



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

*This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address.*

For Office Use Only

### OWNER INFORMATION

Permit No. ILR10 \_\_\_\_\_

Company/Owner Name: Lake County Division of Transportation  
Mailing Address: 600 West Winchester Road Phone: 847-377-7400  
City: Libertyville State: IL Zip: 60048 Fax: 847-984-5601  
Contact Person: Daniel Martinez E-mail: dmartinez3@lakecountyil.gov  
Owner Type (select one) County

MS4 Community:  Yes  No

### CONTRACTOR INFORMATION

Contractor Name: Lorig Construction Company  
Mailing Address: 250 East Touhy Avenue Phone: 847-298-0360  
City: Des Plaines State: IL Zip: 60018 Fax: 847-298-2689

### CONSTRUCTION SITE INFORMATION

Select One:  New  Change of information for: ILR10 AP54  
Project Name: Hutchins Road over Mill Creek County: Lake  
Street Address: North of 36630 N Hutchins Road City: Libertyville IL Zip: 60048  
Latitude: 42 23 45.636 Longitude: 87 59 5.640 7 45N 11E  
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range  
Approximate Construction Start Date Jun 1, 2019 Approximate Construction End Date Sep 30, 2019

Total size of construction site in acres: 1.22  
If less than 1 acre, is the site part of a larger common plan of development?  
 Yes  No

Fee Schedule for Construction Sites:  
Less than 5 acres - \$250  
5 or more acres - \$750

### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency?  Yes  No

(Submit SWPPP electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov))

Location of SWPPP for viewing: Address: 600 West Winchester Road City: Libertyville  
SWPPP contact information:  
Contact Name: Daniel Martinez Inspector qualifications: \_\_\_\_\_  
Phone: 847-377-7400 Fax: 847-984-5601 E-mail: dmartinez3@lakecountyil.gov P.E. \_\_\_\_\_  
Project inspector, if different from above Inspector qualifications: \_\_\_\_\_  
Inspector's Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

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. This form has been approved by the Forms Management Center.

**TYPE OF CONSTRUCTION (select one)**

Construction Type Transportation

SIC Code: \_\_\_\_\_

Type a detailed description of the project:

Lake County Division of Transportation is replacing a triple barrel culvert installation over Mill Creek with a single span steel girder bridge. The project will involve removing two of the existing culverts to construct the single span bridge, while also maintaining the flow through the creek. Following completion of the bridge, the last culvert will be removed.

**HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE**

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency     Yes     No

Endangered Species                 Yes     No

**RECEIVING WATER INFORMATION**

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

Owner of storm sewer system: Lake County Division of Transportation

Name of closest receiving water body to which you discharge: \_\_\_\_\_

Mail completed form to: Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Permit Section  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
or call (217) 782-0610  
FAX: (217) 782-9891

Or submit electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov)

I certify under penalty of law that this document and all attachments were prepared under my direction and 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 this 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. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

**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 Signature:

4/2/19

Date:

Shane Schneider, P.E.

Printed Name:

County Engineer

Title:



Storm Water Pollution Prevention Plan

Route Hutchins Road
Section 17-00275-02-BR
County Lake

Marked Rte. FAU 2648
Project No.
Contract No.

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

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.

Shane Schneider, PE

Print Name

County Engineer

Title

Lake County Division of Transportation

Agency

Handwritten signature of Shane Schneider

Signature

2/19/19

Date

Note: Guidance on preparing each section of BDE 2342 can be found in Chapter 41 of the IDOT Bureau of Design and Environment Manual. Chapter 41 and this form also reference the IDOT Drainage Manual which should be readily available.

I. Site Description:

A. Provide a description of the project location (include latitude and longitude, Section, Town, and Range):

The existing 3 cell pipe culvert conveying Mill Creek under Hutchins Rd will be replaced with a single span steel beam bridge. Lat 42 deg 23' 43", Long 87 deg 59' 9". S7, T45N, R11E

B. Provide a description of the construction activity which is the subject of this plan. Include the number of construction stages, drainage improvements, in-stream work, installation, maintenance, removal of erosion measures, and permanent stabilization:

Culvert/structure removal, pavement removal, HMA paving, grading, pile driving, concrete structures, underground utilities.

C. Provide the estimated duration of this project:

4 months

D. The total area of the construction site is estimated to be 1.22 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 0.3 acres.

E. The following are weighted averages of the runoff coefficient for this project before and after construction activities are completed (See Section 4-102 of the IDOT Drainage Manual):

0.68

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

Sawmill silty clay loam, undrained, 0 to 2 percent slopes, frequently flooded (1107A), K=0.28 Wauconda silt loam, 0 to 2 percent slopes (697A), K=0.37 Zurich and Ozaukee silt loams, 2 to 4 percent slopes (840B), K=0.37 Grays and Markham silt loams, 2 to 4 percent slopes (979B), K=0.37 Mundelein and Elliott silt loams, 0 to 2 percent slopes (989A), K=0.28

G. If wetlands were delineated for this project, provide an extent of wetland acreage at the site (See Phase I report):

See attached wetland delineation.

Wetland Site 1: 0.006 acres of permanent wetland impacts.

H. Provide a description of potentially erosive areas associated with this project:

The southern side of the culvert to bridge conversion includes moderately erosive soils.

I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g., steepness of slopes, length of slopes, etc.):

The scope of work for this project consists of converting an existing 3-cell pipe culvert to a single span steel beam bridge.

Stage 1: Removal of two existing culverts. Installation of cofferdam to dry up two culverts.

Stage 2: Build single span bridge over 1 remaining existing culvert.

Stage 3: Remove third existing culvert and restore full flow through corridor.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Lake County DOT

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.

IDOT, Warren Township and Lake County

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. In addition, include receiving waters that are listed as Biologically Significant Streams by the IDNR. The location of the receiving waters can be found on the erosion and sediment control plans:

Mill Creek, Sub-watershed of Upper Des Plaines River Watershed

According to IDNR Biological Stream Ratings, Mill Creek is not a biologically significant stream.

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes (i.e., 1:3 or steeper), highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc. Include any commitments or requirements to protect adjacent wetlands.

For any storm water discharges from construction activities within 50-feet of Waters of the US (except for activities for water-dependent structures authorized by a Section 404 permit, describe: a) How a 50-foot undisturbed natural buffer will be provided between the construction activity and the Waters of the United States, or b) How additional erosion and sediment controls will be provided within that area.

There are wetlands along the upper slopes of the streambank that will be protected.

O. Per the Phase I document, the following sensitive environmental resources are associated with this project and may have the potential to be impacted by the proposed development. Further guidance on these resources is available in Section 41-4 of the BDE Manual.

303(d) Listed receiving waters for suspended solids, turbidity, or siltation

The name(s) of the listed water body, and identification of all pollutants causing impairment:

Mill Creek: Oxygen, Dissolved and pH

Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

Minimizing the disturbance to steep slopes. Ensuring bare soil is left unprotected. Maintain both natural and man-made erosion and sediment control protection for the site.

Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

The project is located over Mill Creek and will include instream work for the existing culvert removal.

Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

- Applicable Federal, Tribal, State or Local Programs
- Floodplain  
Hazard Floodway designation by FEMA FIRM map
- Historic Preservation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation  
TMDL (fill out this section if checked above)  
The name(s) of the listed water body:

Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

- Threatened and Endangered Species/Illinois Natural Areas (INAI)/Nature Preserves
- Other
- Wetland

P. The following pollutants of concern will be associated with this construction project:

- |  |  |
|--|--|
| <input type="checkbox"/> Antifreeze / Coolants   | <input checked="" type="checkbox"/> Solid Waste Debris                               |
| <input checked="" type="checkbox"/> Concrete   | <input type="checkbox"/> Solvents  |
| <input checked="" type="checkbox"/> Concrete Curing Compounds                                      | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Truck Waste   | <input type="checkbox"/> Other (specify)   |
| <input type="checkbox"/> Fertilizers / Pesticides  | <input type="checkbox"/> Other (specify)   |
| <input type="checkbox"/> Paints  | <input type="checkbox"/> Other (specify)   |
| <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) | <input type="checkbox"/> Other (specify)   |
| <input checked="" type="checkbox"/> Soil Sediment  | <input type="checkbox"/> Other (specify)   |

## II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

- A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed and maintained to:
  1. Minimize the amount of soil exposed during construction activity;
  2. Minimize the disturbance of steep slopes;
  3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
  4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles,

sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- |                                     |                                    |                          |                                   |
|-------------------------------------|------------------------------------|--------------------------|-----------------------------------|
| <input checked="" type="checkbox"/> | Erosion Control Blanket / Mulching | <input type="checkbox"/> | Temporary Turf (Seeding, Class 7) |
| <input type="checkbox"/>            | Geotextiles                        | <input type="checkbox"/> | Temporary Mulching                |
| <input checked="" type="checkbox"/> | Permanent Seeding                  | <input type="checkbox"/> | Vegetated Buffer Strips           |
| <input checked="" type="checkbox"/> | Preservation of Mature Vegetation  | <input type="checkbox"/> | Other (specify)                   |
| <input checked="" type="checkbox"/> | Protection of Trees                | <input type="checkbox"/> | Other (specify)                   |
| <input type="checkbox"/>            | Sodding                            | <input type="checkbox"/> | Other (specify)                   |
| <input checked="" type="checkbox"/> | Temporary Erosion Control Seeding  | <input type="checkbox"/> | Other (specify)                   |

Describe how the stabilization practices listed above will be utilized during construction:

During construction, each area in which work has been completed will be seeded/ sod.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Removal of perimeter erosion control barrier will not commence until the permanent seeding has restored the area. All disturbed area shall be seeded/ sodded as soon as practical after construction in that area has concluded. Erosion control blanket will be placed over seeding areas after construction in that area has concluded.

- C. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, 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 but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, 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. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

- |                                     |                              |                                     |                               |
|-------------------------------------|------------------------------|-------------------------------------|-------------------------------|
| <input type="checkbox"/>            | Aggregate Ditch              | <input checked="" type="checkbox"/> | Stabilized Construction Exits |
| <input type="checkbox"/>            | Concrete Revetment Mats      | <input type="checkbox"/>            | Stabilized Trench Flow        |
| <input type="checkbox"/>            | Dust Suppression             | <input type="checkbox"/>            | Slope Mattress                |
| <input type="checkbox"/>            | Dewatering Filtering         | <input type="checkbox"/>            | Slope Walls                   |
| <input type="checkbox"/>            | Gabions                      | <input checked="" type="checkbox"/> | Temporary Ditch Check         |
| <input checked="" type="checkbox"/> | In-Stream or Wetland Work    | <input type="checkbox"/>            | Temporary Pipe Slope Drain    |
| <input type="checkbox"/>            | Level Spreaders              | <input type="checkbox"/>            | Temporary Sediment Basin      |
| <input type="checkbox"/>            | Paved Ditch                  | <input type="checkbox"/>            | Temporary Stream Crossing     |
| <input type="checkbox"/>            | Permanent Check Dams         | <input type="checkbox"/>            | Turf Reinforcement Mats       |
| <input checked="" type="checkbox"/> | Perimeter Erosion Barrier    | <input type="checkbox"/>            | Other (specify)               |
| <input type="checkbox"/>            | Permanent Sediment Basin     | <input type="checkbox"/>            | Other (specify)               |
| <input type="checkbox"/>            | Retaining Walls              | <input type="checkbox"/>            | Other (specify)               |
| <input type="checkbox"/>            | Riprap                       | <input type="checkbox"/>            | Other (specify)               |
| <input type="checkbox"/>            | Rock Outlet Protection       | <input type="checkbox"/>            | Other (specify)               |
| <input checked="" type="checkbox"/> | Sediment Trap                | <input type="checkbox"/>            | Other (specify)               |
| <input checked="" type="checkbox"/> | Storm Drain Inlet Protection | <input type="checkbox"/>            | Other (specify)               |

Describe how the structural practices listed above will be utilized during construction:

Perimeter erosion barrier shall be installed at locations specified in the plans at 1 foot outside the toe of slope or inside the ROW, whichever is closer to the centerline.

