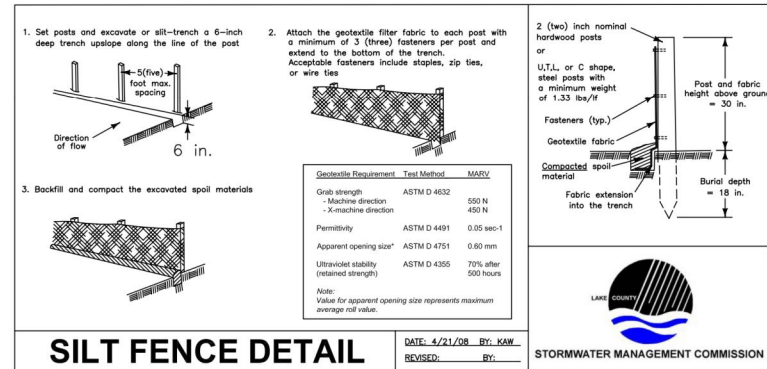
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| Checked By | JCH | | | | | | | | |
| Approved By | JCH | | | | | | | | |
| Filename | 002CE1.DWG | | | | | | | | |
| Project No. | 14207/14208/ 14212 | | | | | | | | |
| Project Date | JAN 2024 | | | | | | | | |

**LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
WRF IMPROVEMENTS**

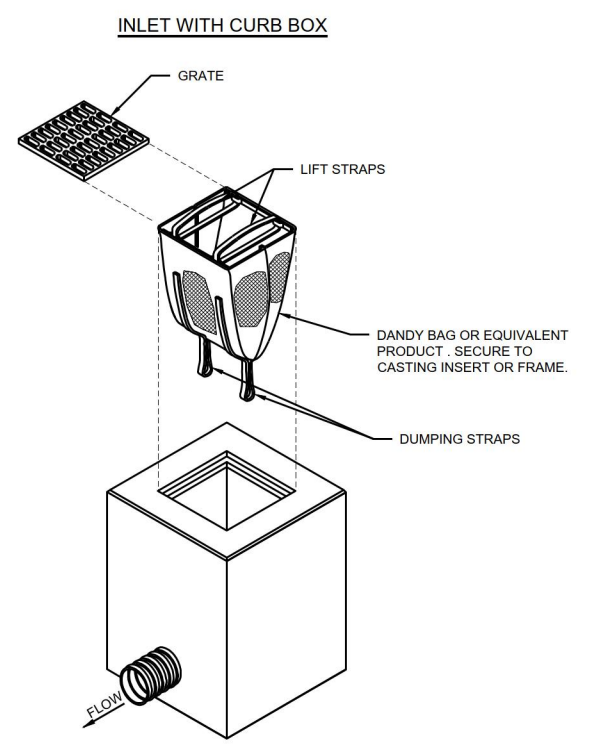
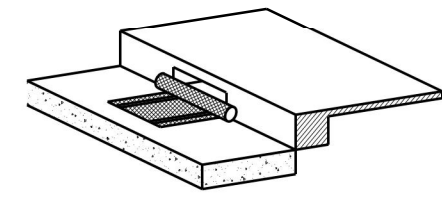
**SITE DEVELOPMENT
EROSION CONTROL AND SITE RESTORATION NOTES**



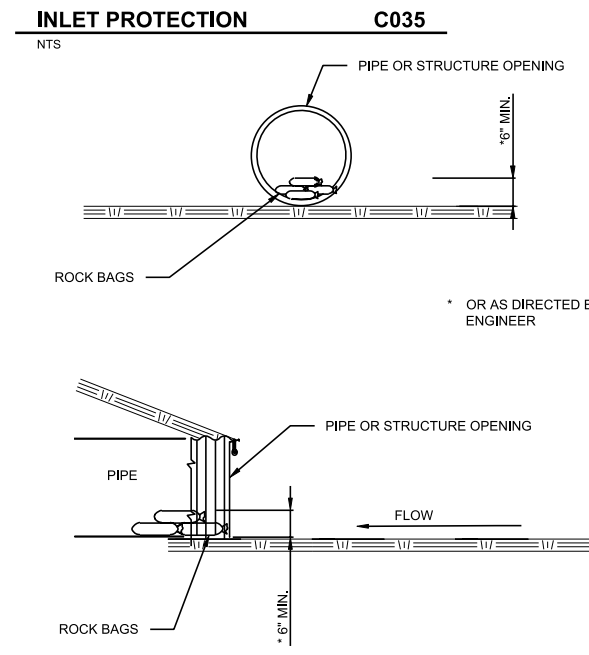
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SILT FENCE DETAIL C031
NTS



