### INDOT DNR Maintenance Memorandum

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### Outline

- Why revise?
- General Terms
- Exemptions
- Non-exempt Maintenance Activity
- INDOT Work Performance Standards
- Exempt Maintenance Activity

### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is made and between the Indiana Department of Transportation (INDOT) and the Indiana Department of Natural Resources (IDNR) on the dates indicated below for the purpose of providing certain INDOT maintenance activity exemptions under the Flood Control Act and Navigable Waterways Act.

Whereas, INDOT and IDNR wish to cooperate in the elimination of unnecessary paperwork and the expeditious processing of certain INDOT maintenance actives which have minimal impact to the environment, the attached INDOT Maintenance Activity Exemption from the Flood Control and Navigable Waterways Act is hereby established.

Mr. Curt Wiley, Commissioner Indiana Department of Transportation March 9, 1997

Mr. Karry D. Macklin, Director Indiana Department of Natural Resources



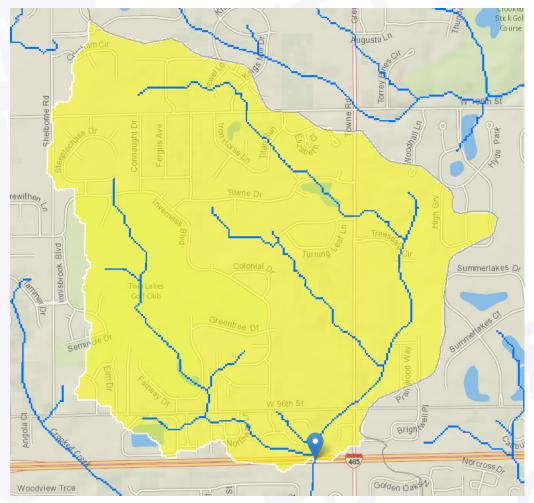
# Why Revise?

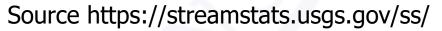
- 9/1993 to 3/2020 = **27** years !!!!
- INDOT Interpretation vs. DNR Intent
- Linked to INDOT Maintenance Work Performance Standards
- Organization
  - General Terms
  - Non-exempt Activity
  - Exempt Activity



### **General Terms**

- No IDNR jurisdiction drainage area above structure < 1 sq. mile</li>
- Example
  - Drainage area is 1.465 sq. miles
  - Within urban area
  - CIF permit is require
- Qualifies for Rural Bridge Exemption







### Rural Bridge Exemption IC 14-28-1-22 (b)(2)

- A construction or reconstruction project on a state or county highway bridge;
- In a rural area;
  - the lowest floor elevation (including basement) of any residential, commercial, or industrial building impacted by the project is **above the 100-year flood elevation**;
  - located outside the corporate boundaries of a consolidated or an incorporated city or town; and
  - located outside of the territorial authority for comprehensive planning defined as the contiguous unincorporated area within two (2) miles from the corporate boundaries of a municipality. 312 IAC 10-2-36
- That crosses a stream having an upstream drainage area of not more than fifty (50) square miles; and
- The relocation of utility lines associated with the construction or reconstruction project must be confined to an area not more than one hundred (100) feet from the limits of the highway construction right-of-way.

# **General Terms**

- Drainage area above structure < 1 sq. mile
- Qualifies for Rural Bridge Exemption
- Project follows agency guidelines USACE, IDEM and DNR
- Temporary measures are exempt IF project is exempt
- Date restrictions (waiverable)
  - Salmonid Streams March 15 through June 30 and July 15 through November 30
  - Other Rivers or Streams April 1 through June 30
- Follow E & SC practices
- Use of herbicides
  - In addition or in lieu of mechanical or hand removal
  - Used in accordance with product label



### **General Terms**

- Logjam, mass of wood debris or sandbar removal
  - Comply with IC 14-28-1-22 (b)(6)
     and 312 IAC 10-5-7
  - Limited to within ROW unless outside is contiguous
  - Outside of ROW only, not covered





### Logjam and Sandbar Removal, General License

- Not within <u>salmonid stream</u> or a <u>natural, scenic, or recreational</u> river.
- Logs crossways in the channel must be cut, relocated, and removed from the floodplain.
- May maintain logs in floodplain if anchored or secured and area is not a wetland.
- Remove and secure logs with minimum vegetation damage.
- Single logs embedded or rooted in the channel, that do not span the channel or cause flow problems, can be removed when associated with or close to larger obstructions.