Temporary ditch checks shall be constructed per the standard detail and shall be installed as grading progresses through the project.

Silt fence should not be used in areas of concentrated flow. Ditch checks shall be utilized in locations of concentrated flows.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

N/A

**D. Treatment Chemicals**

Will polymer flocculants or treatment chemicals be utilized on this project:  Yes  No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

**E. Permanent (i.e., Post-Construction) Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. 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 on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined based on the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will 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).

Description of permanent storm water management controls:

N/A

**F. Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, 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 the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All work shall be in accordance with Lake County Stormwater Management Commission Watershed Development Ordinance. All construction activities shall be in accordance with the National Pollutant Discharge Elimination System Storm Water Permit ILR10.

**G. Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.

1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
  - Approximate duration of the project, including each stage of the project
  - Rainy season, dry season, and winter shutdown dates
  - Temporary stabilization measures to be employed by contract phases
  - Mobilization timeframe
  - Mass clearing and grubbing/roadside clearing dates
  - Deployment of Erosion Control Practices
  - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
  - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
  - Paving, saw-cutting, and any other pavement related operations
  - Major planned stockpiling operations
  - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
  - Permanent stabilization activities for each area of the project
  
2. During the pre-construction meeting, the Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
  - Temporary Ditch Checks - Identify what type and the source of Temporary Ditch Checks that will be installed as part of the project. The installation details will then be included with the SWPPP.
  - Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
  - Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
  - Stockpile Management – Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
  - Waste Disposal – Discuss methods of waste disposal that will be used for this project.
  - Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
  - Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
  - Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
  - Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
  - Dewatering Activities – Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
  - Polymer Flocculants and Treatment Chemicals – Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
  - Additional measures indicated in the plan.

### **III. Maintenance:**

When requested by the Contractor, the Resident Engineer will provide general maintenance guides (e.g., IDOT Erosion and Sediment Control Field Guide) to the Contractor for the practices associated with this project. Describe how all items will be checked for structural integrity, sediment accumulation and functionality. Any damage or undermining shall be repaired immediately. Provide specifics on how repairs will be made. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

All maintenance of ESC systems is the responsibility of the contractor. When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The

following additional procedures will be used to maintain, in good and effecting operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMP's which are to be installed and maintained per manufacturer's specifications.

All work shall be in accordance with Lake County Stormwater Management Commission Watershed Development Ordinance. All construction activities shall be in accordance with the National Pollutant Discharge Elimination System Storm Water Permit ILR10.

Maintenance of Temporary Erosion Control Systems will be as listed in the contract Special Provisions. This will include any repairs to the various temporary erosion control systems, removal of entrapped sediment or cleaning of any silt filter fabric.

Outlet protection: Restore dislodged protection at outlet structures and repair erosion as necessary. Remove any sediment buildup that may occur within the riprap. Replace with new riprap as designated by the engineer.

#### **IV. Inspections:**

Qualified personnel shall inspect disturbed areas of the construction site including Borrow, Waste, and Use Areas, which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: [epa.swnoncomp@illinois.gov](mailto:epa.swnoncomp@illinois.gov), telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall 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. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

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

#### **V. Failure to Comply:**

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.





**STORMWATER MANAGEMENT COMMISSION**

February 21, 2019

Mr. Michael Burke  
Lake County Division of Transportation  
600 West Winchester road  
Libertyville, IL 60048  
[mburke@lakecountyil.gov](mailto:mburke@lakecountyil.gov)

Subject: Watershed Development Permit #WDP-18-228  
Hutchins Road Bridge over Mill Creek  
**PERMIT ISSUANCE**

Dear Mr. Burke:

Accompanying this letter is the required Watershed Development Permit for the proposed replacement of the three existing arch culverts with a bridge (42.39554, -87.98587). This approval is subject to the conditions on the back of the permit including the following:

- Provide prior notification to Tim Cook (of the SMC) of the pre-construction meeting at least 5 calendar days in advance to enable SMC attendance
- SMC shall review and approve the Contractor's proposed in-stream work plan prior to any work in surface waters.
- Impacts to Waters of the United States are not permitted unless a permit from the U.S. Army Corps of Engineers is received prior to any such impact. Please provide SMC with a copy of the final permit when available.
- Work on the watermain is not permitted until authorization has been obtained from Lake County Public Works.
- Discussion at the preconstruction meeting will include:
  - Resident Engineer contact information
  - Construction sequence
  - Coordinate with SMC Inspector prior to start of dewatering operations
  - Coordination with LC Public Works on the watermain

This approval is based on the plans entitled:

STATE OF ILLINOIS, COUNTY OF LAKE, PLANS FOR PROPOSED HUTCHINS  
ROAD OVER MILL CREEK BRIDGE, SECTION 17-00275-02-BR,

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

PREPARED BY HAMPTON, LENZINI AND RENWICK, DATED 2/14/2019,  
RECEIVED BY SMC 2/21/2019, 112-SHEETS

We would like to be of assistance. Do not hesitate to contact Tim Cook at (847)377-7703 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 Kurt Woolford [kwoolford@lakecountyil.gov](mailto:kwoolford@lakecountyil.gov) or Executive Director Michael Warner [mwarner@lakecountyil.gov](mailto:mwarner@lakecountyil.gov) at (847) 377-7700.

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION



Robert D. Gardiner, P.E., CFM  
Permit Engineer



Kurt Woolford, P.E., CFM  
Chief Engineer

C: Mike Warner -- SMC  
Chris Olcott – HLR  
Pat Hickey – HLR  
Kaitlyn Pascus – USACE (LRC-2018-685)  
Dave Humbert – Lake County Public Works



STORMWATER MANAGEMENT COMMISSION

**WATERSHED DEVELOPMENT PERMIT NUMBER  
Permit #WDP-18-228  
HAS BEEN SECURED**

**Project:** Hutchins Road Bridge over Mill Creek

**Date Issued:** February 21, 2019

**Lat/Long:** 42.39554, -87.98587

**Conditions:**

- Install and maintain all SE/SC measures
- Minimize environmental impacts

**Issued By:** Robert D. Gardiner, PE, CFM  
Permit Engineer

Kurt A. Woolford, PE, CFM, LEED AP  
Chief Engineer

## **Notice to Contractors and Owners**

**Post this card at the site, visible from the street and so located as to permit the inspector to record the indicated inspections on the placard. 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**

**WATERSHED DEVELOPMENT PERMIT APPLICATION**

Revised 10/2012

<b>Office Use</b>	<b>1. COMMUNITY AND STATUS</b> <input type="checkbox"/> Standard <input type="checkbox"/> Conditional <input type="checkbox"/> Certified <input type="checkbox"/> Non-Certified	<b>2. Map Number</b> <i>(office use only)</i>	<b>3. STORMWATER APP. PERMIT #</b> _____	<b>4. COMMUNITY APP. NO.</b> <i>(to be assigned by Community)</i> _____
<b>5. NAME &amp; ADDRESS OF PROPERTY OWNER</b> Mr. Michael Burke Lake County Division of Transportation 600 West Winchester Road Libertyville, IL 60048  Daytime Phone: <u>847.599.7550</u> Fax: _____ Email: <u>mburke@lakecountyil.go</u>		<b>6. NAME &amp; ADDRESS OF ENGINEER/AGENT</b> Chris Olcott, P.E. Hampton, Lenzini and Renwick Inc. 380 Shepard Drive Elgin, IL 60123  Daytime Phone: <u>847.697.6700</u> Fax: <u>847.697.6753</u> Email: <u>colcott@hlreng.com</u>		<b>7. NAME &amp; ADDRESS OF CERT. WETLAND SPECIALIST</b> Patrick Hickey Hampton, Lenzini and Renwick Inc. 380 Shepard Drive Elgin, IL 60123  Daytime Phone: <u>847.531.0288</u> Fax: <u>847.697.6753</u> Email: <u>phickey@hlreng.com</u>

<b>8A. CHECK THE ONE CONDITION THAT APPLIES:</b> <input type="checkbox"/> Exempt, Watershed Development Permit Not Required (IV.A.2) <input type="checkbox"/> Minor Development (IV.A., IV.B.) <input type="checkbox"/> Major Development Outside the Floodplain (IV.A., IV.B., IV.D., IV.G.) <input type="checkbox"/> Major Development Inside the Floodplain (IV.A., IV.B., IV.C., IV.D., IV.G.) <input checked="" type="checkbox"/> Public Road Development (IV.A., IV.F.) <input type="checkbox"/> Public Development in the Floodplain (Appendix E.J.2.) <input type="checkbox"/> Existing Conditions BFE Only (no development) <input type="checkbox"/> Soil Erosion and Sediment Control Review Only	<b>8B. CHECK ALL CONDITIONS THAT APPLY:</b> <input type="checkbox"/> Isolated Wetland Impact (IV.E.) <input type="checkbox"/> Request Letter of No Wetland Impact (LONI) (IV.E.) <input checked="" type="checkbox"/> Development in a Floodway (IV.C.3.) <input type="checkbox"/> Floodplain Map Revision or Amendment (IV.C.2.g.; IV.C.3.d.(8)) <input type="checkbox"/> Watercourse w/Drainage Area >20 Acres and <100 Acres (IV.A., IV.D.) <input type="checkbox"/> Watercourse w/Drainage Area >100 Acres and <640 Acres (IV.A., IV.D.) <input type="checkbox"/> Earth Change Approval (ECA) (IV.A.4.b.) <input type="checkbox"/> Variance Request (V.) <input type="checkbox"/> BFE or Floodway Determination (IV.C.) <input checked="" type="checkbox"/> Designated Erosion Control Inspector (DECI Required) <input type="checkbox"/> Pre-application Meeting Held _____ <input checked="" type="checkbox"/> Hydrologically Disturbs 5000 sq. ft. or More
---	--