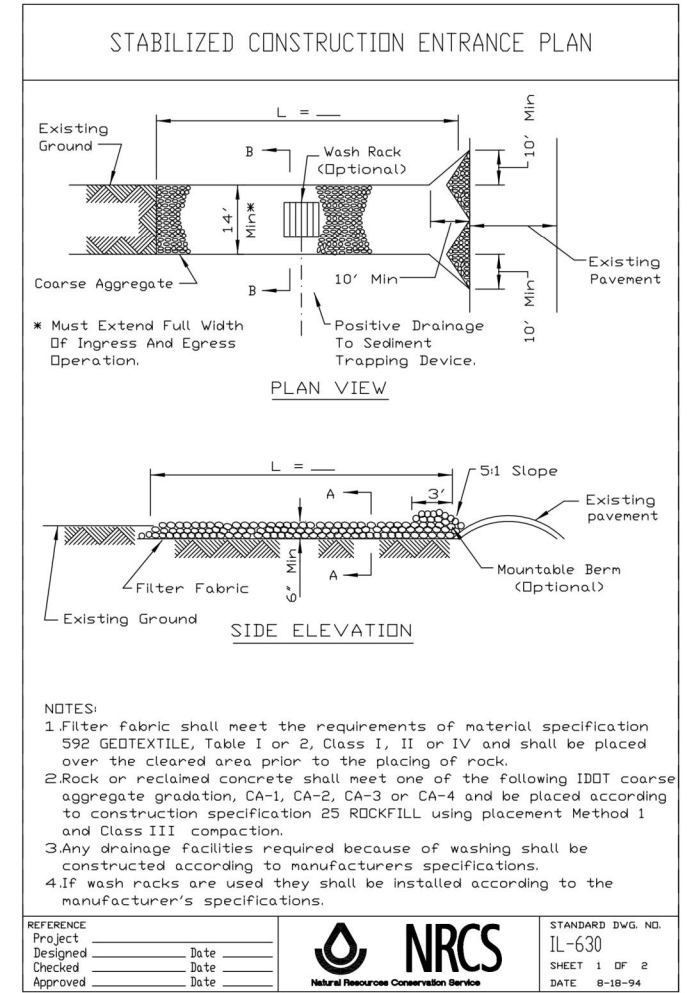
INLET WITHOUT CURB BOX



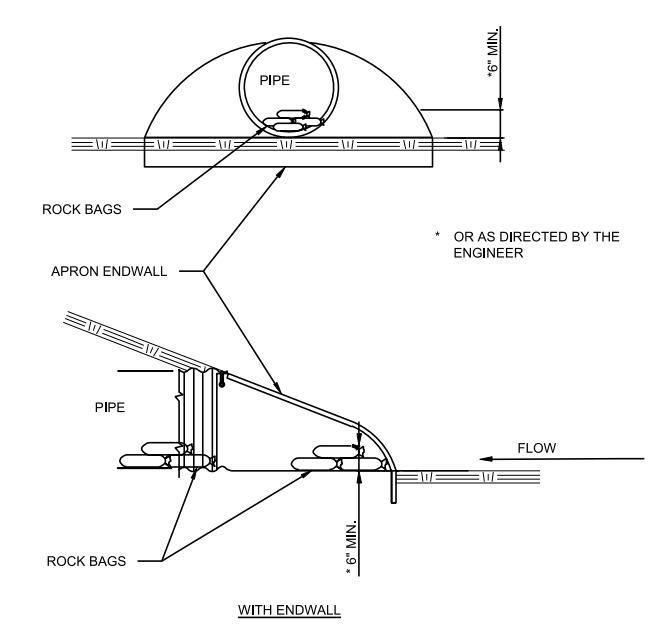
INLET PROTECTION C035
NTS

NOTE:
INSTALL AT INLET END OF CULVERT

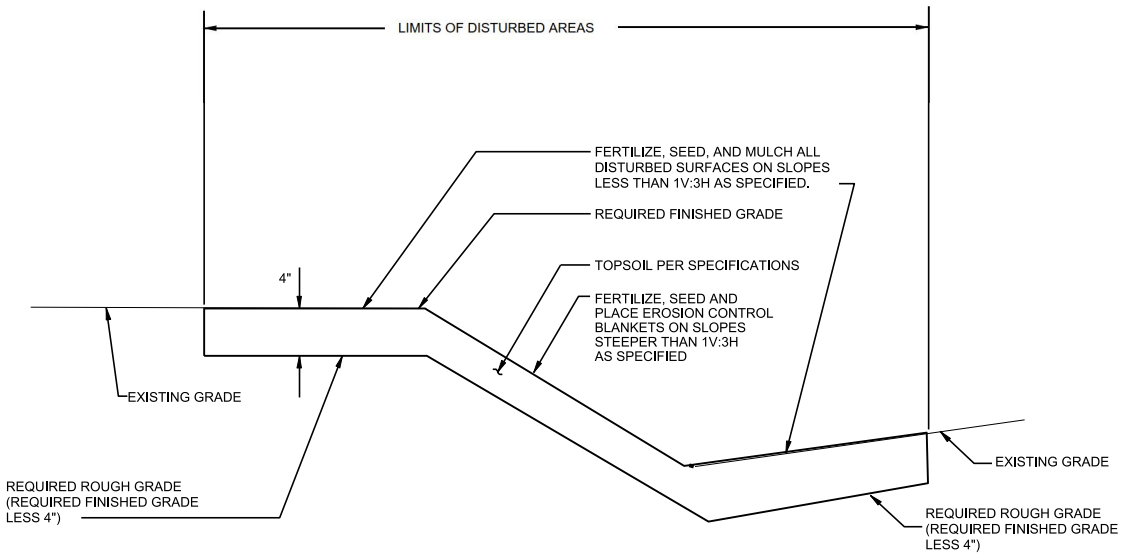
ROCK BAG CULVERT INLET PROTECTION C060
NTS



STABILIZED CONSTRUCTION ENTRANCE C040
NTS



WITH ENDWALL



TYPICAL TURF RESTORATION FOR TOPSOIL AND TURF C050
NTS

NOTE: THIS DETAIL IS INTENDED TO SHOW THAT:
A. 4" OF TOPSOIL IS TO BE PLACED ON ALL SURFACES TO HAVE TURF ESTABLISHED.
B. MULCH IS TO BE USED ON OTHER SLOPES LESS THAN 1V:3H.
C. EROSION CONTROL BLANKETS ARE TO BE USED ON ALL SLOPES STEEPER THAN 1V:3H.

| | |
|----------------------|-------------------|
| Date | |
| Checked By | |
| Drawn By | |
| Revision Description | |
| Revision Number | |
| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 999CD1.DWG |
| Project No. | 14207/14208/14212 |
| Project Date | JAN 2024 |

LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
WRF IMPROVEMENTS

GENERAL NOTES, SCHEDULES AND STANDARD DETAILS
CIVIL



Sheet No. 122
Drawing No.

Appendix D
Specification Section 31 25 00

SECTION 31 25 00
EROSION AND SEDIMENTATION CONTROL

PART 1 – GENERAL

1.01 SUMMARY

- A. Section describes requirements for control of erosion on construction sites. Contractor shall provide necessary materials, equipment, and labor to control erosion by methods specified herein. If no specific quantities are shown on Plans, Contractor shall use whatever quantities are necessary to prevent sediment transport into adjacent storm water conveyance systems or water bodies.
- B. Section includes:
 - 1. Silt Fence
 - 2. Storm Sewer Inlet Protection
 - 3. Dewatering
 - 4. Erosion Control Blanket
 - 5. Temporary Seeding
 - 6. Temporary Mulching
 - 7. Concrete Washout
 - 8. Stabilized Construction Entrance
- C. Contractor shall not begin work until after initial erosion and sediment control devices are in place and approved by Engineer.

1.02 REFERENCES

- A. Illinois Department of Transportation (IDOT): Standard Specifications for Road and Bridge Construction, Current Edition
- B. Illinois Urban Manual (IUM), Current Edition
- C. Lake County Stormwater Management Commission Watershed Development Ordinance (WDO) and Technical Reference Manual (TRM), Current Editions

1.03 PERMITS AND REGULATORY REQUIREMENTS

- A. Prior to start of any earthwork, the following permits are required and will be obtained by Contractor.
 - 1. Comply with the Lake County Stormwater Management Commission (LCSMC) Watershed Development Ordinance and Watershed Development Permit. The LCSMC Watershed Development Permit obtained by the Owner for this project (Permit #WDP-23-587) is included as an Appendix in the Contract Documents.
 - a. A Designated Erosion Control Inspector (DECI) approved by Lake County Stormwater Management Commission is required for this project and shall be provided by the Contractor.
 - 2. IEPA NPDES General Permit for Stormwater Discharges from Construction Sites.
 - a. Since the work WILL disturb more than 1 acre of land, a Stormwater NPDES Permit WILL BE needed. Contractor is responsible for implementing and complying with a storm water pollution prevention plan as developed by the Engineer. Contractor shall submit

the IEPA Notice of Intent and pay all associated fees. Engineer will provide the Storm Water Pollution Prevention Plan to the Contractor before construction starts.

1.04 SUBMITTALS

A. General:

1. Submit Product Data in sufficient detail to confirm compliance with requirements of this Section. Submit Product Data and Shop Drawings in one complete submittal package. Partial submittals are unacceptable.

B. Submit in accordance with Section 01 33 00.

PART 2 – PRODUCTS

2.01 TOPSOIL

- A. Conform to Section 32 92 00.

2.02 FERTILIZER

- A. Conform to Section 32 92 00.

2.03 MULCH

- A. Conform to Illinois Urban Manual Practice Standard 875.

2.04 TEMPORARY SEEDING

- A. Temporary seed shall conform to the requirements of Article 1081.15(g) of the IDOT Standard Specifications.

2.05 EROSION CONTROL BLANKET

- A. Conform to Section 32 92 00.

2.06 STORM INLET PROTECTION

- A. Inlet protection shall be a manufactured storm sewer insert.

1. Inlets with curb box:
 - a. Dandy Curb Bag by Dandy Products
 - b. Approved equal
2. Inlet without curb box:
 - a. Dandy Bag by Dandy Products
 - b. Approved equal

2.07 SILT FENCE

- A. Geotextile fabric: meet the requirements of IDOT Article 1080.02 for silt fence.

B. Silt fence stakes and posts:

1. Use either wooden stakes or steel posts for fence construction.
2. Minimum length: 5 feet.

3. Wooden posts: 2-inch x 2-inch nominal cross-sectional area.
4. Steel posts: Standard U or T-section, minimum weight of 1.33 pounds per linear foot.
5. Fasteners: staples, zip ties, or wire ties.

2.08 STABILIZED CONSTRUCTION ENTRANCE

- A. Aggregate: IDOT gradation CA-1.
- B. Geotextile fabric: meet the requirements of IUM Material Specification 592 – Geotextile, Table 1 or 2, Class I, II, or IV.

2.09 CONCRETE WASHOUT FACILITY

- A. Prefabricated temporary concrete washout facility designed to contain concrete slurry and solids in accordance with IUM Practice Standard 954.

2.10 WATER

- A. Furnished in accordance with Section 01 52 00.

2.11 ALL OTHER PRODUCTS

- A. All other products shall be as specified in current version of Illinois Urban Manual.

PART 3 – EXECUTION

3.01 EROSION CONTROL REQUIREMENTS

- A. All erosion control measures shall be implemented in accordance with referenced IUM Practice Standards or IDOT Articles:
 1. Practice Standard 813: Dewatering
 2. Practice Standard 830: Erosion Control Blanket
 3. Practice Standard 830: Turf Reinforcement Mat
 4. Practice Standard 861: Inlet Protection – Impervious Areas
 5. Practice Standard 862: Inlet Protection – Pervious Areas
 6. Practice Standard 875: Mulching for Seeding and Soil Stabilization
 7. Practice Standard 920: Silt Fence
 8. Practice Standard 927: Soil Stockpile
 9. Practice Standard 930: Stabilized Construction Entrance
 10. Practice Standard 954: Temporary Concrete Washout Facility
 11. Practice Standard 965: Temporary Seeding
- B. Erosion control devices, disturbed areas of the site that have not achieved final stabilization, and locations where vehicles enter and exit the site shall be inspected by a qualified person at least once every seven (7) calendar days and following a storm event resulting in 0.5 inches or more of rain. Post-rain event inspections shall be completed within 24 hours of the end of the rain event, or by the end of the following work day.
- C. Make needed repairs and document findings of inspections in a site erosion control log that includes the date of inspection, name of person conducting inspection, scope of the inspection, major observations relating to sediment and erosion control, and any actions taken.
- D. Install perimeter erosion controls and stabilized construction entrance(s) prior to any land-disturbing activities, including clearing and grubbing.

