

## Design Memorandum No. 05-2006

TO: Engineering Offices and Divisions  
Districts  
Consulting Engineers

FROM: Roger Weigel, P.E. /s/  
Program Manager, Design Division  
Mark S. Gaydos, P.E. /s/  
Design Engineer

Design Manual Reference:

Section II-05

Revision

Supplemental

DATE: October 26, 2006

SUBJECT: PROGRAMMATIC CATEGORICAL EXCLUSION

---

### Introduction

This guidance is intended to Replace Design Memo 01-2006 “Programmatic Environmental Check Document for Seal Coats and Programmatic Preventative Maintenance Projects”. The new *Programmatic Categorical Exclusion* and supporting worksheets are attached. The Word version of the sheets can be found at: [http://www.dot.nd.gov/designmanual\\_wp\\_docfiles.html](http://www.dot.nd.gov/designmanual_wp_docfiles.html).

The original agreement was approved by FHWA on 1/12/06 .

### Implementation

The use of this guidance is to be implemented immediately.

### Guidance

The *Programmatic Categorical Exclusion* applies to only those types of projects listed in this sheet. All items on *Worksheet A* must be checked “No” for the *Programmatic Categorical Exclusion* to be valid. *Worksheet B* must be completed to determine if a Design Exception is required and to do a cost effective analysis. A cost effective analysis is not required for signing projects. If a Design Exception is required, the Design Exception will be completed as a separate document. See Design Memo 04-2006 for more details on the Design Exception.

The *Programmatic Categorical Exclusion* is used instead of a Project Concept Report when applicable. If there is an environmental impact that is found during the process of completing the *Programmatic Categorical Exclusion*, the designer will need to develop a Project Concept Report and follow the proper procedures for a Project Concept Report.

The *Programmatic Categorical Exclusion* and *Worksheet A* will be filled out by the designer and certifies that there are no environmental impacts for a particular project. *Worksheet B* will be filled out by the designer and certified by a Registered Professional Engineer. Each sheet must be completed for each project. Each sheet will be filed in filenet separately from each other. Enter “*Programmatic Categorical Exclusion*”, “*Worksheet A*”, or “*Worksheet B*” in the subject line within Filenet as appropriate.

Distribution will be as follows:

- *Programmatic Categorical Exclusion*: Designer will complete, sign above the name by entering (\s), date, place the sheet in Filenet and send a link to Joyce Schmidt, Office of Project Development (OPD) and Clay Sorneson, Bridge Division - CAS.
- *Worksheet A*: The designer will complete, sign above the name by entering (\s), date, and place the sheet in Filenet.
- *Worksheet B*: A hard copy of *Worksheet B* will be completed, stamped, signed with blue ink, and mailed to OPD. Using MicroSoft Word, the designer will insert the electronic distribution statement into the PE stamp area, sign above the signature line by entering (\s), date, place the sheet in Filenet.
  - If a Design Exception is required, the original hard copy of the Design Exception will be completed and mailed with a hard copy of *Worksheet B* to CAS. CAS will forward these documents to OPD. OPD will deliver them to the Deputy Directory for Engineering (DDE).
    - Upon approval of the Design Exception, an electronic copy of the *Programmatic Categorical Exclusion* will be forwarded to FHWA. When the signed documents are returned, OPD will scan and forward links to CAS and the designer.
    - If the Design Exception is not approved, OPD will notify CAS who will notify the Designer.

## Questions

Any questions regarding the content or implementation of the memorandum should be referred to James Rath, Design Division, 701-328-1722.

## Approved

/s/ Grant Levi, P.E. Deputy Director for Engineering for  
Office of Project Development

10/26/06  
Date

# PROGRAMMATIC CATEGORICAL EXCLUSION

---

Project #: \_\_\_\_\_ PCN: \_\_\_\_\_ Date: \_\_\_\_\_

The work for this project is a road top treatment (except signs) limited to:

- \_\_\_\_\_ **1) Seal Coat/Slurry Seals:** The purpose of a seal coat project is to prevent the newly placed bituminous surfacing from oxidizing and to provide a wearing surface for traffic. Seal coat projects will only consist of work activities to place oil, chips, on the driving lanes, shoulders and sloughs. Replacement of pavement markings will also be done.
  
- \_\_\_\_\_ **2) Thin Lift Overlay/Patching:** The purpose is to prolong the life of the existing surfacing and to correct minor section differentials. Thin lift overlay projects can consist of placing bituminous surfacing on the mainline, shoulder prep and spraying for weeds prior to applying one of the shoulder treatments shown in the NDDOT design manual, paving of intersections, section lines, private drives, and field approaches. Milling may be included. Replacement of pavement markings will also be done.
  
- \_\_\_\_\_ **3) Preventive Maintenance Concrete Pavement Repair (CPR):** The purpose is to repair the concrete panels that are severely deteriorating. Preventive Maintenance CPR projects will consist of replacing only the deteriorated concrete panels in the driving lane and passing lane. Replacement of disturbed pavement markings will also be done.
  
- \_\_\_\_\_ **4) Microsurfacing/Macrosurfacing:** The purpose is to prolong the life of the existing surfacing and to fill ruts. Microsurfacing/Macrosurfacing projects can consist of placing bituminous surfacing on the mainline, may include seal coat shoulders, and the placement of pavement markings. No work will be performed on any driveways, section line and driveway approaches, and any intersection.
  