<b>9A. STORMWATER DATA SUMMARY</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>=</th> <th></th> <th>Unit</th> </tr> </thead> <tbody> <tr><td>Total Property Ownership</td><td>=</td><td>N/A</td><td>Acres</td></tr> <tr><td>Hydrologic Disturbance</td><td>=</td><td>0.896</td><td>Acres</td></tr> <tr><td>Watershed Area Tributary to Development</td><td>=</td><td>12,900</td><td>Acres</td></tr> <tr><td>Proposed Impervious Area (new)</td><td>=</td><td>0.174</td><td>Acres</td></tr> <tr><td>Existing Impervious Area Pre-1992</td><td>=</td><td></td><td>Acres</td></tr> <tr><td>Existing Impervious Area Post-1992</td><td>=</td><td></td><td>Acres</td></tr> <tr><td>Detention Volume Required</td><td>=</td><td>N/A</td><td>Acres-ft.</td></tr> <tr><td>Compensatory Storage Required</td><td>=</td><td>0.29</td><td>Acres-ft.</td></tr> <tr><td>    Depressional</td><td>=</td><td>0.00</td><td>Acres-ft.</td></tr> <tr><td>    Riverine 0- to 10-Year</td><td>=</td><td>0.25</td><td>Acres-ft.</td></tr> <tr><td>    Riverine 10- to 100-Year</td><td>=</td><td>0.04</td><td>Acres-ft.</td></tr> </tbody> </table>		=		Unit	Total Property Ownership	=	N/A	Acres	Hydrologic Disturbance	=	0.896	Acres	Watershed Area Tributary to Development	=	12,900	Acres	Proposed Impervious Area (new)	=	0.174	Acres	Existing Impervious Area Pre-1992	=		Acres	Existing Impervious Area Post-1992	=		Acres	Detention Volume Required	=	N/A	Acres-ft.	Compensatory Storage Required	=	0.29	Acres-ft.	Depressional	=	0.00	Acres-ft.	Riverine 0- to 10-Year	=	0.25	Acres-ft.	Riverine 10- to 100-Year	=	0.04	Acres-ft.	<b>9B. WETLAND DATA SUMMARY</b> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th>=</th> <th></th> <th></th> </tr> </thead> <tbody> <tr><td>Existing Wetland Acreage</td><td>=</td><td>0.006</td><td></td></tr> <tr><td>    Waters of the U.S.</td><td>=</td><td>0.006</td><td></td></tr> <tr><td>    Isolated Waters of Lake County</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>Impacted Wetland Acreage</td><td>=</td><td>0.006</td><td></td></tr> <tr><td>    Waters of the U.S.</td><td>=</td><td>0.006</td><td></td></tr> <tr><td>    Isolated Waters of Lake County</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>Mitigation Replacement Ratio</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>Mitigation Acreage Required</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>    Waters of the U.S.</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>    Isolated Waters of Lake County</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>On-Site</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>Off-Site</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>Mitigation Bank</td><td>=</td><td>N/A</td><td></td></tr> <tr><td>SMC Wetland Restoration Fund</td><td>=</td><td>N/A</td><td></td></tr> </tbody> </table>		=			Existing Wetland Acreage	=	0.006		Waters of the U.S.	=	0.006		Isolated Waters of Lake County	=	N/A		Impacted Wetland Acreage	=	0.006		Waters of the U.S.	=	0.006		Isolated Waters of Lake County	=	N/A		Mitigation Replacement Ratio	=	N/A		Mitigation Acreage Required	=	N/A		Waters of the U.S.	=	N/A		Isolated Waters of Lake County	=	N/A		On-Site	=	N/A		Off-Site	=	N/A		Mitigation Bank	=	N/A		SMC Wetland Restoration Fund	=	N/A	
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9C. Check box if State (IL) funds are being used for this development.       9D. Check box if this is a project being funded in part/in whole by an SMC grant?

**10A. DESCRIPTION OF DEVELOPMENT** Roadway and bridge improvements at Hutchins Road Bridge over Mill Creek

<b>10B. NAME OF DEVELOPMENT</b> Hutchins Road	<b>10C. SINGLE FAMILY HOME ONLY</b> Estimated future home value: _____								
<b>10D. LOCATION OF DEVELOPMENT</b> Hutchins Road over Mill Creek Street Address <u>Near 36630 N Hutchins Rd, Gurnee, IL 60031</u> Municipality <u>Gurnee, Illinois</u> Des Plaines River <u>Mill Creek</u> Watershed <u>Sub-Watershed</u>	<b>11. LEGAL DESCRIPTION</b> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="text-align:center;">NE</td> <td style="text-align:center;">7</td> <td style="text-align:center;">45N</td> <td style="text-align:center;">11E</td> </tr> <tr> <td style="text-align:center;">¼ Section</td> <td style="text-align:center;">Section</td> <td style="text-align:center;">Township</td> <td style="text-align:center;">Range</td> </tr> </table> PIN <u>Roadway right-of-way</u> (If more than three PIN exists for the project, please include on a separate attachment)  42.39554°N      87.98587°W Latitude      Longitude	NE	7	45N	11E	¼ Section	Section	Township	Range
NE	7	45N	11E						
¼ Section	Section	Township	Range						

**12. LIST ALL LOCAL, STATE, AND FEDERAL PERMIT APPLICATION, OR APPROVAL LETTERS REQUIRED FOR DEVELOPMENT**

Permit Type	Issuing Agency	Permit Number	Application Filing Date	Permit Issue Date
Regional Permit 3	U.S. Army Corps of Engineers	LRC-2018-623	August 2, 2018	Pending

**13A. UNDER PENALTY OF INTENTIONAL MISREPRESENTATION AND/OR PERJURY, I declare that I have examined and/or made this application and it is true and correct to the best of my knowledge and belief. I agree to construct said development in compliance with the permitted documents. I realize that the information that I have affirmed hereon forms a basis for the issuance of the Watershed Development Permit(s) herein applied for and approval of plans in connection therewith shall not be construed to permit any construction upon said premises or use thereof in violation of any provision of any applicable ordinance or to excuse the owner or his successors in title from complying therewith.**

Signature of Property Owner, or Authorized Agent _____ Signature of Professional Engineer Christopher Olcott	Date <u>8/23/2018</u> Signature of Certified Wetland Specialist Patrick Hickey CWS# <u>009</u> Date <u>8/20/18</u>
---	--

**13B. I CERTIFY that the plans/documents submitted for the above-referenced development have been prepared under the supervision of a professional engineer or certified wetland specialist as appropriate.**

Signature of Professional Engineer Christopher Olcott P.E.# <u>062-063213</u> Date <u>8/20/18</u>	Signature of Certified Wetland Specialist Patrick Hickey CWS# <u>009</u> Date <u>8/20/18</u>
--	---

FOR OFFICE USE ONLY

14. PERMIT REVIEW FEES (separate checks)

Stormwater Review Amount: \$4,200

Isolated Wetland Review Amount: \$

15. VARIANCE REQUEST Date Requested: Date Adversised: Date Approved/Denied:

16. SECURITIES (if required) AMOUNT

Pre Construction \$ Inspection Deposit \$ 5 Year Mitigation \$
Surety\$ Wetland Credit held by TOTAL SECURITY \$

17. FINAL APPROVAL FOR PLANS ENTITLED AND DATED:

State of Illinois, County of Lake, Plans for Proposed Hutchins Road Over Mill Creek Bridge, Section 17-00275-02-BR, prepared by Hampton, Lenzini and Renwick, Dated 2/14/19, received by SMC 2/21/19, 112-sheets

Community Professional Engineer

Certified Wetland Specialist

Lake Co. Stormwater Management Commission 2/21/19

Handwritten signature of Kurt Wolf

Chief Engineer #062-059261

Enforcement Officer

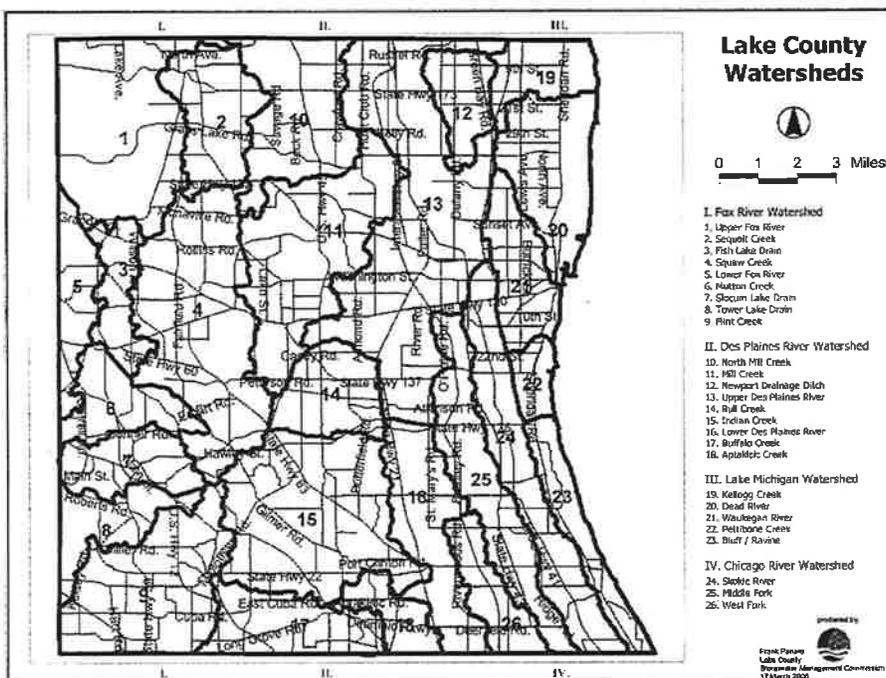
This permit is subject to the following conditions:

- (a) This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands...
(b) This permit does not release the permittee from liability for damage to persons or property...
(c) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations...
(d) The permittee shall, at his own expense, remove all temporary piling, cofferdams, false work...
(e) The execution and details of the work authorized shall be subject to the approval of the SMC...
(f) Application for permit will be considered full acceptance by the permittee of the terms and conditions of the permit...
(g) The SMC, in issuing this permit has relied, upon the statements and representations made by the permittee...
(h) If the project authorized by this permit is located in or along Lake Michigan or a meandered lake...
(i) In issuing this permit, the SMC does not approve the adequacy of the design or structural strength...
(j) Noncompliance with the conditions of this permit will be considered grounds for revocation...
(k) If the work permitted is not completed within three years of the permit issuance date, this permit shall be void.

This permit is subject to further special conditions as follows:

PROVIDE PRIOR NOTIFICATION OF THE PRE-CONSTRUCTION MEETING TO SMC (847) 377-7700 INSPECTOR FIVE WORKING DAYS BEFORE START OF CONSTRUCTION TO ENABLE SMC ATTENDANCE.

PROVIDE AS-BUILT PLANS OF THE STORMWATER MANAGEMENT SYSTEM TO SMC PRIOR TO FINAL SEEDING.





REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY**  
CHICAGO DISTRICT, CORPS OF ENGINEERS  
231 SOUTH LA SALLE STREET  
CHICAGO, ILLINOIS 60604-1437

March 7, 2019

Technical Services Division  
Regulatory Branch  
LRC-2018-00685

SUBJECT: RP 3 & 7 for LCDOT Hutchins Road, 0.01 acre of fill, Lake County, Illinois  
(42.39554, -87.98587)

Michael Burke  
Lake County Department of Transportation  
600 West Winchester Road  
Libertyville, Illinois 60048

Dear Mr. Burke,

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit 3 & 7 and the General Conditions for all activities authorized under the Regional Permit Program.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the February 14, 2019, plans entitled *Hutchins Road Over Mill Creek Cover Sheet* prepared by Hampton Lenzini and Renwick Inc. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The following special conditions are a requirement of your authorization:

1. Please note that this site is within the aboriginal homelands of several American Indian Tribes. If any cultural, archaeological or historical resources are unearthed during activities authorized by this permit, work in that area must be stopped immediately and the Corps, State Historic Preservation Office and/or Tribal Historic Preservation Office must be contacted for further instruction. The Corps will initiate the coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing on the National Register of Historic Places.
2. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.

3. A copy of this authorization must be present at the project site during all phases of construction.
4. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
5. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions.
6. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Lake County Stormwater Management Commission (LCSMC)'s written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on-site.
  - a. You shall schedule a preconstruction meeting with LCSMC to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site. You shall contact the LCSMC at least 10 calendar days prior to the preconstruction meeting so that a representative may attend.
  - b. You shall notify the LCSMC or the LCSMC's designated agent of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
  - c. Prior to commencement of any in-stream work, you shall submit construction plans and a detailed narrative disclosing the contractor's preferred method of cofferdam and dewatering method to the LCSMC or the LCSMC's designated agent. Work in the waterway shall NOT commence until the LCSMC notifies you, in writing, that the plans have been approved.
7. Under no circumstances shall the Contractor prolong final grading and shaping so that the entire project can be permanently seeded at one time. Permanent stabilization within the wetland and stream buffers identified in the plans shall be initiated immediately following the completion of work. Final stabilization of these areas should not be delayed due to utility work to be performed by others.
8. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.