- E. Work shall not begin until after initial erosion and sediment control devices are in place and approved by Engineer.
- F. Take all possible precautions to prevent sediment from being tracked onto public or private roadways. Any sediment reaching a public or private road shall be removed by street cleaning (not flushing) before end of each workday.
- G. All activities on site shall be conducted in a logical sequence to minimize area of bare soil exposed at any one time.
- H. Site stabilization measures shall be initiated whenever any clearing, grading, excavating, or other earth disturbing activities have permanently ceased on any portion of the site, or have temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization measures shall be initiated no later than one (1) working day after temporary or permanent cessation of construction activities, except when stabilization is precluded by snow cover. Once initiated, stabilization measures shall be completed as soon as practicable, but no more than 14 days from the initiation of stabilization work in an area.
- I. Temporary stabilization is required if disturbed areas are not permanently stabilized with the surface treatment as indicated on the Drawings within the specified timeframe. Temporary stabilization for areas with slopes flatter than 3H:1V shall be achieved by temporary seeding, mulching, or covering with erosion control blankets. Temporary stabilization for areas with slopes equal to or steeper than 3H:1V shall be achieved by temporary seeding and erosion control mats.
- J. Immediately stabilize stockpiles and surround stockpiles as needed with silt fence or other perimeter control if stockpiles will remain inactive for 7 days or longer.

3.02 TEMPORARY SEEDING

- A. Provide temporary erosion control seeding in accordance with IUM Practice Standard 965.
- B. Temporary seeding shall provide protection for no longer than one (1) year.

3.03 TEMPORARY MULCHING

- A. Provide temporary mulching in accordance with IUM Practice Standard 875.

3.04 EROSION CONTROL BLANKET

- A. Install erosion control blankets in accordance with IUM Practice Standard 830 and IUM Standard Drawing 530.

3.05 TURF REINFORCEMENT MAT

- A. Install turf reinforcement mat in accordance with IUM Practice Standard 831 and IUM Standard Drawing 531.

3.06 SILT FENCE

- A. Silt fences shall be placed along all sideslope and downslope sides of site. If a channel or area of concentrated runoff passes through site, sediment control fences shall be placed along channel edges to reduce sediment reaching channel.
- B. Install in accordance with the Drawings.

- C. Attach geotextile fabric to each post with a minimum of three (3) fasteners per post.
- D. Remove sediment from behind silt fences and sediment barriers before sediment reaches a depth that is equal to one-third of the fence and/or barrier height.

3.07 STORM DRAIN INLET PROTECTION

- A. Provide inlet protection for existing and new inlets receiving runoff from areas disturbed by construction activities.
- B. Install inlet protection prior to land-disturbing activities in the contributing drainage area and/or immediately upon new inlet installation.
- C. Install device according to manufacturer's instructions.
- D. The contributing drainage area to inlet protection device shall be one acre or less. In instances where a larger contributing drainage area exists, runoff shall be routed through a sediment trap or settling device upstream of inlet.

3.08 DEWATERING

- A. Dewatering, surface water control, and temporary diversions shall be used to facilitate work "in the dry." The Contractor shall make their own calculations and shall plan their work accordingly.
- B. Work shall not be allowed in wetlands, flowing water, or in standing water that can discharge directly to Waters of the U.S.
- C. Contact owner or operator of municipal separate stormwater system if discharge is to municipal storm water conveyance system.
- D. Select best management practice for sediment removal based on predominant soil texture encountered at dewatering site with consideration given to pumping or flow rates to prevent discharge of sediment to the maximum extent practical. General categories include:
 - 1. Geotextile Bags
 - 2. Gravity Based Settling Systems
 - 3. Passive Filtration Systems
 - 4. Pressurized Filtration Systems
- E. Water pumped from site shall be treated by temporary sedimentation basins, grit chambers, sand filters, upslope chambers, hydro-cyclones, swirl concentrators, or other appropriate controls designed and used to remove particles of 100 microns or greater for highest dewatering pumping rate. If water is demonstrated to have no particles greater than 100 microns during dewatering operations, then no control is needed before discharge. Water may not be discharged in a manner that causes erosion of site or receiving channels.
- F. In accordance with IUM Practice Standard 813.

3.09 TEMPORARY CONCRETE WASHOUT FACILITY

- A. Provide temporary concrete washout facility within the staging and laydown area designated on the Drawings.
- B. Only liquids and concrete waste generated by washout operations shall be discharged to the concrete washout facility. No other construction waste or debris shall be placed in the

concrete washout facility.

- C. Washout water shall not be discharged into the environment.
- D. Washout facility shall provide adequate holding capacity as required by the Work. Maintain a minimum freeboard of four (4) inches.

END OF SECTION

Appendix E
Grading and Stabilization Activities Log

APPENDIX F
SWPPP Site Inspection Report

SWPPP Site Inspection Report

| General Information | | | |
|---|-----------------------|---|--|
| Project Name | | | |
| NPDES Tracking No. | | Location | |
| Date of Inspection | | Start/End Time | |
| Inspector's Name(s) | | | |
| Inspector's Title(s) | | | |
| Inspector's Organization | | | |
| Describe nature and location of current construction activities | | | |
| Type of Inspection: | | | |
| <input type="checkbox"/> Regular <input type="checkbox"/> Pre-storm event <input type="checkbox"/> During storm event <input type="checkbox"/> Post-storm event | | | |
| Weather Information | | | |
| Has there been a storm event since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| If yes, provide: | | | |
| Storm Start Date & Time: | Storm Duration (hrs): | Approximate Amount of Precipitation (in): | |
| | | | |
| Weather at time of this inspection? | | | |
| <input type="checkbox"/> Clear <input type="checkbox"/> Cloudy <input type="checkbox"/> Rain <input type="checkbox"/> Sleet <input type="checkbox"/> Fog <input type="checkbox"/> Snowing <input type="checkbox"/> High Winds | | | |
| <input type="checkbox"/> Other: _____ Temperature: _____ | | | |
| Have any discharges occurred since the last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| If yes, describe: | | | |
| | | | |
| Are there any discharges at the time of inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | |
| If yes, describe: | | | |
| | | | |

SWPPP Site Inspection Report

| Site-Specific BMPs | | | |
|--------------------|----------------------------------|---|---|
| | BMP | BMP Installed? | BMP Maintenance Required? |
| 1 | Silt Fence | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 2 | Inlet Protection | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 3 | Culvert Protection | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 4 | Stabilized Construction Entrance | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 5 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 6 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 7 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 8 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 9 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |
| 10 | | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A | <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A |

Provide additional notes below, and corrective actions for any "No" answer to the above Site-Specific BMPs.

APPENDIX G
SWPPP Amendment Report

SWPPP Amendment Report

| General Information | |
|------------------------------|--|
| Project Name | |
| NPDES Tracking No. | |
| Amendment No. | |
| Date | |
| Amendment Prepared by | |
| Title of Preparer | |
| Preparer's Organization | |
| Preparer's Signature | |
| Summary of Required Changes | |
| | |
| Reasons for Required Changes | |
| | |

APPENDIX H

Incidence of Noncompliance (ION) Report



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Division of Water Pollution Control

Construction Site Storm Water Discharge Incidence of Non-Compliance (ION)

This form should be completed within Acrobat before being saved, printed, signed, and submitted within 24 hours to the appropriate Region email address listed on the next page.

Permittee Information

Name: _____ Permit No. ILR10 _____

Mailing Address: _____ P.O. Box: _____

City: _____ State: IL Zip Code: _____ County: _____

Phone: _____ Email: _____

Construction Site Information

Site Name: _____

Street Address: _____

City: _____ State: IL Zip Code: _____

Cause of Non-Compliance

Actions Taken to Prevent Any Further Non-Compliance

Environmental Impact Resulting From the Non-Compliance

Actions Taken to Reduce the Environmental Impact Resulting From the Non-Compliance

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Owner Printed Name

Title

Owner Signature

Date

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied.