- \_\_\_\_\_ **5) Grinding:** The purpose is to reestablish a smoother riding pavement surface. Grinding projects can consist of grinding the driving and passing lanes of concrete pavements and enough of the shoulders to tie in. Grinding projects can also include any auxiliary lanes or ramps. Replacement of pavement markings will also be done.
  
- \_\_\_\_\_ **6) Mudjacking:** The purpose is to improve the ride quality on concrete pavements that have settled. Mudjacking projects are commonly done on concrete panels and bridge approach slabs. Approach slabs should not be raised on the bridge end adjacent to a bridge abutment. Safety improvements are not addressed on this type of maintenance work.
  
- \_\_\_\_\_ **7) Signs:** The purpose is to replace signs that have lost their reflectivity or readability, and to replace damaged sign supports. This work consists of updating signs and supports.

\_\_\_\_\_ *(signature of person filling out documentation)*  
*(Print Name of person filling out documentation)*

\_\_\_\_\_ Date

# Worksheet A

## ENVIRONMENTAL CHECK LIST

Project #: \_\_\_\_\_ PCN: \_\_\_\_\_ Date: \_\_\_\_\_

In order for this project to be considered programmatic, all answers must be **no** to these environmental questions:

\_\_\_\_ Yes \_\_\_\_ No SECTION 4(F)/6(F): Are there any impacts to Section 4(f) or 6(f) property ("public owned land of a public park, recreation area, or wildlife and waterfowl refuge and historic sites) or a negative declaration to bikeway/walkways?

\_\_\_\_ Yes \_\_\_\_ No HISTORIC / ARCHAEOLOGICAL: Are there any impacts to HISTORIC / ARCHAEOLOGICAL properties? If additional material (aggregate or borrow) is required, the appropriate clearances must be obtained.

\_\_\_\_ Yes \_\_\_\_ No THREATENED OR ENDANGERED SPECIES: Does the action affect species or critical habitat protected by the Endangered Species Act?

\_\_\_\_ Yes \_\_\_\_ No RIGHT OF WAY: Is there any action required for new right of way or temporary easement, minor access change, relocations, and does it have any low risk of hazardous materials involvement?

\_\_\_\_ Yes \_\_\_\_ No FARMLAND: Does this action involve the acquisition of farmland?

\_\_\_\_ Yes \_\_\_\_ No SECTION 404: Does this action involve placement of fill into Waters of the United States (33 CFR 328)?

\_\_\_\_ Yes \_\_\_\_ No FLOODPLAINS: Based on the solicitation of view letter sent to the State Water Commission are there any impacts in this area? *(SOV Only required if the original roadway elevation will be altered)*

\_\_\_\_ Yes \_\_\_\_ No WETLANDS: Does the action impact wetlands?

\_\_\_\_ Yes \_\_\_\_ No NOISE: Is this action a Type I action in accordance with Section 772 of the Federal Aid Policy Guide and does it significantly impact noise levels? (Increases the carrying capacity of the roadway by allowing more volume).

\_\_\_\_ Yes \_\_\_\_ No AIR: Will the action significantly impact air quality?

\_\_\_\_ Yes \_\_\_\_ No WATER QUALITY: Does the project disturb greater than one acre at an individual site and if it does a North Dakota Pollution Discharge Elimination System Construction Permit must be obtained.

\_\_\_\_ Yes \_\_\_\_ No PUBLIC CONTROVERSY: Is this action controversial?

\_\_\_\_\_  
*(signature of person filling out documentation)*  
*(Print Name of person filling out documentation)*

\_\_\_\_\_  
Date

# Worksheet B PROJECT DATA

Project #: \_\_\_\_\_ PCN: \_\_\_\_\_ Date: \_\_\_\_\_

**Costs:**  
 Estimated Cost: \$ \_\_\_\_\_ STIP Cost: \$ \_\_\_\_\_

<b>Traffic Data:</b>			
Current ADT:	_____	Percent Trucks:	_____

<b>Shoulder Requirements (If width not met, design exception is needed):</b>		
<i>Check One</i>	<i>Condition</i>	<i>Shoulder Width Required</i>
	0-750 ADT	No Shoulder
	751-2000 ADT	3 feet; 2 feet if <10% trucks
	>2000 ADT	6 feet
	Multi-lane	AASHTO
	Urban	Match Existing
	Seal Coat, CPR, Grinding, Mudjacking, Signs	Match Existing

**Design Exception Proposed for shoulder width:**    Yes \_\_\_\_\_ No \_\_\_\_\_  
 (Applies to Thin Lift Overlay, Patching, Microsurfacing, and Macrosurfacing)

**Cost Effective Analysis:** \*\*\*See [http://www.dot.nd.gov/designmanual\\_wp\\_docfiles.html](http://www.dot.nd.gov/designmanual_wp_docfiles.html) for choices of tables and replace the table below if needed. Cost effective analysis is not required for signing. Delete these three sentences prior to final submittal.\*\*\*

<b>3R STRUCTURAL OVERLAY</b>		<b>PM THIN LIFT OVERLAY</b>	
3R Structural Overlay Cost	\$205,000	PM Thin Lift Overlay Cost	\$85,000
Estimated Service Life	20	Estimated Design Life	7.28
Discount Rate	4%	Discount Rate	4%
Life Cycle Cost	\$205,000	Life Cycle Cost	\$205,000

*(signature of person filling out documentation)*

*(Print Name of person filling out documentation)*

  

\_\_\_\_\_

Date

PE STAMP HERE