9. The plan will be designed to allow for the conveyance of the 2-year peak flow past the work area without overtopping the cofferdam. The Corps has the discretion to reduce this requirement if documented by the applicant to be infeasible or unnecessary.
10. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
11. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
12. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities
13. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
14. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or pre-construction conditions and fully stabilized prior to accepting flows.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Kaitlyn A. Pascus of my staff by telephone at (312) 846-5533, or email at [Kaitlyn.A.Pascus@usace.army.mil](mailto:Kaitlyn.A.Pascus@usace.army.mil).

Sincerely,  
Digitally signed by  
CHERNICH.KATHLEEN.G.1230  
365616  
Date: 2019.03.07 18:02:31  
-06'00'  
Kathleen G. Chernich  
Chief, East Section  
Regulatory Branch

Enclosures

Copy Furnished:

Lake County Stormwater Management Commission (Kurt Woolford)  
Lake County Planning, Building and Development Department (Matthew Meyers)  
Hampton, Lenzini, & Renwick, Inc. (Patrick Hickey)  
Village of Gurnee (David L. Ziegler)



**PERMIT COMPLIANCE  
CERTIFICATION**

Permit Number: LRC-2018-00685  
Permittee: Michael Burke  
Lake County Department of Transportation  
Date: March 7, 2019

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.<sup>1</sup>

\_\_\_\_\_  
PERMITTEE

\_\_\_\_\_  
DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers  
Chicago District, Regulatory Branch  
231 South LaSalle Street, Suite 1500  
Chicago, Illinois 60604-1437

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

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<sup>1</sup> If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



US Army Corps of Engineers®  
Chicago District

**GENERAL CONDITIONS  
APPLICABLE TO THE 2017  
REGIONAL PERMIT PROGRAM**

The permittee must comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. State 401 Water Quality Certification - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On February 16, 2017, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

1. The applicant must not cause:
  - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - c) interference with water use practices near public recreation areas or water supply intakes;
  - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
2. The applicant must provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Except as allowed under condition 7, 9 and 10, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction must be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be constructed during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2016).
6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains and related facilities prior to construction.
7. Backfill used in stream crossing trenches shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or

- b) excavation and backfilling are done under dry conditions.
10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
  11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered “acid-producing material” as defined in 35 Il. Adm. Code, Subtitle D. If considered “acid-producing material,” the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.
  12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
  13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance), or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
  14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) with respect to the “Notification” General Condition 23, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification must include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.
  15. The applicant shall implement Best Management Practices (BMPs) to protect water quality, preserve natural hydrology and minimize the overall impacts to aquatic resources during and after construction. If the project involves a water with an approved Total Maximum Daily Load (TMDL) allocation for any parameter, measures which ensure consistency with the assumption and requirements of the TMDL shall be included. TMDL program information and water listings are available at <http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/index>. If the project involves and impaired water listed on the Illinois Environmental Protection Agency’s Section 303(d) list for suspended solids, turbidity, or siltation, measures designed for at least a 25-year, 24-hour rainfall event shall be incorporated. Impaired waters are identified at <http://www.epa.illinois.gov/topics/water-quality/watershed-management/tmdls/303d-list/index>.
  16. Earthen granular fill used for construction of temporary structures in waters of the State shall have less than 20% passing a #230 U.S. sieve.
  17. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:
    - a) All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
    - b) All drilling fluids shall be adequately contained such that they cannot cause a discharge to surface waters of the State. Such fluids shall be managed such that they are not discharged to waters of the State and disposed of appropriately in accordance with the regulations at 35 Il. Adm. Code Subtitle G.
    - c) Erosion and sediment control is provided with Conditions 2, 4, and 5.
2. Illinois Coastal Management Program - Any non-federal entity applying to the Corps for an Individual Permit or a Letter of Permission for a project located within the boundary of the Illinois Coastal Management Program (ICMP), including waters of Lake Michigan, is required to submit a Federal Consistency Determination confirmation from the Illinois Coastal Management Program as part of the permit review process.

On February 18, 2017, the Illinois Department of Natural Resources, Coastal Management Program granted the Federal Consistent Determination for the Regional Permit Program. This determination is confirmation that the activities covered under the Regional Permit Program are consistent with the policies of the ICMP.

PDF maps of the Illinois Coastal Management Program’s Zone Boundaries can be found at the bottom of the page at [www.dnr.illinois.gov/cmp/Pages/boundaries.aspx](http://www.dnr.illinois.gov/cmp/Pages/boundaries.aspx) and instructions on requesting an ICMP Federal Consistency Determination can be found at [www.dnr.illinois.gov/cmp/Documents/ICMPFederalConsistencyReviewProcedures.pdf](http://www.dnr.illinois.gov/cmp/Documents/ICMPFederalConsistencyReviewProcedures.pdf).

### 3. Threatened and Endangered Species –

- a) For applications where a Federal agency other than the District is designated as the lead agency, the designated lead agency shall follow agency specific procedures for complying with the requirements of Section 7 of the Endangered Species Act of 1973 (Act). Federal permittees must provide the District with the following documentation to demonstrate compliance with those requirements: the species list, your effects determination for each species, and the rationale for your effects determination for each species.
- b) For non-Federal permittees, if the District determines that the activity may affect Federally listed species or critical habitat, the District must initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants must provide additional information that would enable the District to conclude that the proposed action will have no effect on Federally listed species.

The application packet must indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants must provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at [www.fws.gov/midwest/Endangered](http://www.fws.gov/midwest/Endangered). Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list and provide your effects determination for each species along with the rationale for your effects determination for each species to this office for review.

If no species, their suitable habitats, or critical habitats are listed, then a “no effect” determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have “no effect” or “may affect” the species or suitable habitat. The District must request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation.

If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine’s emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine’s emerald dragonfly critical habitat units in Illinois. [www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html](http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html)

4. Historic Properties - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees designated as the lead agency shall follow agency specific procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)).

When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District will determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the District,

the non-Federal applicant must not begin the activity until notified by the District either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District must take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency  
1 Old State Capitol Plaza  
Springfield, IL 62701-1507  
(217) 782-4836  
[www.illinois.gov/ihpa/](http://www.illinois.gov/ihpa/)

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. The District will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

5. Soil Erosion and Sediment Control - Measures must be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures must be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures must be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark must be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary best management practices (BMPs) to be implemented during construction. It is recommended that the plan be designed in accordance with the Illinois Urban Manual, current edition ([www.aiswcd.org/illinois-urban-manual](http://www.aiswcd.org/illinois-urban-manual)). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans should follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional SESC measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD) or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has determined that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may elect to attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD  
2315 Dean Street, Suite 100  
St. Charles, IL 60174  
(630) 584-7960 ext.3  
[www.kanedupageswcd.org](http://www.kanedupageswcd.org)

Lake County SMC  
500 W. Winchester Rd, Suite 201  
Libertyville, IL 60048  
(847) 377-7700  
[www.lakecountyil.gov/stormwater](http://www.lakecountyil.gov/stormwater)

McHenry-Lake County SWCD  
1648 South Eastwood Dr.  
Woodstock, IL 60098  
(815) 338-0099 ext.3  
[www.mchenryswcd.org](http://www.mchenryswcd.org)

North Cook SWCD  
640 Cosman Rd  
Elk Grove Village, IL 60007  
(847) 885-8830  
[www.northcookswcd.org](http://www.northcookswcd.org)

Will/South Cook SWCD  
1201 S. Gougar Rd  
New Lenox, IL 60451  
(815) 462-3106  
[www.will-scookswcd.org](http://www.will-scookswcd.org)

6. Total Maximum Daily Load - For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant must develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: [www.epa.state.il.us/water/tmdl/](http://www.epa.state.il.us/water/tmdl/)

7. Floodplain - Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills must be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR  
2050 Stearns Road  
Bartlett, IL 60103  
(847) 608-3100  
[www.dnr.illinois.gov/WaterResources/](http://www.dnr.illinois.gov/WaterResources/)

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

8. Navigation - Regulated activities may not cause more than a minimal adverse effect on navigation. Safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities within navigable waters of the United States. The permittee understands and agrees that if future operations by the United States require the removal, relocation, or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work will cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim will be made against the United States on account of any such removal or alteration.

9. Proper Maintenance - Authorized structures or fill must be properly maintained, including that necessary to ensure public safety.

10. Aquatic Life Movements - Regulated activities may not substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.

11. Equipment - Soil disturbance and compaction in regulated areas must be minimized through the use of low ground pressure equipment, matting for heavy equipment, or other measures as approved by the District.

12. Wild and Scenic Rivers - Regulated activities may not occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.

13. Tribal Rights - Regulated activities or their operation may not impair reserved Tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

14. Water Supply Intakes - Discharges of dredged or fill material may not occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.

15. Shellfish Production - Discharges of dredged or fill material may not occur in areas of concentrated shellfish production.

16. Suitable Material - Discharges of dredged or fill material may not consist of unsuitable material. Material discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, vehicle parts, asphalt, and creosote treated wood.
17. Spawning Areas - Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.
18. Obstruction of High Flows - Discharges must not permanently restrict or impede the passage of normal or expected high flows. All crossings must be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows and designed so as not to impede low water flows or the movement of aquatic organisms.
19. Impacts From Impoundments - If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow must be avoided to the maximum extent practicable.
20. Waterfowl Breeding Areas - Discharges into breeding areas utilized by migratory waterfowl must be avoided to the maximum extent practicable.
21. Removal of Temporary Fills - Temporary fill material must be removed in its entirety and the affected area returned to pre-existing condition.
22. Mitigation - All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation must utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant must describe in detail how the mitigation site was chosen and will be developed, and be based on the specific resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site, and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at [www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx](http://www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx).
23. Notification - The applicant must provide written notification (i.e., a complete application) for a proposed activity to be verified under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant must submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period. Applications may be either sent to [ChicagoRequests@usace.army.mil](mailto:ChicagoRequests@usace.army.mil) or mailed to our office: USACE Regulatory Branch, 231 South LaSalle Street, Suite 1500, Chicago, Illinois 60604.

For all activities, notification must include:

- a. A detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of permanent and temporary fills proposed in each water of the U.S., and a statement that the terms and conditions of the RPP will be followed. For projects with impacts to multiple aquatic resources, provide a table identifying impact types and amounts.
- b. A completed joint application form for Illinois signed by the applicant or agent. The application form is available at [www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf](http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf). If the applicant does not sign the joint application form, notification must include a signed, written statement from the applicant designating the agent as their representative.

- c. A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands must be identified through the use of reference materials including review of local wetland inventories, soil surveys, and the most recent available aerial photography), must be prepared in accordance with the current U.S. Army Corps of Engineers methodology ([www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg\\_supp.aspx](http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx)) and generally conducted during the growing season.\* The District's wetland delineation standards are available at [www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf](http://www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf). For sites supporting wetlands, the delineation must include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation must also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of these requirements may be allowed by the District on a case-by-case basis only.
- d. A street map showing the location of the project area.
- e. Latitude and longitude for the project in decimal degrees format (for example 41.878639N, -87.631212W).
- f. Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans must include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans must also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- g. Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction of the project.
- h. A determination whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants must provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at [www.fws.gov/midwest/Endangered](http://www.fws.gov/midwest/Endangered). Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list and provide your effects determination for each species along with the rationale for your effects determination for each species to this office for review.

In the event there are no species, their suitable habitats, or critical habitats within areas affected (directly or indirectly) by the proposed project, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have a "no effect" or a "may affect" determination on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effects determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

- i. A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: [dnr.illinois.gov/EcoPublic/](http://dnr.illinois.gov/EcoPublic/). For the first general information question, select "To obtain information on Illinois T&E species or INAI sites for federal agency actions" and select "U.S. Army Corps of Engineers" from the drop down menu. Once the EcoCAT and consultation process is complete, forward all resulting information to this office for consideration. The report must also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.