Guidelines for Completion of the Construction Site Storm Water Discharge Incidence of Non-Compliance (ION) Form

Complete and submit this form for any violation of the Storm Water Pollution Prevention Plan observed during any inspection conducted, including those not required by the SWPPP. Please adhere to the following guidelines:

Initial submission within 24 hours by email to appropriate region contact listed below of any incidence of non-compliance for any violation. After 24 hours notification, submit signed original ION form within 5 days to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance #19
Post Office Box 19276
Springfield, Illinois 62794-9276

Region 2 - DES PLAINES

Jay Patel - Manager 847-294-4000

EPA.DWPC.DesPlaines@illinois.gov

Region 3 - PEORIA

Paul Jungles - 309-671-3022

EPA.DWPC.Peoria@illinois.gov

Region 4 - Champaign

Jeff Holste - 217-278-5800

EPA.DWPC.Champaign@illinois.gov

Region 5 - SPRINGFIELD

David Ginder - 217-557-8761

EPA.DWPC.Springfield@illinois.gov

Region 6 - COLLINSVILLE

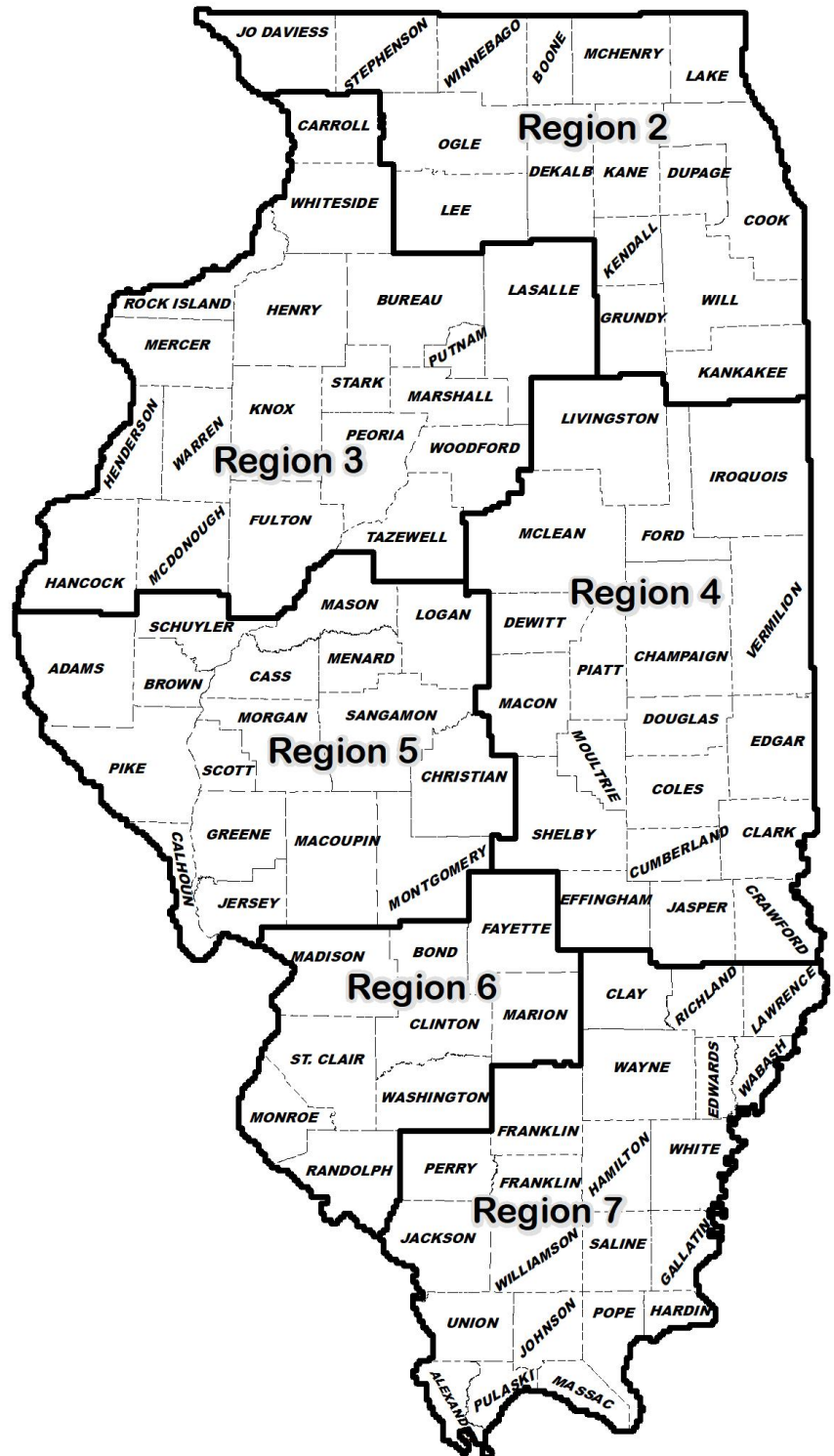
Joe Stitely - 618-346-5120

EPA.DWPC.Collinsville@illinois.gov

Region 7 - MARION

Joe Stitely - 618-993-7200

EPA.DWPC.Marion@illinois.gov



APPENDIX I
EcoCAT Review



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
<http://dnr.state.il.us>

JB Pritzker, Governor

Natalie Phelps Finnie, Director

February 13, 2024

Cade Kamaleson
Lake County Public Works Department
650 West Winchester Road
Libertyville, IL 60048

RE: Des Plaines River WRF UV Upgrade
Project Number(s): 2410391 [2407377]
County: Lake

Dear Applicant:

This letter is in reference to the project you recently submitted for consultation. The natural resource review provided by EcoCAT identified protected resources that may be in the vicinity of the proposed action. The Department has evaluated this information and concluded that adverse effects are unlikely. Therefore, consultation under 17 Ill. Adm. Code Part 1075 is terminated.

This consultation is valid for two years unless new information becomes available that was not previously considered; the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. If the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Bradley Hayes
Division of Ecosystems and Environment
217-785-5500

Applicant: Lake County Public Works Department
Contact: Cade Kamaleson
Address: 650 West Winchester Road
Libertyville, IL 60048

IDNR Project Number: 2410391
Date: 02/09/2024
Alternate Number: 2407377

Project: Des Plaines River WRF UV Upgrade
Address: 800 Krause Drive, Buffalo Grove

Description: The project consists of the construction of an ultraviolet disinfection system at the Des Plaines River Water Reclamation Facility which will replace the existing chlorination and dechlorination disinfection system.

Natural Resource Review Results

Consultation for Endangered Species Protection and Natural Areas Preservation (Part 1075)

The Illinois Natural Heritage Database shows the following protected resources may be in the vicinity of the project location:

- Buffalo Grove Prairie INAI Site
- Edward L. Ryerson Conservation Area INAI Site
- Edward L. Ryerson Nature Preserve
- Northern Long-Eared Myotis (*Myotis septentrionalis*)

An IDNR staff member will evaluate this information and contact you to request additional information or to terminate consultation if adverse effects are unlikely.

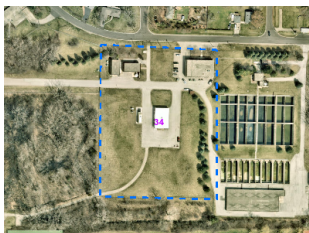
Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Lake

Township, Range, Section:

43N, 11E, 34



IL Department of Natural Resources Contact

Bradley Hayes
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction

Lake County Public Works
Marc Bourgault
650 Winchester Road
Libertyville, Illinois 60048

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

APPENDIX J
Project Directory

LEGEND

| EXISTING | PROPOSED | |
|----------|----------|--------------------------------------|
| | | BENCHMARK |
| | | CATCH BASIN |
| | | CULVERT |
| | | CULVERT OVER 24" (SHOWN ACTUAL SIZE) |
| | | GAS VALVE |
| | | GUY WIRE |
| | | HAY BALES |
| | | HEADWALL |
| | | HYDRANT |
| | | INLET |
| | | IRON PIPE |
| | | MANHOLE |
| | | MARSH |
| | | METER |
| | | UTILITY POLE |
| | | UTILITY POLE WITH LIGHT |
| | | SECTION CORNER |
| | | SIGN |
| | | SPOT ELEVATION |
| | | SOIL BORING |
| | | STREET LIGHT |
| | | SURVEY CONTROL POINT |
| | | TRANSFORMER |
| | | TREE CONIFEROUS, DECIDUOUS |
| | | TREE REMOVAL |
| | | TREE/SHRUB LINE |
| | | WATER VALVE |

