EPA and Iowa DOT Agreement on NPDES Permit Compliance, by Seana Godbold / James Bultman - Iowa DOT

Iowa DOT Erosion and Sediment Control "R Sheet" Approach, by Seana Godbold / James Bultman - Iowa DOT

I-80/I-380 Interchange Project Overview, by Aaron Granquist - HR Green

I-80/I-380 Interchange Storm Water Management, by Aaron Granquist - HR Green

I-80/I-380 Interchange Field Applications, by Ethan Lenertz - Iowa DOT

EPA and Iowa DOT focus on NPDES Permit Compliance

- Permit and storm water storage requirements (3,600 cu. ft./ac. disturbed) remains unchanged
- Main change to design = site map requirement
- Iowa DOT incorporated site maps into R sheets to focus on erosion control and storm water management

Iowa DOT R Sheet and Site Map Requirements

- Iowa DOT Office of Design Designed Projects
  - R sheets and site maps implemented on all projects (late fall 2018)
- Iowa DOT District Designed Projects
  - R sheets and site maps required on all projects starting with December 2019 letting
- Iowa DOT Consultant Designed Projects
  - R sheets and site maps required on all projects starting with December 2019 letting

Iowa DOT Erosion and Sediment Control “R-Sheet” Approach, by Seana Godbold / James Bultman - Iowa DOT
R Sheet Set Up
- R Sheets focus on Erosion Control Items
- RC Sheets (information formerly on C and CE sheets)
  - Erosion Control Bid Items
  - Estimate Reference Information (ERI)
  - Standard Road Plans
  - Incidental Notes (seeding, etc)
  - Stormwater Storage Calculations (tab100-34)
  - Erosion Control Tabulations
  - Pollution Prevention Plan (PPP)

Example: RC Sheet - Bid Items / ERI

Example: RC Sheet - SRP / Tabs

Example: RC Sheet - Tab 100-34

Example: RC Sheet - PPP

R Sheet Set Up (Cont’d)
- RR Sheets
  - Erosion Control Legend and Symbol Information
  - Site Maps
  - Drainage Basins
- RU Sheets
  - 500 Series Erosion Control Detail Sheets
  - Special Erosion Control Details
- Link: Iowa DOT Design Manual: 1F-17

Example: RC Sheet - PPP
I-80/I-380 Interchange Project
Overview, by Aaron Granquist - HR Green

Project Overview
- I-80 and I-380/US 218/A 27 existing interchange is a full cloverleaf
- Located in Johnson County adjacent to and within the cities of Tiffin & Coralville
- Environmental Assessment (EA) and Interchange Justification Report (IJR) completed in early 2009
  - Identified numerous operational and safety deficiencies
  - Preferred alternative is a turbine-style interchange with directional ramps
  - NEPA Clearance (FONSI) given in May 2010

- Added to 2015-2018 STIP in October 2014
- First lettings in 2017
  - Clearing & Grubbing for utility relocations
  - Grading assist with utility relocations
  - Coordination with new Forevergreen Road interchange
- Subsequent major lettings in 2018 & 2019
  - Grading in SW, NW, NE quadrants
  - Local road relocations
  - Numerous bridges construction
  - Shoulder widening and strengthening throughout
  - Median grading and paving

- INFRA Grant
  - Commitment to accelerate project by 2 years
  - Recently completed design efforts
    - Median grade & pave and bridges on I-380
    - Shoulder widening and strengthening on I-80 and I-380
    - I-80 bridge widening over the IAIS railroad & US 6
    - Ramp bridges over Clear Creek
  - Current design efforts
    - Remaining improvements
    - Several years of major construction activities to be condensed by 2 years
    - Additional year for final stabilization

I-80/I-380 Storm Water
Management Approach, by
Aaron Granquist - HR Green

Storm Water Management Approach
- Construction Staging Impacts
  - Complex staging
  - Interim drainage features

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Storm Water Management Approach

- Construction Staging Impacts
  - Complex staging
  - Interim drainage features

Post-Construction Storm Water Management

- Backslopes
  - 12” deep tillage and 8” of topsoil
  - Permanent native seeding as soon as practical, with preference for spring application

- Ditches and Foreslopes
  - Rural seed mix for initial stabilization
  - 8” of topsoil
  - 18” deep tillage and native seeding after access no longer needed.
  - Specifications prohibit heavy equipment on tilled areas, without restoration at the contractor’s cost.

Permanent Median Inlets in Bridge Approach Slabs

- Standard SW-547 intakes not meant to be used in approach slabs
- Developed modified SW-547 intake that includes a split top

Permanent native seeding as soon as practical, with preference for spring application

Specifications prohibit heavy equipment on tilled areas, without restoration at the contractor’s cost.

Coralville Field Applications

- Drainage tile
- Keyed rock

Coralville Field Applications, by Ethan Lenertz - Iowa DOT
Coralville Field Applications

Standard Road Plan EC - 601
Coralville Field Applications

Questions?