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\* If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

- j. A statement about the knowledge of the presence or absence of historic properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) may be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee must provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: [www.illinois.gov/iHPA/Preserve/Pages/Resource-Protection.aspx](http://www.illinois.gov/iHPA/Preserve/Pages/Resource-Protection.aspx).
- k. Where an appropriate watershed plan is available, the applicant must address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan. A list of watershed plans is available at [www.lrc.usace.army.mil/Missions/Regulatory/Illinois/WatershedPlans.aspx](http://www.lrc.usace.army.mil/Missions/Regulatory/Illinois/WatershedPlans.aspx).
- l. A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP) in compliance with 33 CFR 332.
- n. A written narrative individually addressing each of the items listed under the specific RP(s) being requested.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to interested Federal, state and local agencies, and appropriate Indian Tribes for review and comment. Additional entities may also be notified as needed. Agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension, not to exceed fifteen (15) calendar days. The Illinois Historic Preservation Agency and Indian Tribes have thirty (30) calendar days from the date of the ARC to provide comments. The District will fully consider agency comments received within the specified time frame. If the District determines that the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an Individual Permit.

24. Compliance Certification - Any permittee who has received authorization under the RPP from the District must submit a signed certification stating that the authorized work has been completed. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions, and; c) the signature of the permittee certifying the completion of the work and mitigation.

25. Multiple use of Regional Permits - In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant must notify the District in accordance with General Condition 23. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.

26. Other Restrictions - Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved by:

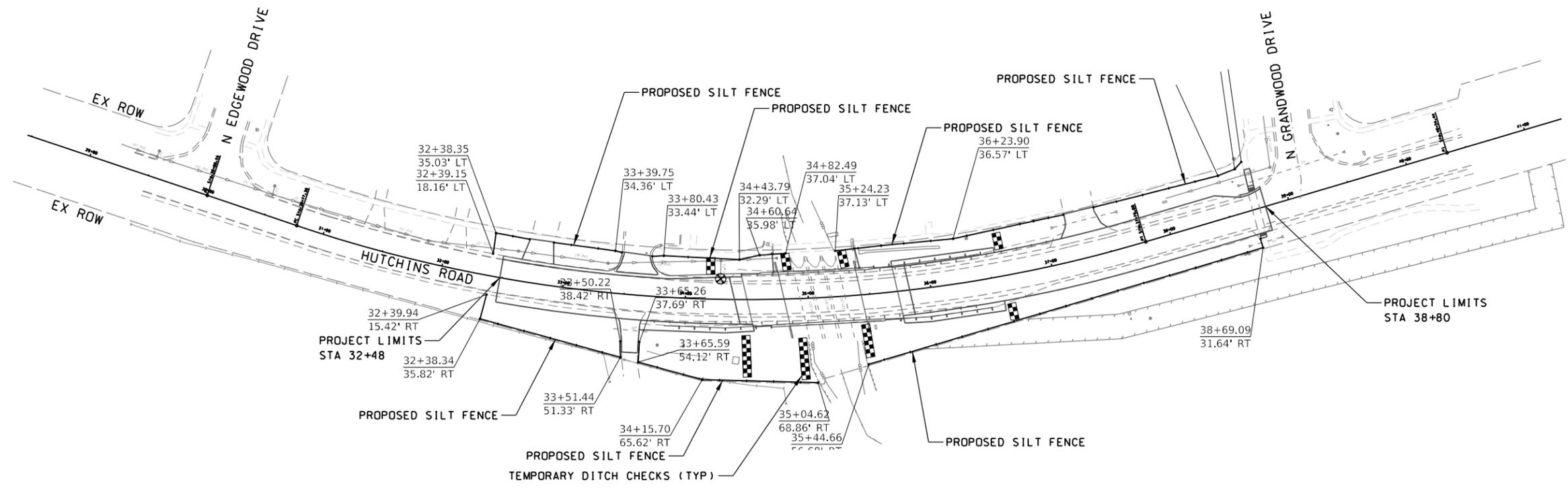
//ORIGINAL SIGNED/

\_\_\_\_\_  
 Christopher T. Drew  
 Colonel, U.S. Army  
 District Commander

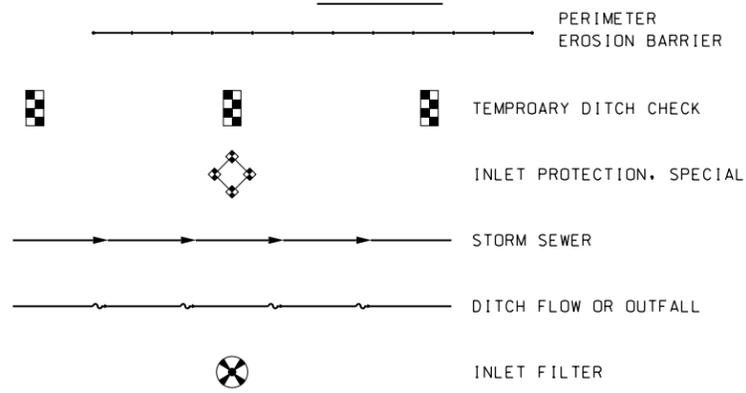
March 23, 2017

\_\_\_\_\_  
 Date





**LEGEND**



**ESTIMATED QUANTITIES**

- 1,185 FEET - PERIMETER EROSION BARRIER
- 63 POUNDS - TEMPORARY EROSION CONTROL SEEDING
- 89 FEET - TEMPORARY DITCH CHECKS
- 1 EACH - INLET FILTERS
- 3,069 SQYD - TEMPORARY EROSION CONTROL BLANKET

U.S. Army Corps of Engineers – Chicago District – Regulatory Branch

**Requirements for In-stream Construction Activities**

The U.S. Army Corps of Engineers shall be contacted for a review of the proposed In-stream work plan which must be approved by this office prior to the commencement of work. The plan shall meet the erosion and sediment control standards listed below and include means and methods for completing work within a waterway. All cofferdams shall be constructed to allow the passage of high flows, maintain downstream flows, and withstand anticipated erosive forces. Cofferdams shall be designed and installed so as not to impede the movement of aquatic organisms.

**The following definitions apply to these notes:**

**Cofferdam:** a temporary structure within a waterway or body of water designed to provide a dry work area for temporary construction activities and to contain disturbed soil and/or suspended sediments.

**In-stream work area:** work occurring at or below the ordinary high water mark (OHWM) of a waterway or the normal water level (NWL) of abutting wetlands, including adjacent uplands.

**Dewatering:** the removal of water with the purpose of creating a dry work area for temporary construction activities.

**Work within a waterway must meet the following standards:**

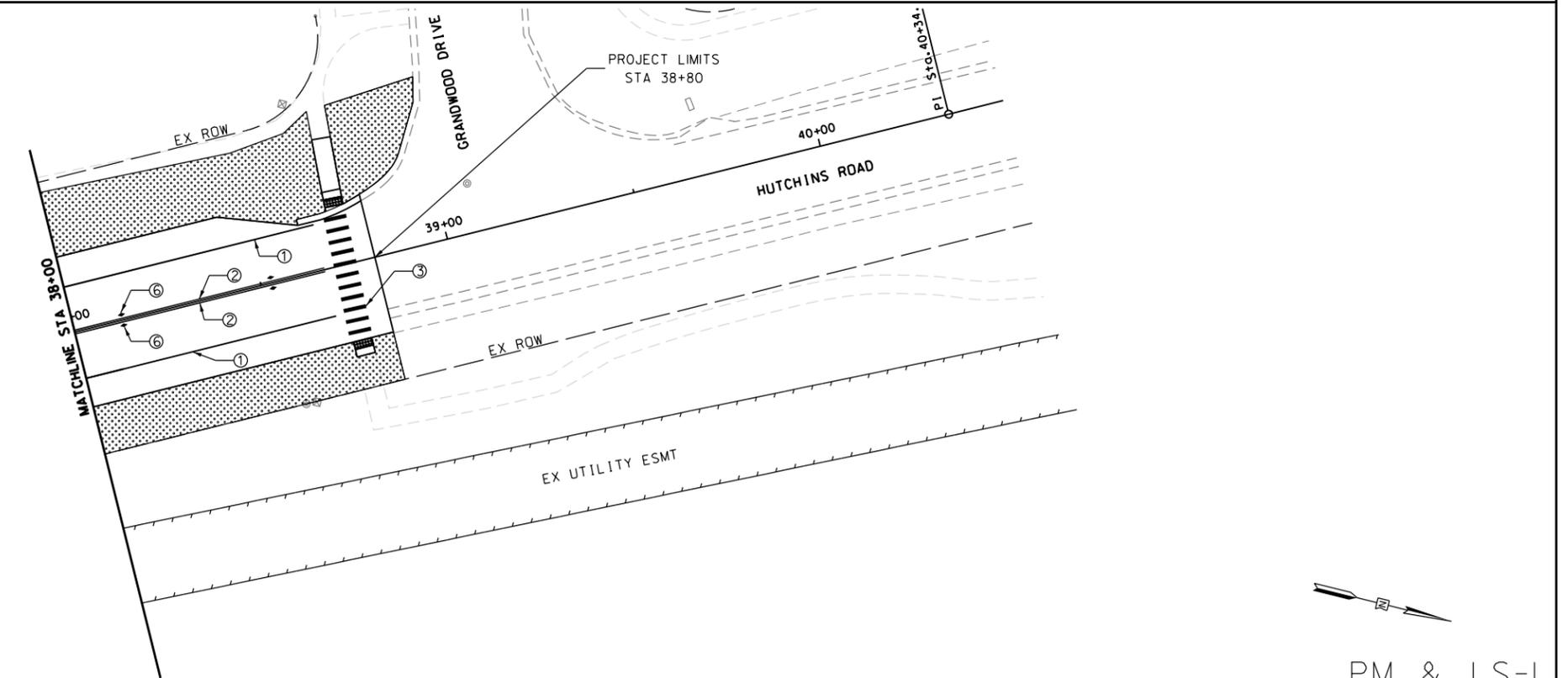
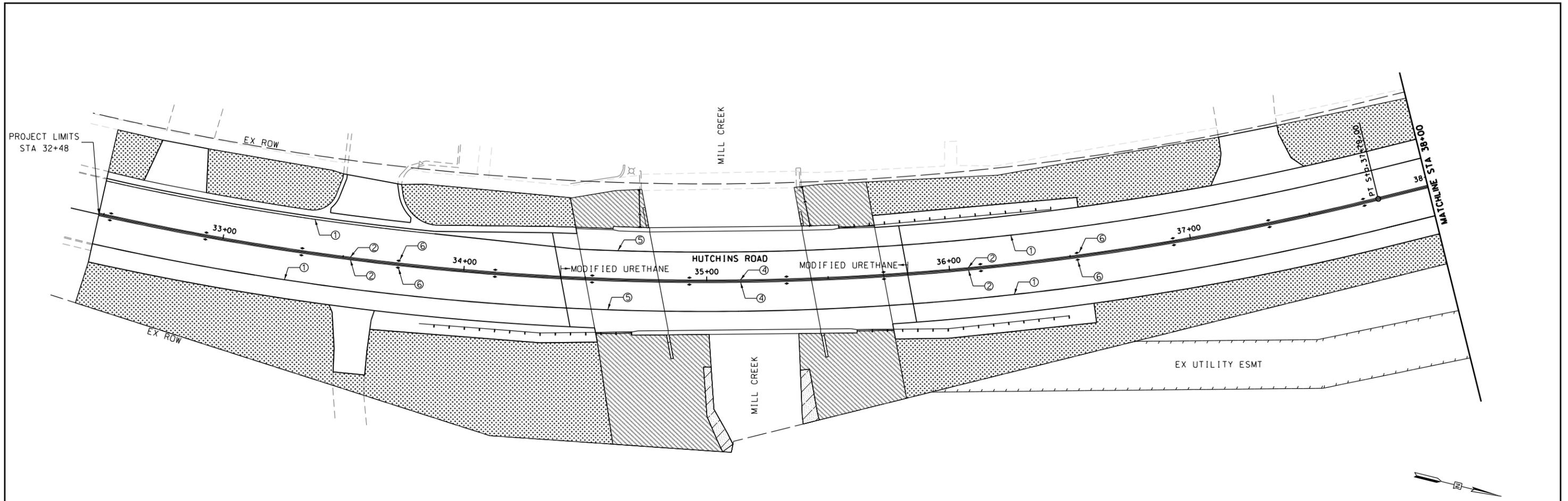
1. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
2. The plan will be designed to allow for the conveyance of the 2-year peak flow past the work area without overtopping the cofferdam. The Corps has the discretion to reduce this requirement if documented by the applicant to be infeasible or unnecessary.

3. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
4. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
5. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
6. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
7. The area from the toe to the top of the side slope shall be temporarily stabilized during construction to reduce the potential for erosion. All areas disturbed due to construction activities shall be restored to proposed conditions and fully stabilized prior to accepting flows.

REVISIONS / REMARKS		DATE	BY	SURVEYOR:	
NO.	DESCRIPTION	/ /		DSGMR/LIAISON:	/
		/ /		PLOTTED BY:	dshermon2/14/2019



<b>HUTCHINS ROAD OVER MILL CREEK</b>		ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
<b>EROSION CONTROL PLAN</b>		<b>CH81</b>	<b>275</b>	<b>17-00275-02-BR</b>	<b>19</b>	<b>112</b>



**LEGEND**

- ① THERMOPLASTIC PAVEMENT MARKINGS, LINE 4"  
GROOVING FOR RECESSED PAVEMENT MARKINGS, 5"
- ② THERMOPLASTIC PAVEMENT MARKINGS, LINE 5"  
GROOVING FOR RECESSED PAVEMENT MARKINGS, 6"
- ③ THERMOPLASTIC PAVEMENT MARKINGS, LINE 12"  
GROOVING FOR RECESSED PAVEMENT MARKINGS, 13"
- ④ MODIFIED URETHANE PAVEMENT MARKING, LINE 4"
- ⑤ MODIFIED URETHANE PAVEMENT MARKING, LINE 5"
- ⑥ RECESSED REFLECTIVE PAVEMENT MARKERS

- SEEDING CLASS 2A (SALT TOLERANT ROADSIDE MIXTURE)  
EROSION CONTROL BLANKET
- SODDING (SALT TOLERANT)
- SEEDING CLASS 4B  
EROSION CONTROL BLANKET

REVISIONS / REMARKS		DATE	BY	SURVEYOR:
NO.	DESCRIPTION			
				DSG NR/LIAISON:
				PLOTTED BY: dsherman2/14/2019

**VERTICAL**  
0 10 20 40

**SCALES**  
HORIZ.  
0 20 40

Hamilton, Lentz and Renwick, Inc.  
Civil & Survey Engineering and Construction Services  
ELLEN - SPRINGFIELD - WOODBRIDGE - MT CARMEL  
www.hlr-engineering.com

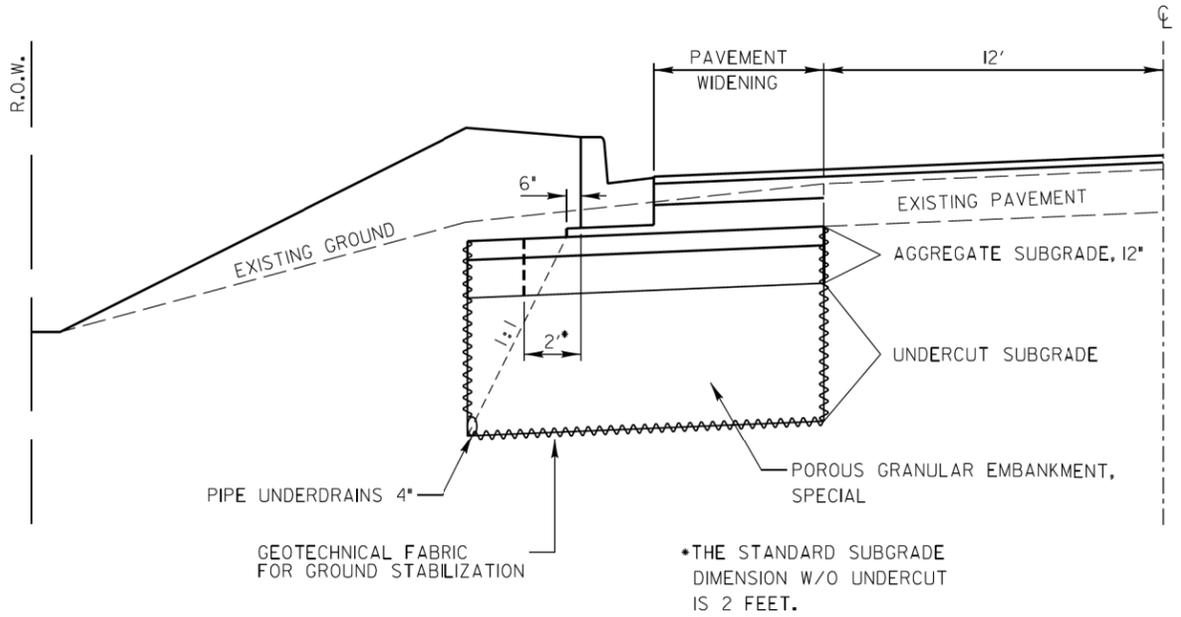


**HUTCHINS ROAD OVER MILL CREEK**  
**PAVEMENT MARKING & LANDSCAPING PLAN**

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH81	275	17-00275-02-BR	20	112

PM & LS-1

FILE NAME: P:\2017\170582\cad\phase 2\CADD.Sheets\170582-sht-PaveMark and Landscape-01.dgn



IN UNSTABLE AREAS, THE SUBGRADE SHALL BE:  
 UNDERCUT (PAID FOR AS EARTH EXCAVATION PER CU YD);  
 REINFORCED WITH GEOTECHNICAL FABRIC FOR GROUND STABILIZATION  
 (PAID FOR PER SQ YD);  
 DRAINED BY INSTALLATION OF PIPE UNDERDRAINS, 4"  
 (PAID FOR PER FOOT);  
 BACKFILLED WITH POROUS GRANULAR EMBANKMENT, SPECIAL  
 (PAID FOR PER TON) AND;  
 TOPPED WITH AGGREGATE SUBGRADE, 12" (300mm)  
 (PAID FOR PER SQ YD).

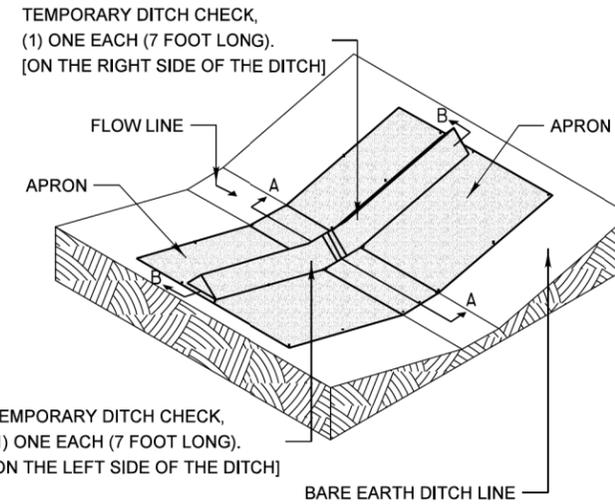
SCALE:  
 HORIZONTAL 1" = 5'  
 VERTICAL 1" = 2.5'

REVISIONS	DATE	APPROVED BY: M. G. Zemaitis DATE: APRIL 1, 2007

**UNDERCUT DETAIL**

LC2000

**FOR BARE EARTH APPLICATION ONLY**



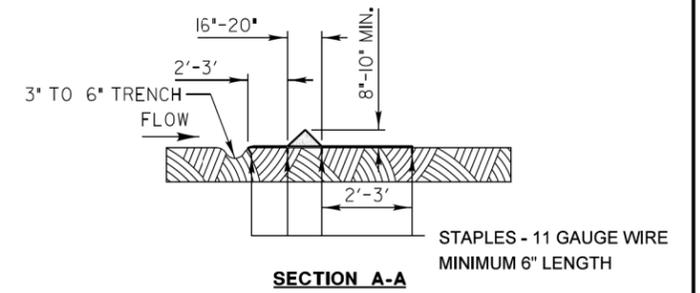
**SILT DIKE UNIT ISOMETRIC**

NOTES:  
 THE TEMPORARY DITCH CHECK SHALL BE USED IN BARE EARTH DITCH LINES AND SHALL BE REMOVED JUST PRIOR TO THE INSTALLATION OF EROSION CONTROL BLANKET AND SEEDING.

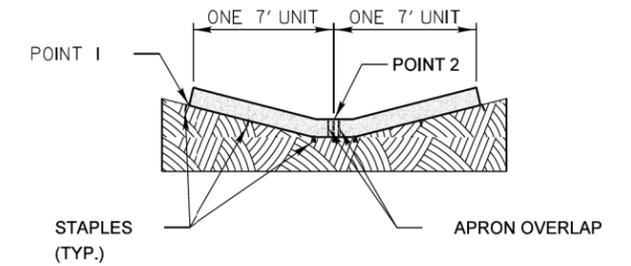
THE INSTALLATION SHOWN WILL BE MEASURED AND PAID FOR AS A TEMPORARY DITCH CHECK 14 FEET IN LENGTH.

STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON THE DIAGRAM.

POINT 1 MUST BE HIGHER THAN POINT 2 TO INSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUND THE ENDS.



**SECTION A-A**



**SECTION B-B**

REVISIONS	DATE	APPROVED BY: M. G. ZEMAITIS DATE: APRIL 1, 2007
ADDED DIMENSIONS	04/11/08	
REVISED PAY ITEM	04/15/10	
ADDED PLASTIC BERM (pg2)	10/10/12	

**TEMPORARY DITCH CHECK INSTALLATION FOR ROADWAY OR DRAINAGE DITCH**

(SHEET 1 OF 2)

LC2050

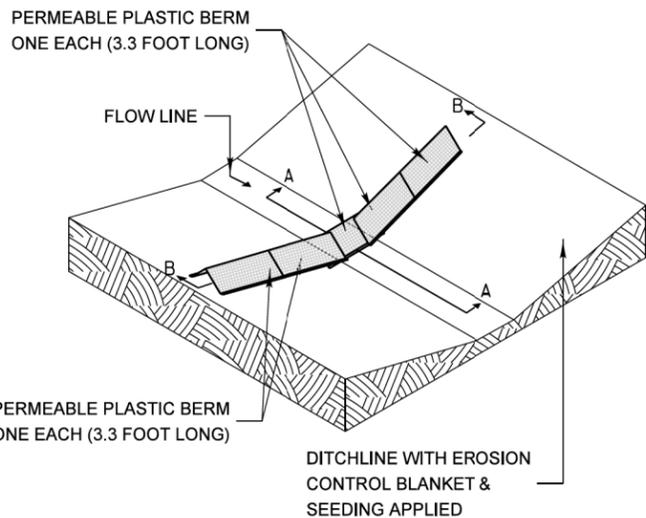
NO.	DESCRIPTION	DATE	BY	SURVEYOR:



**HUTCHINS ROAD OVER MILL CREEK**  
 LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH81	275	17-00275-02-BR	59	112

# FOR USE WHILE ESTABLISHING FINAL LANDSCAPING



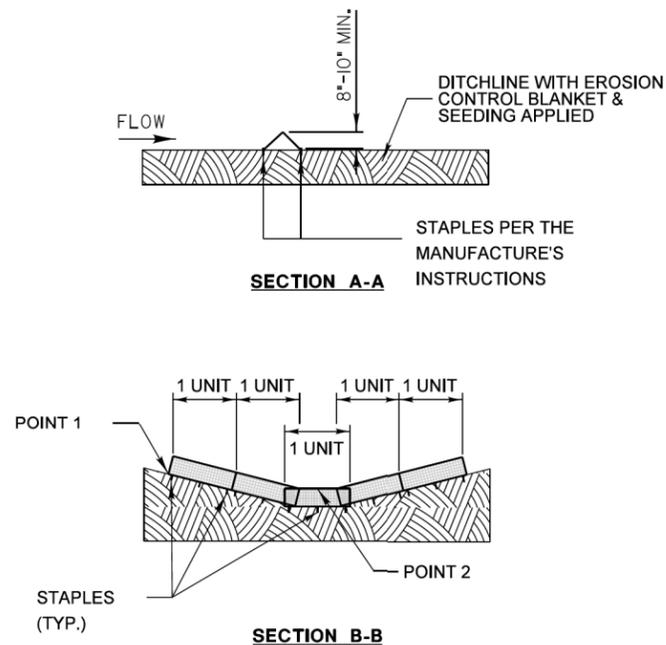
**PERMEABLE PLASTIC BERM ISOMETRIC**

NOTES:  
THE PERMEABLE PLASTIC BERM SHALL REPLACE THE TEMPORARY DITCH CHECK AFTER THE INSTALLATION OF EROSION CONTROL BLANKET AND SEEDING.