### Logjam and Sandbar Removal, General License

- May remove leaning or severely damaged tree in immediate danger of falling into waterway if near an obstruction. Leave root system and stump.
- Minimize construction of access roads. Must not elevate floodplain.
- Equipment is operated from the bridge or bank within the ROW. No equipment in the river or stream.
- See the <u>DNR Regulatory Guide for Removal of a Logjam or a Mass</u> of Wood Debris from a Floodway.



# **General Terms**

- Maintenance activity must occur in existing or apparent ROW
  - 50 foot access corridor for equipment placement allowed
- Emergency situations
  - Imminent threat to safety of life and property
  - Address the threat, required permits will be obtained later





# Non-exempt Maintenance Activity

- Project upstream drainage area is > 1 mi
   sq or doesn't meet rural bridge exemption
- Culvert replacement
- Culvert lining
- Other bridge maintenance
  - See Work Performance Standard 2490
  - Replacing previously existing riprap, slopewall and erosion repairs, clearing waterway openings, and channel maintenance
- Roadway slide repair





### **INDOT Work Performance Standards**

- Available on the Maintenance Operations webpage
- https://www.in.gov/indot/3223.htm

# INDOT WORK PERFORMANCE STANDARDS

DIVISION OF MAINTENANCE









July 1, 2013 Revised November 15, 2019





# 2310 – Major Cleaning & Reshaping Ditching



### INDIANA DEPARTMENT OF TRANSPORTATION DIVISION OF MAINTENANCE

### WORK PERFORMANCE STANDARD

ACTIVITY Major Cleaning & Reshaping Ditching Purpose

The primary purpose of this activity is for excavating large amounts of soil or digging long distances to restore drainage along the roadside. This activity may be used to reshape ditches so a vehicle leaving the roadway can cross over them without the vehicle overturning, being abruptly stopped or causing the driver to lose control

CODE	2310
Category	Roadway/Drainage
	⊠ PM
	⊠ QA
	Unit Cost
	□ Plan Location

### Scheduling & Coordination

Schedule this work on ditches which have standing water, have obstructions. Emphasis should be on ditches with excessive silting and blocked drainage structures. This should be done during the growing season, when it's easiest to reestablish vegetation. For large areas this is from mid-August through October (lowest amounts and less intense rainfall events). Dredging shall be conducted during low water periods and "in the dry."

Ditching Excavation area that is needed to be removed should be marked prior to the date of actual work. The amount will be determine by fixed flow elevation points (i.e. culvert inlets/outlets, catch basin inlets, etc.).

Plan for installation of temporary erosion & sediment control measures. Coordinate with underground utilities

This activity should also plan where to dispose of excavated material that are close to the work area. First choice should be to used on R/W, where washout/ erosion are accruing or where poor soil conditions exist.

Reporting Units

Accomplishment is the total linear feet of ditch dug.

Only report continuous ditching of greater than 200 feet to this activity. Areas reported to this activity that are greater than 500 linear feet of excavated material shall have a survey of drainage area to be cleaned by a qualified person. Survey will consist of both depth elevations and finished transverse slopes and erosion control plans. A copy of this survey must be attached to the work order.

If waste material will be disposed of on private property, ensure an "Excavation Material Disposal" form is completed. Attach a copy of this form to the work order.

Ditching that is less than 200 feet shall be reported to Spot Ditching (Activity 2311).

Cleaning payed side ditches is reported to Other Drainage Maintenance (Activity 2390, Sub-Activity 819)

Average Daily Production	500 -1,000 Linear Ft	EFFECTIVE DATE	1/1/2015
Sub Activities	None		
*Traffic Control Equipment is N	NOT shown here	Seed (914.04), Fertilizer( 914.03), Mulch (914.05), Blanket (914.09)	
Tractor/Tiller or Tractor /Seed	drill 1	Standard Specifications 621.03 thru 621.14	
Travel loader or Loader	0-1	Standard Specifications 205.01 thru 205.06	
Dump truck	3-4	327 A I C 15 - 5, Rule 5	
Surveyor's Equipment	1	Other References	
Excavator or Grader	1	Other Deference	
Job Specific Equipment		T GTUILEGT	
Trainic Control Fersonilei ale i	AOT SHOWITHERE	Fertilizer	
Traffic Control Personnel are N		Grass seed	
Truck drivers	3-4	Erosion Control Items	
Laborer	2-3	Materials	
Operator	1-2	Base PPE	
Crew Size 6-9	Workers QTY	P.P.E.	