LINE TYPE IDENTIFICATION

| EXISTING | PROPOSED | |
|----------|----------|-----------------------------------|
| | | CABLE TV |
| | | CENTERLINE OF ROAD |
| | | CONTOUR |
| | | DITCH/SWALE |
| | | EASEMENT |
| | | FENCE |
| | | ELECTRIC |
| | | ELECTRICAL DUCT |
| | | FIBER OPTIC |
| | | FORCEMAIN |
| | | GAS |
| | | GUARDRAIL |
| | | OVERHEAD ELECTRIC |
| | | PIPE, ABANDON |
| | | PIPE, PREVIOUSLY ABANDONED |
| | | PIPE OVER 24" (SHOWN ACTUAL SIZE) |
| | | PROPERTY LINE |
| | | R.O.W. |
| | | RAILROAD |
| | | SANITARY SEWER |
| | | SILT FENCE |
| | | STORM SEWER |
| | | TELEPHONE |
| | | WATER |
| | | WATER'S EDGE |
| | | WETLAND |

1

GENERAL NOTES

- DIMENSIONS OR COORDINATES TAKE PRECEDENCE OVER SCALE. CONTRACTORS TO VERIFY ALL DIMENSIONS AND COORDINATES IN THE FIELD FOR PROPER FIT AND ALIGNMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THEIR STATE'S 811 CALL CENTER A MINIMUM OF 72 HOURS PRIOR TO PERFORMING ANY EARTH MOVING OR EXCAVATION ACTIVITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY OTHER UTILITIES WHICH MAY BE PRESENT WHICH ARE NOT PART OF THE ONE CALL SYSTEM. NOTIFY PLANT STAFF ONE WEEK IN ADVANCE OF PLANT UTILITY LOCATION NEEDS TO ALLOW ADEQUATE RESPONSE TIME FOR PLANT STAFF.
- EXISTING BURIED UTILITIES SHOWN IN PLAN AND PROFILE ARE INDICATED IN ACCORDANCE WITH THE AVAILABLE RECORDS AND FIELD INFORMATION AVAILABLE TO THE ENGINEER. OTHER UTILITIES MAY ALSO BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING FROM THE OWNERS OF THE EXISTING UTILITIES THE LOCATION OF THEIR BURIED FACILITIES. ANY UTILITIES DAMAGED OR DESTROYED BY THE CONTRACTOR'S OPERATIONS WHETHER SHOWN ON THE DRAWINGS OR NOT, SHALL BE REPLACED OR REPAIRED TO THE UTILITY'S SATISFACTION AT NO COST TO THE OWNER.
- IF UTILITY FACILITIES OTHER THAN THOSE SHOWN ARE LOCATED, OR IF UTILITIES ARE LOCATED WHICH ARE NOT IN ACCORDANCE WITH THE LOCATION SHOWN ON THE DRAWINGS, THE ENGINEER SHALL BE NOTIFIED TO DETERMINE IF PLAN REVISIONS ARE NEEDED. CONTRACTOR IS REQUIRED TO FIELD LOCATE ALL CROSSING UTILITIES SUFFICIENTLY IN ADVANCE OF CONSTRUCTION ACTIVITIES TO ALLOW ENGINEER TO REVISE LOCATIONS OF NEW FACILITIES TO AVOID CONFLICTS WITHOUT ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL SITE FACILITIES DURING CONSTRUCTION. CONTRACTOR SHALL PLAN ITS WORK SEQUENCE AND ACTIVITIES TO ENSURE THAT ITS WORK DOES NOT INTERFERE WITH PUBLIC NEEDS OR PUBLIC FACILITIES OPERATIONS, DELIVERIES, PICKUPS OR OTHER ACCESS NEEDS.
- THE CONTRACTOR SHALL COORDINATE THE ACTIVITIES OF ITS PERSONNEL, SUBCONTRACTORS, AND UTILITIES PERFORMING WORK ON THIS PROJECT. THE CONTRACTOR SHALL ALSO COORDINATE WITH CITY CREWS AND OTHER CONTRACTORS WORKING IN OR NEAR THE PROJECT AREA.
- THE CONTRACTOR SHALL MAINTAIN ON FILE WITH THE OWNER AND ENGINEER A CURRENT LIST OF EMERGENCY TELEPHONE NUMBERS FOR THE CONTRACTORS SUPERVISORY PERSONNEL ASSIGNED TO THIS PROJECT. NO LESS THAN 2 NAMES WITH 24 HOUR PHONE NUMBERS SHALL BE INCLUDED.
- ELEVATIONS CALLED OUT ON THE DRAWINGS ARE TYPICALLY AT THE "INVERT" OR BOTTOM OF PIPES AND STRUCTURES, ALONG THE FLOW LINE IN GUTTERS AND SWALES, AND AT THE "RIM" OR TOP (FINISHED GRADE) OF THE FRAME AND COVERS. OTHER ELEVATIONS ARE SPECIFICALLY NOTED.
- UNLESS NOTED OTHERWISE RESTORATION OF EXISTING SANITARY SEWERS AND SERVICE LINES, WATER MAINS AND SERVICE LINES, STORM SEWERS, OTHER UTILITIES, SIDEWALKS, CURBS, DRIVEWAYS, STREETS OR OTHER IMPROVEMENTS NOT SHOWN AS BEING REMOVED, REPLACED OR MODIFIED BY THE PROJECT IS REQUIRED ONLY TO THE EXTENT THEY ARE DAMAGED OR DISTURBED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL RESTORE ALL DAMAGED AND DISTURBED IMPROVEMENTS TO THE IMPROVEMENT OWNERS AND ENGINEERS SATISFACTION.
- WHERE NEW WORK ABUTS EXISTING CURBS, SIDEWALK, DRIVES, OR OTHER PAVEMENTS WHICH ARE TO REMAIN IN PLACE, THE CONTRACTOR SHALL PROVIDE NEAT SAWCUTS, FULL DEPTH AT THE LIMIT OF CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE SUPPORT AND SHALL MAINTAIN SERVICE TO ALL ABOVE AND BELOW GRADE UTILITIES INCLUDING POLES, CABLES, WIRES, WATER, GAS, STORM, AND SANITARY FACILITIES, OR WITH THE WRITTEN CONCURRENCE OF THE UTILITY OWNER, MAY REMOVE, STORE, REINSTALL AND REPLACE AS NECESSARY.
- CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY DURING CONSTRUCTION OF THE PROJECT.
- THE CONTRACTOR SHALL PROTECT ALL PROPERTY PINS (STEEL REBARS, PIPES, CAPPED PINS, ETC.) WHICH WERE FOUND OR LOCATED ON THE PROJECT SITE WHETHER SHOWN ON THE PLANS OR ENCOUNTERED DURING CONSTRUCTION FROM BEING DAMAGED, DESTROYED OR MOVED. IF PROPERTY PINS ARE DAMAGED, DESTROYED OR MOVED, THE CONTRACTOR SHALL PROVIDE THE SERVICES OF A REGISTERED ILLINOIS LAND SURVEYOR TO REPLACE THEM AT NO COST TO THE OWNER.
- AS PART OF THE CONTRACTORS RESPONSIBILITIES A DETAILED SET OF RECORD DRAWINGS SHALL BE KEPT TO RECORD CHANGES OR DEVIATIONS FROM THE PLANS AND TO SHOW EXISTING UNDERGROUND UTILITIES OR OTHER FEATURES ENCOUNTERED DURING CONSTRUCTION.

ABBREVIATIONS

| | | | |
|------|-----------------------|-----|--------------------------------|
| AGG | AGGREGATE | NG | NATURAL GAS |
| B/C | BACK OF CURB | OH | OVERHEAD UTILITY |
| BIT | BITUMINOUS/ASPHALT | PC | POINT OF CURVATURE |
| CIP | CAST IRON PIPE | PE | POLYETHYLENE PIPE |
| CO | CLEANOUT | PI | POINT OF INTERSECTION |
| CONC | CONCRETE | PL | PROPERTY LINE |
| CMP | CORRUGATED METAL PIPE | PT | POINT OF TANGENCY |
| CSP | CONCRETE SEWER PIPE | PVC | POLYVINYL CHLORIDE PIPE |
| | | PVI | POINT OF VERTICAL INTERSECTION |
| DIA | DIAMETER | R | RADIUS |
| DIP | DUCTILE IRON PIPE | RCP | REINFORCED CONCRETE PIPE |
| DW | DEWATERING PIPE | RIM | TOP OF CASTING ELEVATION |
| EXTG | EXISTING | ROW | RIGHT OF WAY |
| EOP | EDGE OF PAVEMENT | RT | RIGHT |
| F&C | FRAME AND COVER | SAN | SANITARY SEWER |
| F/C | FACE OF CURB | STM | STORM SEWER |
| F-F | FACE TO FACE | SD | SUMP DISCHARGE |
| F/G | FINISHED GRADE | T/C | TOP OF CURB |
| FES | FLARED END SECTION | T/W | TOP OF WALL |
| INV | INVERT | UD | UNDERDRAIN |
| L | LENGTH OF CURVE | VC | VERTICAL CURVE |
| LF | LINEAR FT | | |
| LT | LEFT | | |

SYMBOLS

| | |
|--|--|
| | EXISTING ASPHALTIC PAVEMENT TO REMAIN |
| | PROPOSED ASPHALTIC PAVEMENT |
| | PROPOSED CONCRETE PAVEMENT |
| | PROPOSED GRAVEL |
| | REMOVE EXISTING ASPHALTIC PAVEMENT & BASE |
| | REMOVE & REPLACE EXISTING ASPHALTIC PAVEMENT |
| | REMOVE EXISTING CONCRETE PAVEMENT |
| | REMOVE GRAVEL |
| | STAGING AREA |
| | STRUCTURE DEMOLITION |

NOTE:

- PROCESS FLOW STREAM IDENTIFIERS SAME AS SHOWN ON THE PROCESS MECHANICAL LEGEND
- THIS IS STANDARD LEGEND. NOT ALL OF THE INFORMATION SHOWN ON THIS LEGEND IS NEEDED IN THESE CONTRACT DRAWINGS.