EACH PERMEABLE PLASTIC BERM IS 3.3 FEET IN LENGTH. THE MINIMUM INSTALLATION IN A DITCH SHALL BE THREE UNITS. THE INSTALLATION SHOWN WILL BE MEASURED AND PAID FOR AS A PERMEABLE PLASTIC BERM 16.5 FEET IN LENGTH (5 UNITS).

STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND ACCORDING TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

POINT 1 MUST BE HIGHER THAN POINT 2 TO INSURE THAT WATER FLOWS THROUGH OR OVER THE BERM AND NOT AROUND THE ENDS.



REVISIONS	DATE
ADDED DIMENSIONS	04/11/08
REVISED PAY ITEM	04/15/10
ADDED PLASTIC BERM (pg2)	10/10/12



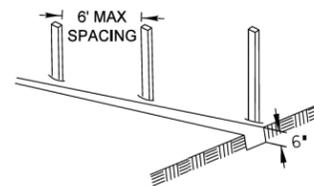
APPROVED BY: M. G. ZEMAITIS  
DATE: APRIL 1, 2007

## TEMPORARY DITCH CHECK INSTALLATION FOR ROADWAY OR DRAINAGE DITCH

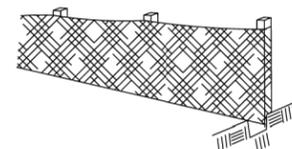
(SHEET 2 OF 2)

LC2050

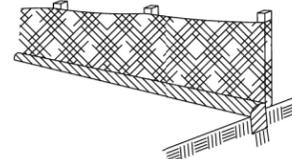
1. SET POSTS AND EXCAVATE OR SLIT-TRENCH A 6-INCH DEEP TRENCH UPSLOPE ALONG THE LINE OF POSTS



2. ATTACH GEOTEXTILE FILTER FABRIC TO EACH POST WITH A MINIMUM OF 3 (THREE) FASTENERS PER POST AND EXTEND FABRIC TO THE BOTTOM OF THE TRENCH

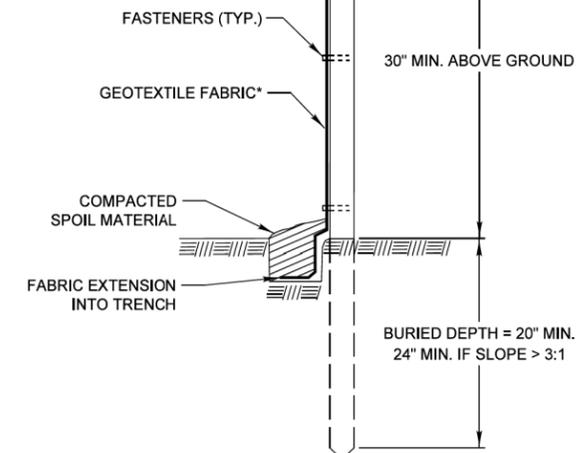


3. BACKFILL AND COMPACT THE EXCAVATED MATERIALS



Requirements	Test Methods	Wire Backed Supported Silt Fence <sup>a</sup>	Unsupported Silt Fence	
			Geotextile Elongation >=50% <sup>b</sup>	Geotextile Elongation <50% <sup>b</sup>
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100lbs
Permittivity <sup>c</sup>	ASTM D 4491	0.05 sec <sup>-1</sup>	0.05 sec <sup>-1</sup>	0.05 sec <sup>-1</sup>
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		

POSTS - CHOICE OF:  
1.2" X 1.2" NOMINAL HARDWOOD POSTS  
2.6" X 2.6" NOMINAL NO.2 SOUTHERN PINE OR  
U, T, L, OR C-SHAPE STEEL POSTS WITH MIN. WEIGHT 1.33 LBS/FT



\* NOTE: OPTIONAL WIRE SUPPORT  
- MIN. 30" HEIGHT  
- MIN. 14 GAUGE WIRE  
- MIN. 6 HORIZ. WIRES  
- MIN. 6" VERTICAL SPACING

SCALE 1" = 1'

REVISIONS	DATE
ORIG. by LCSMC	4/21/08
Update Text	7/15/11



APPROVED BY: M. G. ZEMAITIS  
DATE: JUNE 20, 2008

## PERIMETER EROSION BARRIER INSTALLATION

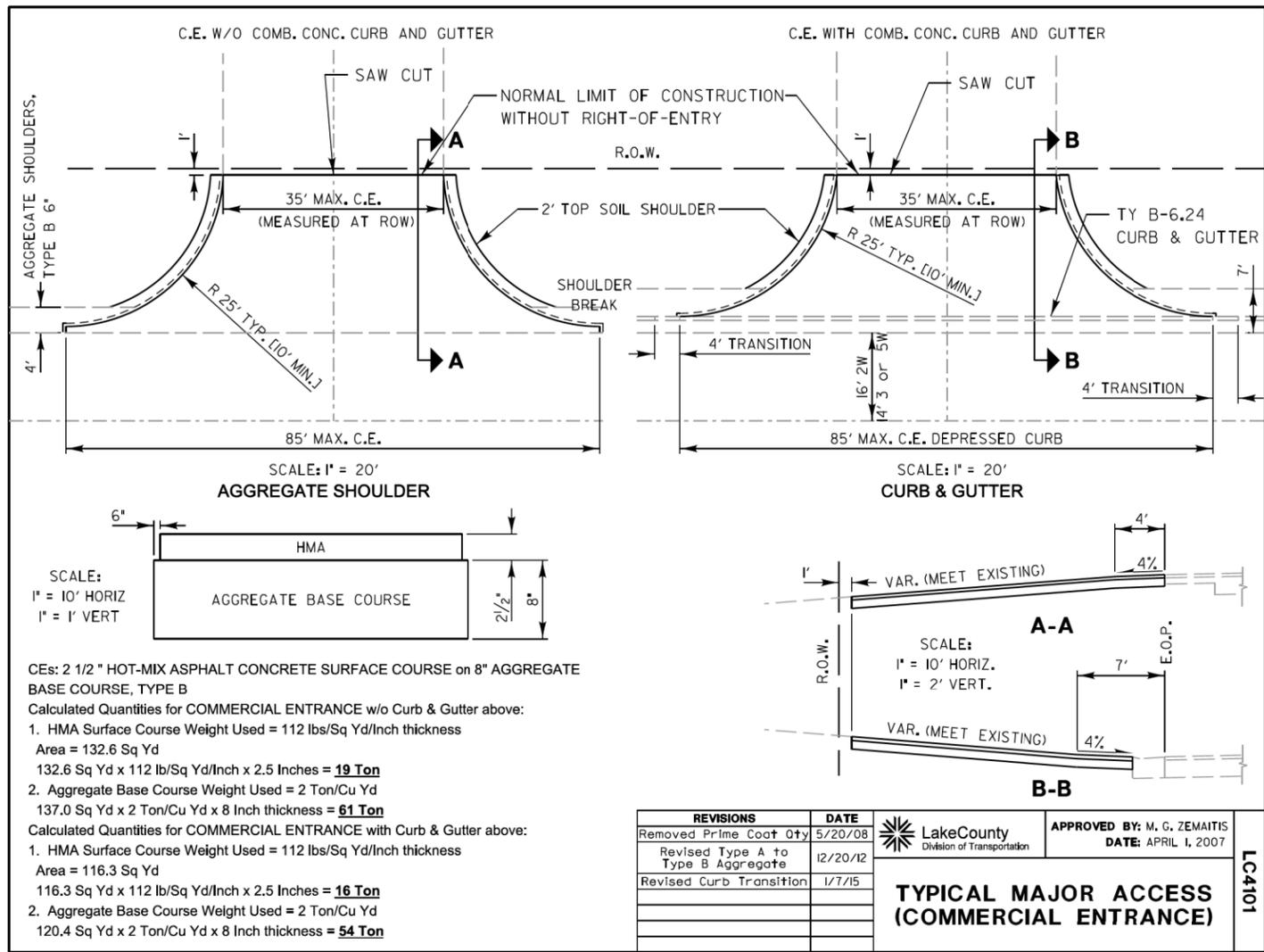
LC2051

NO.	DESCRIPTION	DATE	BY	SURVEYOR:	DSG NR/LIAISON:	PLOTTED BY:
						dsher man2/14/2019



HUTCHINS ROAD OVER MILL CREEK  
LCDOT DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH81	275	17-00275-02-BR	60	112



CEs: 2 1/2" HOT-MIX ASPHALT CONCRETE SURFACE COURSE ON 8" AGGREGATE BASE COURSE, TYPE B

Calculated Quantities for COMMERCIAL ENTRANCE w/o Curb & Gutter above:

- HMA Surface Course Weight Used = 112 lbs/Sq Yd/Inch thickness  
Area = 132.6 Sq Yd  
132.6 Sq Yd x 112 lb/Sq Yd/Inch x 2.5 Inches = **19 Ton**
- Aggregate Base Course Weight Used = 2 Ton/Cu Yd  
137.0 Sq Yd x 2 Ton/Cu Yd x 8 Inch thickness = **61 Ton**

Calculated Quantities for COMMERCIAL ENTRANCE with Curb & Gutter above:

- HMA Surface Course Weight Used = 112 lbs/Sq Yd/Inch thickness  
Area = 116.3 Sq Yd  
116.3 Sq Yd x 112 lb/Sq Yd/Inch x 2.5 Inches = **16 Ton**
- Aggregate Base Course Weight Used = 2 Ton/Cu Yd  
120.4 Sq Yd x 2 Ton/Cu Yd x 8 Inch thickness = **54 Ton**

