



INDIANA DEPARTMENT OF TRANSPORTATION
Driving Indiana's Economic Growth

Design Memorandum No. 16-11
Technical Advisory

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TO: All Design, Operations, and District Personnel, and Consultants

FROM: /s/Elizabeth W. Phillips
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Bridges Division

SUBJECT: Temporary Erosion and Sediment Control

EFFECTIVE: Lettings on or after September 1, 2016

This memo has been revised to clarify the use of RSP 205-R-636 and its associated pay items.

Effective with lettings on or after September 1, 2016, RSP 205-R-261 Erosion and Sediment Control will be discontinued and replaced with RSP 205-R-636, Storm Water Management. The new RSP replaces INDOT *Standard Specifications* section 205 in its entirety and is applicable to all contracts.

Pay Items

Unit prices have been established for temporary erosion and sediment control measures and will be included in RSP 205-R-636 until such time as the RSP is incorporated into the *Standard Specifications*. Pay items for individual temporary erosion and sediment control measures that have established unit prices should no longer be specified. Each contract should include the following pay items.

205-12108, Storm Water Management Budget (DOL)
and one of the following
205-12109, SWQCP Preparation and Implementation, Level 1 (LS)
205-12111, SWQCP Preparation and Implementation, Level 2 (LS)

Storm Water Management Budget

Once the necessary temporary erosion and sediment control measures and quantities are determined, the established prices from the RSP should be applied to each item and the total dollar amount entered as the Storm Water Management Budget pay item. Do not use bid history to establish unit costs for individual items.

Specialty measures that do not have established prices, such as turbidity curtains and pump arounds, will require a special provision and/or plan detail, and should be included in the contract as individual pay items, where applicable.

The Storm Water Management Budget dollar amount should be entered as the quantity and the unit price as \$1. Below is an example of how the entry will appear in the CIB schedule of pay items.

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0023	205-12108 STORM WATER MANAGEMENT BUDGET	69739.750	1.00000		69739.75	
		DOL				

[IDM 205-2.01] A typical erosion control design is believed to comprise 1% of the estimated construction cost. The designer should use this threshold of 1% as a check in their design process. When the estimated erosion control cost does not reach the 1% threshold, the designer should review the plan and either make revisions or provide a design justification for not meeting this spending threshold.

For contracts that are anticipated to extend over a single construction season, the dollar amount should be increased by 10% for each season.

Fertilizer Pay Item Clarification

Fertilizer used for temporary erosion and sediment control should be included in the Storm Water Management Budget pay item. Fertilizer used for permanent seeding should not be included in Storm Water Management Budget pay item. The 621-06545 Fertilizer pay item should be used and include the supplemental description "for permanent seeding". Bid history should be used to establish the unit cost of this item.

Storm Water Quality Control Plan (SWQCP) Preparation and Implementation

The SWQCP Preparation and Implementation pay item includes all narrative information, plan sheets, sequencing, and implementation information necessary for storm water management utilized on the contract. The pay item also includes the costs for the contractor's Storm Water Quality Manager (SWQM), at the level indicated for the contract, and the costs for weekly storm water inspections for the contract. The SWQM level is discussed below.

The contractor is responsible for developing the SWQCP and presenting it to the Department. However, the designer is responsible for establishing the lump sum cost to be included in the cost estimate. The following may be used for estimating purposes. The total should be entered as the lump sum amount for the SWQCP Preparation and Implementation pay item.

Storm Water Quality Control Plan	\$15,000*
Storm Water Management Inspections	\$400 per week of the contract term*
Attendance of SWQM at Scheduling Meetings	\$400 per each 2-week period from beginning of the contract to the intermediate completion date. *
SWQM Level 1 or Level 2	\$500 for SWQM Level 1 \$1000 for SWQM Level 2

* It may be appropriate to increase or decrease these dollar amounts based on the size of the project. Guidelines for various project sizes have not been established.

Storm Water Quality Manager

RSP 205-R-636 includes the designation of a Storm Water Quality Manager (SWQM) Level. A contractor's Level 1 SWQM must have completed the Department's Construction Storm Water Training course and hold a current training verification document for that course. A Level 2 SWQM must meet the Level 1 requirements and hold a current certification as a Certified Erosion Sediment and Storm Water Inspector (CESSWI), or a CESSWI In-Training, or a Certified Inspector of Sediment and Erosion Control (CISEC), or a CISEC In-Training, or a Certified Professional in Erosion and Sediment Control (CPESC), or a CPESC In-Training, or an approved equivalent.

The designer must identify a Storm Water Quality Manger (SWQM) as Level 1 or Level 2 for each contract. Guidelines for recommending a Level 2 SWQM are not definitive but may include unfavorable soils, very tight right of way, nearby sensitive resources, or major environmental impacts. An initial SWQM level recommendation will be provided by the Environmental Services Division (ESD), but it is ultimately the designer's responsibility to coordinate with the ESD and the Area Engineer, and indicate the appropriate SWQM level for each project.

The following Editable Documents have been revised to reflect these requirements.

1. Contract Preparation Document
2. PS&E Checklist
3. Environmental Consultation Form

These forms are available on the Department's [Editable Documents webpage](#), under Contract Administration and Environmental, respectively. Where the above forms have already been initiated, it is acceptable to annotate them to indicate the SWQM level for the contract.