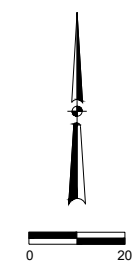
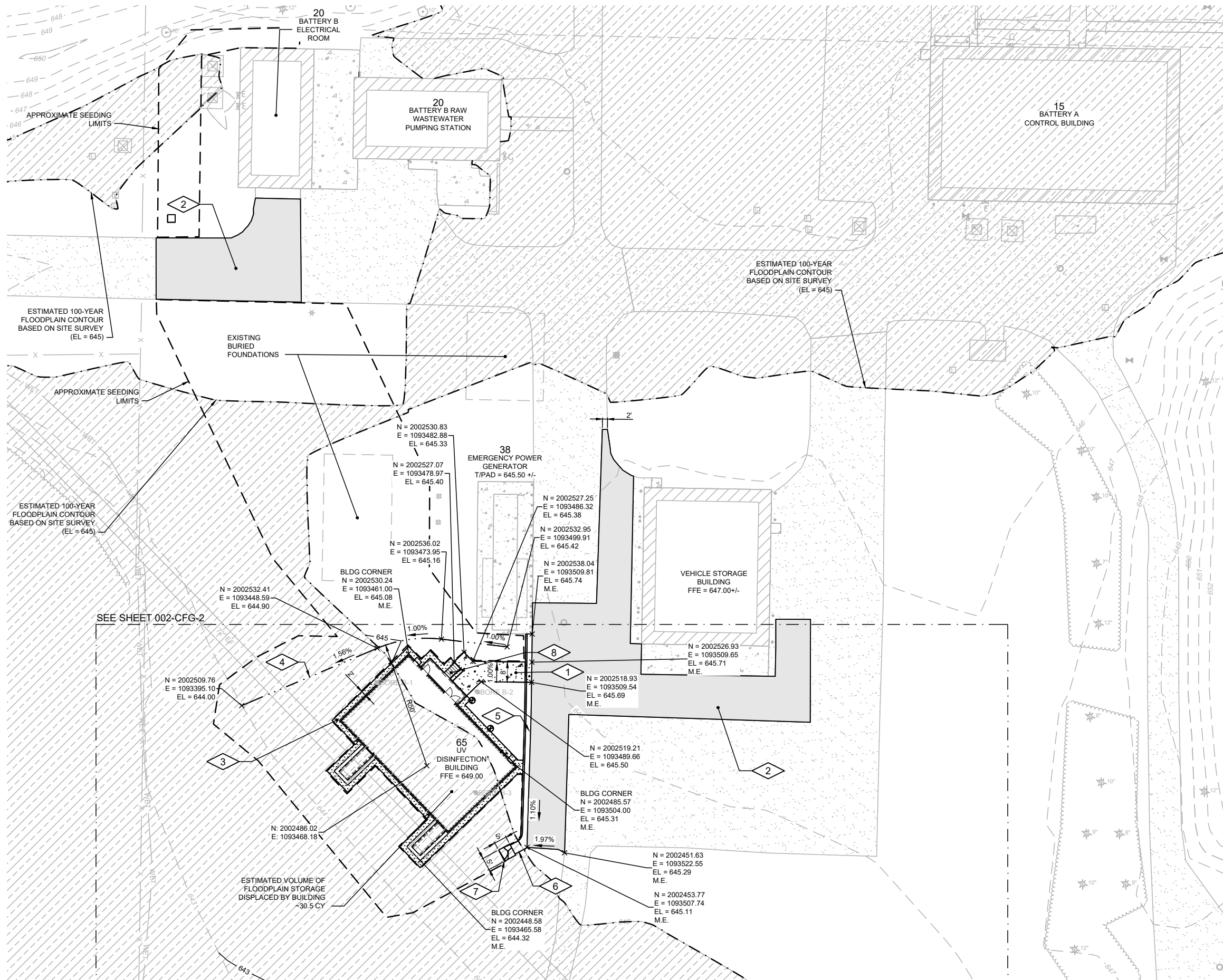
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| 1 | ADDENDUM NO. 1 | JCH | JCH | 02/15/2024 |

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| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 001G3.DWG |
| Project No. | 14207/14208/ 14212 |
| Project Date | JAN 2024 |

LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
WRF IMPROVEMENTS

GENERAL
CIVIL LEGEND AND GENERAL NOTES





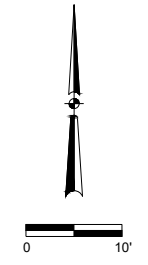
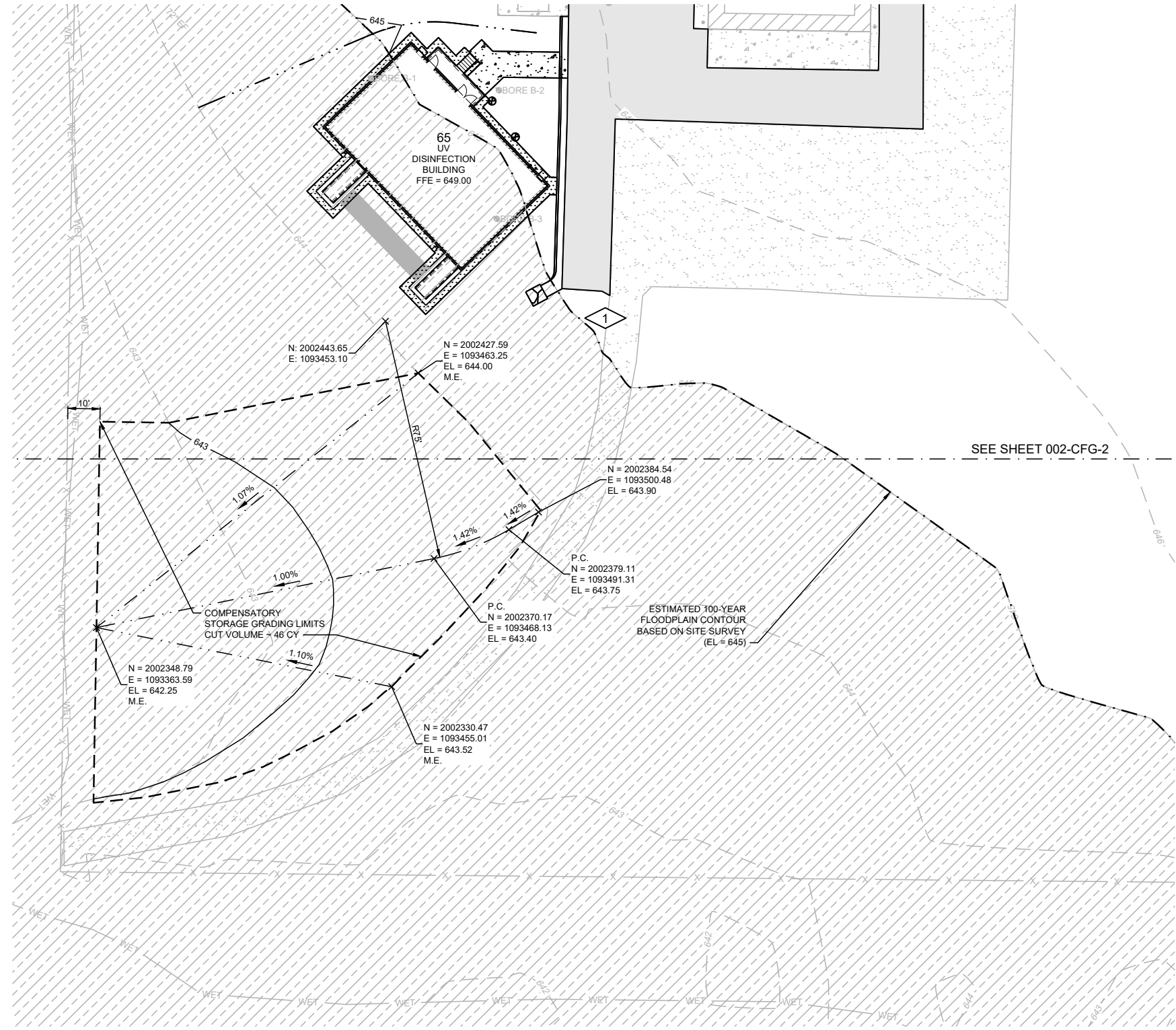
GENERAL NOTES:

1. ALL EROSION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
2. ANY DAMAGED STRUCTURES OR FACILITIES NOT SHOWN FOR REMOVAL SHALL BE RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. MATCH EXISTING GRADE WHERE REPLACEMENT OR PROPOSED SURFACE IMPROVEMENTS ABUT EXISTING PAVEMENT OR OTHER EXISTING SURFACE FEATURES.
4. RESTORE ALL DISTURBED AREAS OUTSIDE OF PAVEMENTS AND BUILDINGS IN ACCORDANCE WITH DETAIL (C050) UNLESS INDICATED OTHERWISE.

PLAN NOTES:

1. CONCRETE SIDEWALK, SEE DETAIL (C155)
2. SAWCUT AND REMOVE ASPHALT PAVEMENT AND BASE. PROVIDE NEW ASPHALT PAVEMENT. SEE DETAILS (C115) AND (C180). MAINTAIN A MINIMUM OF AN EQUIVALENT OF ONE TRAVEL LANE FOR PLANT OPERATIONS WHILE TRENCHING BURIED UTILITIES.
3. LANDSCAPE STONE MOW STRIP AROUND PERIMETER OF BUILDING. INSTALL IN ACCORDANCE WITH SECTION 32 92 00.
4. CONSTRUCT DRAINAGE SWALE TO LINES AND GRADES SHOWN.
5. TYPE M-4.24 CURB AND GUTTER. SEE DETAIL (C167)
6. CONCRETE FLUME, SEE DETAIL (C185)
7. LIGHT RIPRAP IN ACCORDANCE WITH SECTION 31 37 00.
8. INSTALL LANDSCAPING STONE UNDER STAIRS IN ACCORDANCE WITH SECTION 32 92 00.

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| Date | 2/15/2024 |
| Checked By | JCH |
| Drawn By | JCH |
| Revision Description | ADDENDUM NO. 1 |
| Revision Number | 1 |
| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 002CFG1.DWG |
| Project No. | 14212 |
| Project Date | JAN 2024 |
| LAKE COUNTY DEPARTMENT OF PUBLIC WORKS WRF IMPROVEMENTS UV UPGRADE CONTRACT D SITE DEVELOPMENT FACILITY AND GRADING PLAN | |
| | |
| Sheet No. | 84 |
| Drawing No. | 002-CFG-1 |



GENERAL NOTES:

1. ALL EROSION CONTROL DEVICES SHALL BE IN PLACE PRIOR TO ANY EARTH DISTURBING ACTIVITIES.
2. ANY DAMAGED STRUCTURES OR FACILITIES NOT SHOWN FOR REMOVAL SHALL BE RESTORED TO ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
3. MATCH EXISTING GRADE WHERE REPLACEMENT OR PROPOSED SURFACE IMPROVEMENTS ABUT EXISTING PAVEMENT OR OTHER EXISTING SURFACE FEATURES.
4. RESTORE ALL DISTURBED AREAS OUTSIDE OF PAVEMENTS AND BUILDINGS IN ACCORDANCE WITH DETAIL (C050) UNLESS INDICATED OTHERWISE.

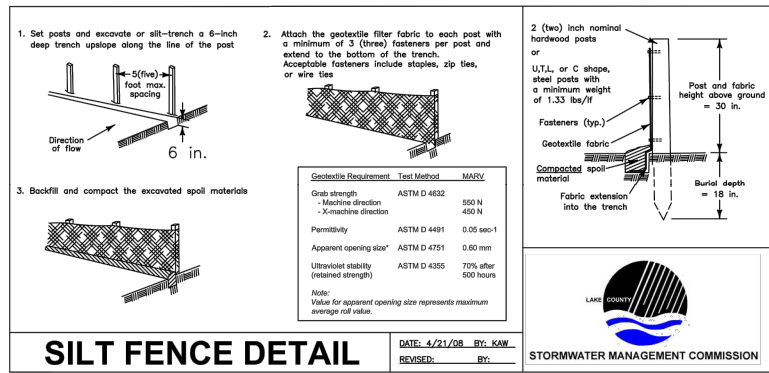
PLAN NOTES:

1. COMPENSATORY STORAGE TO BE EXCAVATED BELOW BFE, AND SHALL BE GRADED TO FREELY DRAIN OFFSITE. RESTORE COMPENSATORY STORAGE AREA WITH 4 INCHES O4 TOPSOIL, NATIVE SEED, AND EROSION CONTROL BLANKET.

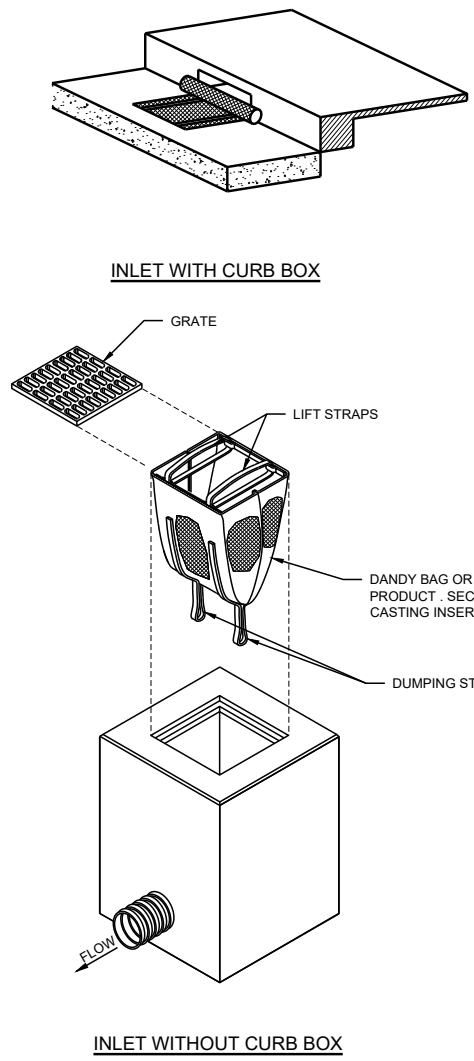
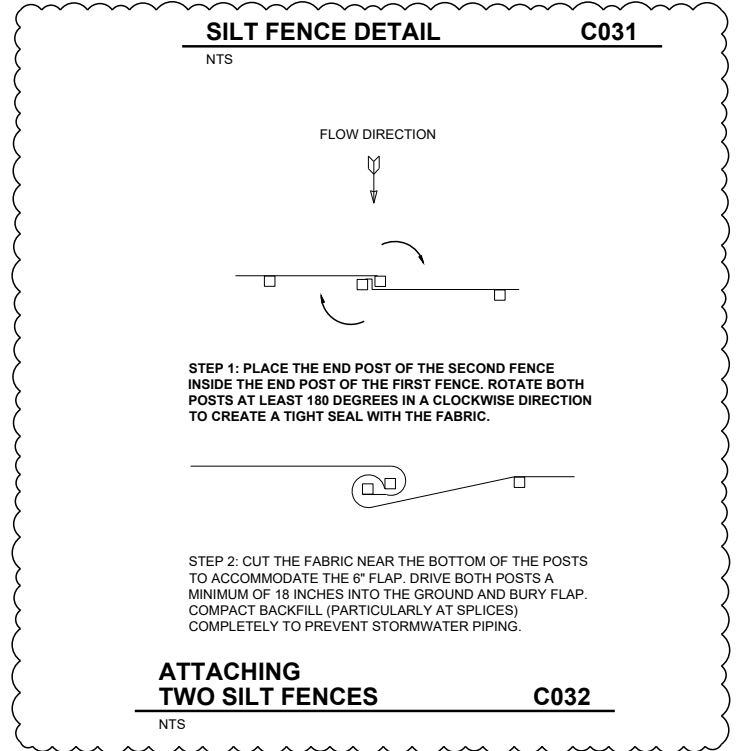
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| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 002CFG1.DWG |
| Project No. | 14212 |
| Project Date | JAN 2024 |