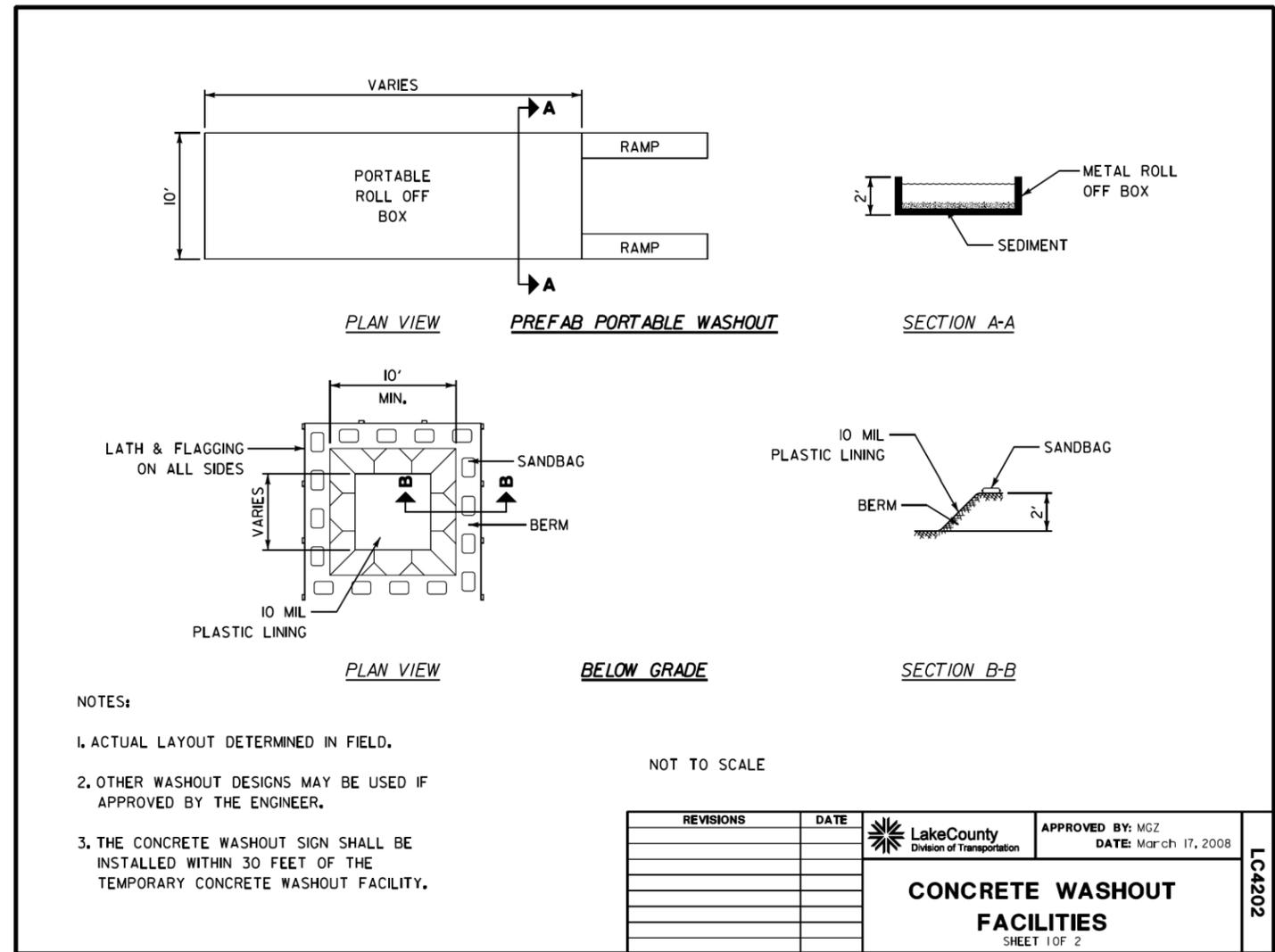
REVISIONS	DATE
Removed Prime Coat Qty	5/20/08
Revised Type A to Type B Aggregate	12/20/12
Revised Curb Transition	1/7/15

LakeCounty  
Division of Transportation

APPROVED BY: M. G. ZEMAITIS  
DATE: APRIL 1, 2007

**TYPICAL MAJOR ACCESS (COMMERCIAL ENTRANCE)**

LC4101



- NOTES:
- ACTUAL LAYOUT DETERMINED IN FIELD.
  - OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
  - THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

REVISIONS	DATE

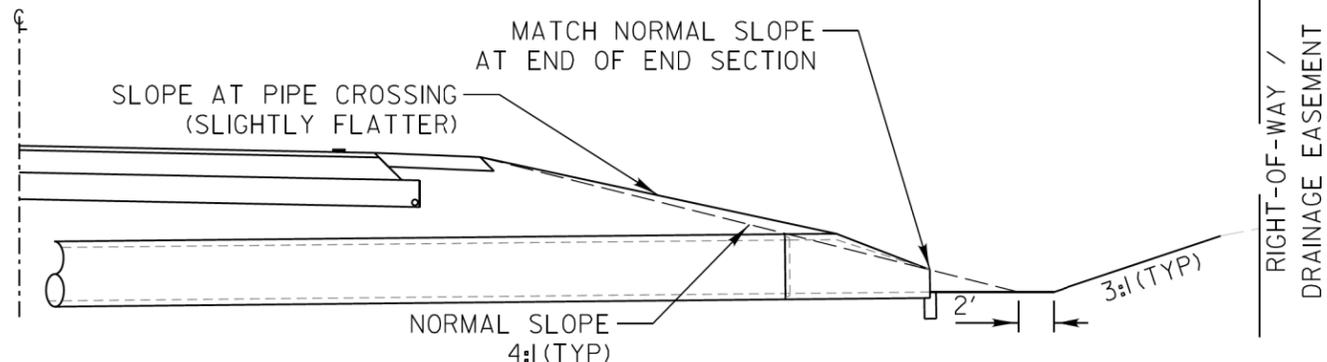
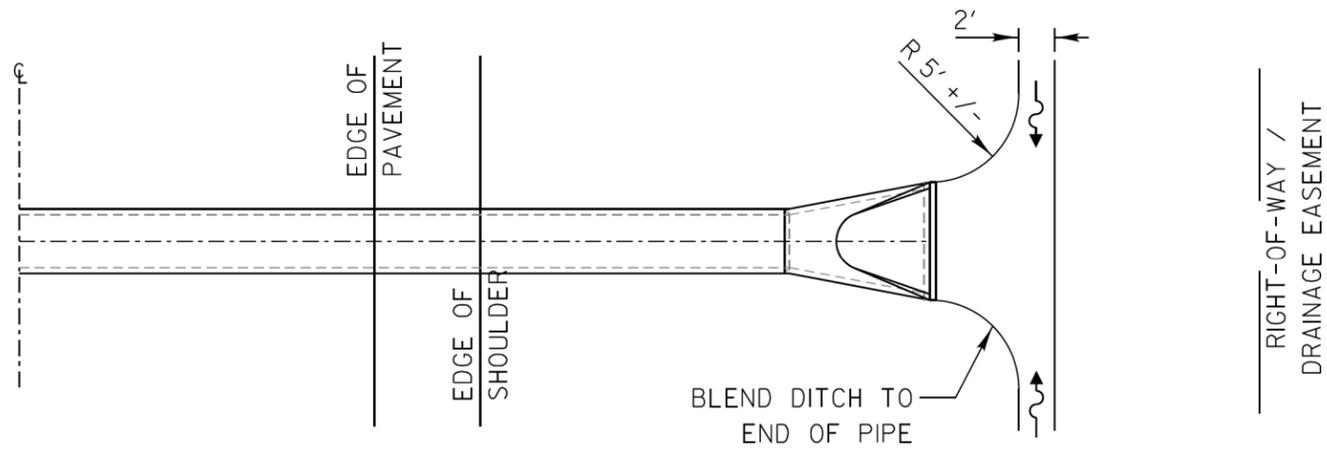
LakeCounty  
Division of Transportation

APPROVED BY: MGZ  
DATE: March 17, 2008

**CONCRETE WASHOUT FACILITIES**

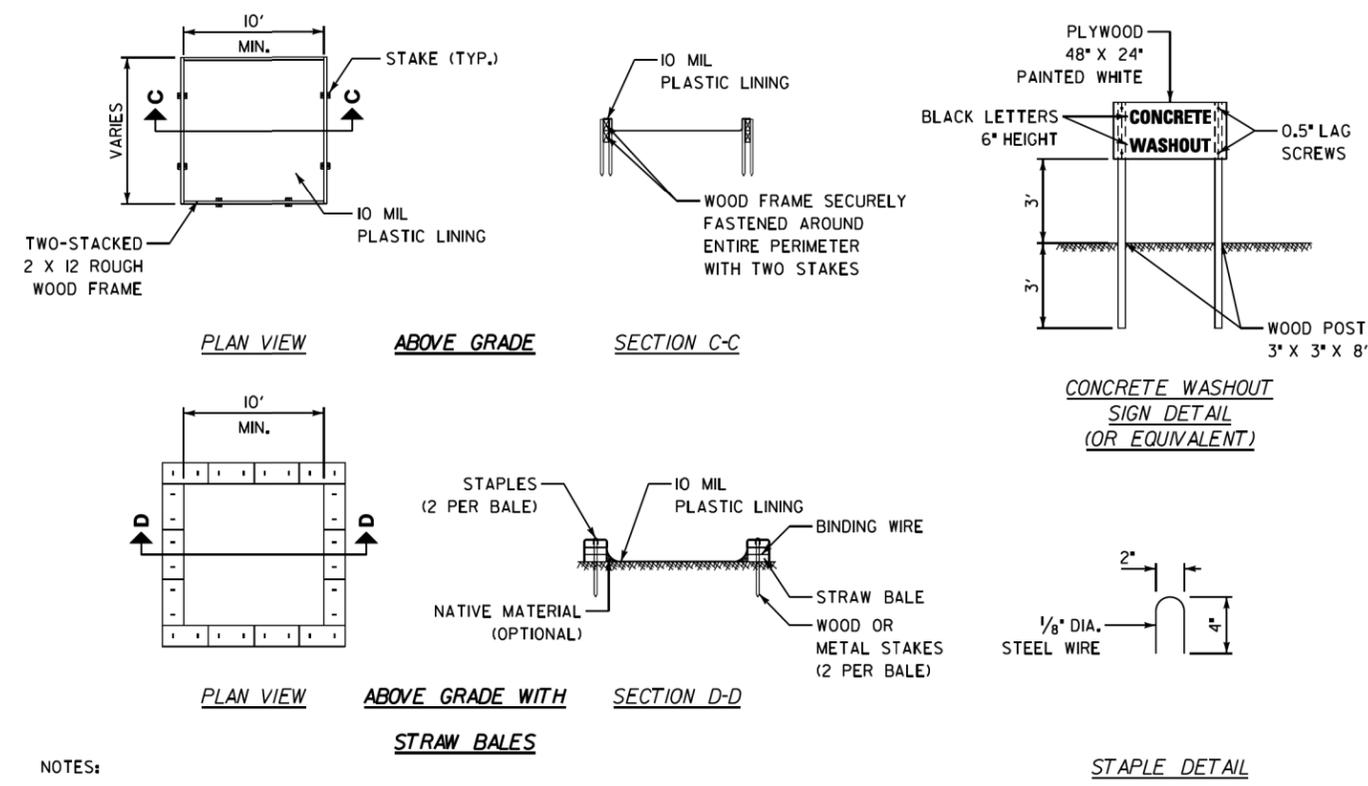
SHEET 1 OF 2

LC4202



REVISIONS	DATE	APPROVED BY: M. G. ZEMAITIS DATE: JANUARY 19, 2009	LC5401

**TYPICAL PLACEMENT OF PRECAST END SECTIONS ON CROSSROAD CULVERTS**



- NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
  2. OTHER WASHOUT DESIGNS MAY BE USED IF APPROVED BY THE ENGINEER.
  3. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY.

REVISIONS	DATE	APPROVED BY: MGZ DATE: March 17, 2008	LC4202

**CONCRETE WASHOUT FACILITIES**  
SHEET 2 OF 2