### **ACTIVITY** Major Cleaning & Reshaping Ditching

CODE

2310

### Work Method

- Place signs and other safety devices
- 2. Install silt/sediment control devises where needed to keep all material on R/W
- Survey the ditch bottom and adjacent culverts to determine where sediment has accumulated. If this hasn't already been identified by survey.
- Identify any underground utilities and hand dig areas to proper elevations, 24 inches on each side of painted marks. This should be done while excavator is working in areas with no utilities.
- When excavating excess material from a ditch, return the ditch to the original design depth and location. Over-excavation and undercutting can result in slope failure, road failure, and ditch head cutting.
- Remove material and debris from ditch with excavator to allow drainage and load in trucks. All efforts shall be made to retain existing vegetation, especially along the ditch slopes to maintain slope stability. Careful precaution shall be taken as not to disturb vegetated ditch areas not requiring dredging.
- The side slopes of the ditch/channel should not exceed the angle of repose of the soil comprising the ditch line, and should generally be 3:1 or flatter. Re-establish uniform flow line, taking care to avoid low spots which will accumulate water.
- Avoid creating a "V" or cup bottom ditch, V-shaped ditches concentrate flow, become incised, and erode
- Dispose of waste according to INDOT environmental policy, INDOT is responsible for the proper disposal of items taken from INDOT's right-of-way.
- Dress and shape fore-slopes and back slopes. Avoid creating steep slopes whenever possible.
- 11. Prepare area to be treated, ditch side slopes shall be seeded and mulched as soon as possible
- 12. Apply fertilizer, seed and mulch side slopes as appropriate to prevent subsequent erosion.
- 13. Ditch cleanings are not to be left on the roadway surfaces. Sweep dirt and debris remaining on the pavement at the completion of ditch cleaning operations.
- 14. Remove signs and other safety devices
- 15. Remove sitt/sediment control devices after permanent vegetation cover has been established

### **Special Considerations**

When disposing of ditching material off of state property, utilize the "Excavation Material Disposal Site" form. Attach a copy of this form to the work order.

APPROVED BY

Average Daily Production 500 - 1.000 Linear Ft

**EFFECTIVE DATE** 

1/1/2015



# Bridge Maintenance

- Bridge as defined in 23 CFR §650.305
- Bridge
  - Cleaning and flushing
  - Repair
- Deck
  - Crack filling
  - Broadcast sealing
  - Patching
- Riprap Turnouts





### Roadside Maintenance

- Mowing
- Brush cutting
- Herbicide treatment
- Seeding and/or fertilizing
- Tree trimming and tree and stump removal
- ROW fence repair
- Natural snow fence
- Man-made snow fence
- Other (see WPS 2290)





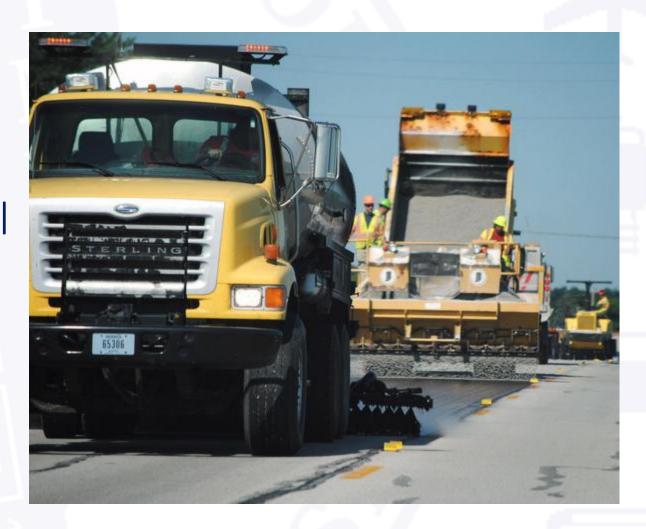
### Drainage Maintenance

- Drainage = culvert, ditch, underdrain
- Cleaning and reshaping ditches
- Small culvert inspection
- Manual drain cleaning
- Mechanical structure cleaning
- Underdrain inspection and cleaning
- Other (see WPS 2390)



### Roadway and Shoulder Maintenance

- Deep and shallow patching
- Spot paving
- Seal coat
- Fog and mainline scrub seal
- Crack sealing
- Resealing concrete pavement joints
- Spot repair of unpaved shoulders





### Roadway and Shoulder Maintenance

- Blading, clipping and reconditioning shoulders
- Joint and bump repair
- Roadway sweeping
- Major surface/shoulder improvements
- Other (see WPS 2190)





# Safety Appurtenance Maintenance

- Guardrail maintenance
- Cable barrier repair







### Traffic Item Maintenance

- Sheet and panel signs
- Delineators and roadway markings
- Detector loop splice repair or install
- Signal and flasher equipment replacement or repair
- Lighting repair or replacement





### Other and Questions

- Applicability to LPA, local governments
- Future incorporate into general license







"Wake up. The cat's got your teeth."