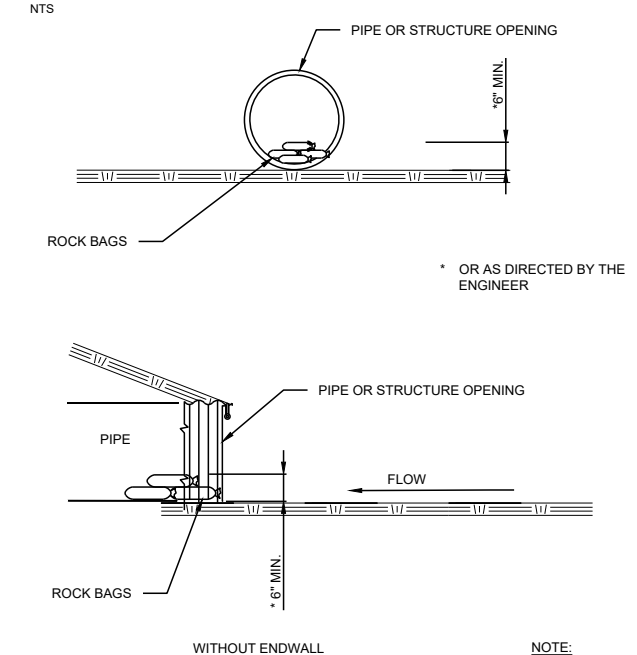
LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
WRF IMPROVEMENTS
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CONTRACT D
SITE DEVELOPMENT
FACILITY AND GRADING PLAN



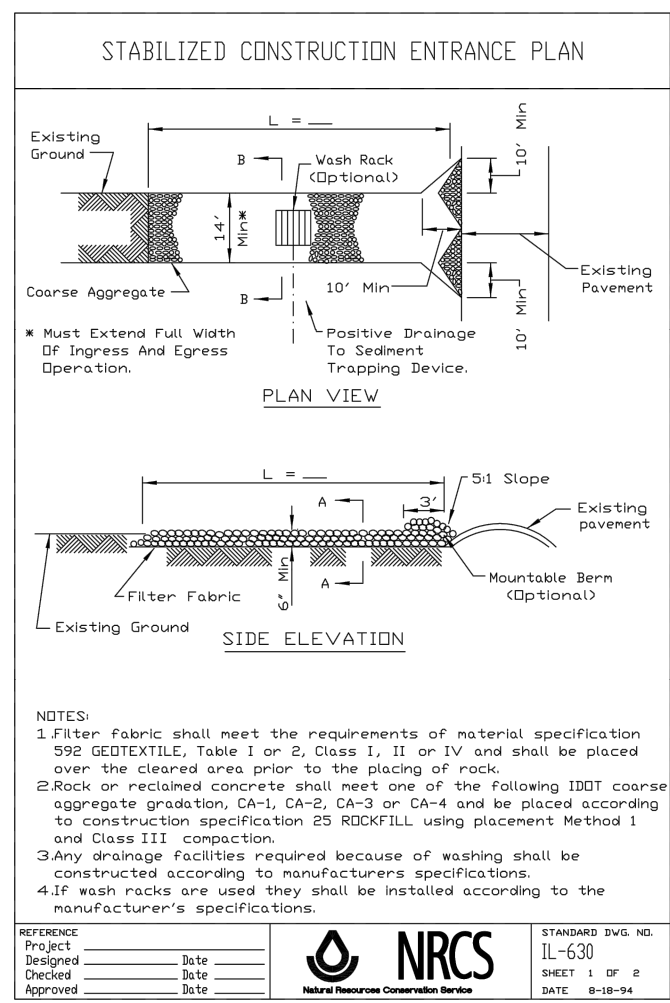
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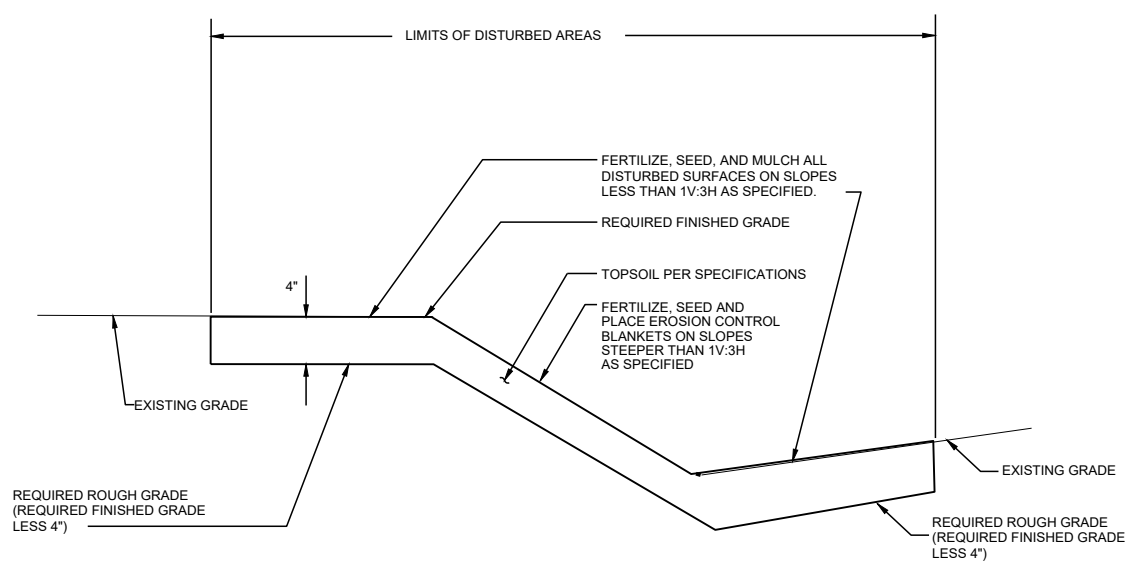
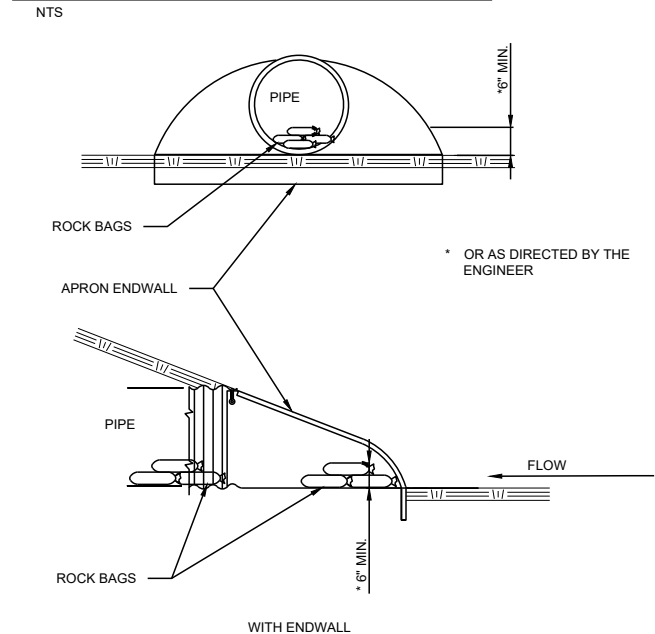
INLET PROTECTION C035
 NTS



ROCK BAG CULVERT INLET PROTECTION C060
 NTS



STABILIZED CONSTRUCTION ENTRANCE C040
 NTS



NOTE: THIS DETAIL IS INTENDED TO SHOW THAT:
 A. 4" OF TOPSOIL IS TO BE PLACED ON ALL SURFACES TO HAVE TURF ESTABLISHED.
 B. MULCH IS TO BE USED ON OTHER SLOPES LESS THAN 1V:3H.
 C. EROSION CONTROL BLANKETS ARE TO BE USED ON ALL SLOPES STEEPER THAN 1V:3H.

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| Date | 2/15/2024 |
| Checked By | JCH |
| Drawn By | JCH |
| Revision Description | ADDENDUM NO. 1 |
| Revision Number | 1 |
| Designed By | WES |
| Drawn By | WES |
| Checked By | JCH |
| Approved By | JCH |
| Filename | 999CD1.DWG |
| Project No. | 14207/14208/14212 |
| Project Date | JAN 2024 |

LAKE COUNTY DEPARTMENT OF PUBLIC WORKS
 WRF IMPROVEMENTS

GENERAL NOTES, SCHEDULES AND STANDARD DETAILS
 CIVIL



Sheet No. 122
 Drawing No.