

# Plan Implementation

*"Where the rubber meets the ~~road~~  
~~dirt~~  
soil"*

*Perry Lindquist, Waukesha County*

*Land Resources Manager*

# History of Problems & Solutions

- ◆ Much time spent on plans, but they are not followed in the field
  - Erosion control plan
  - Storm water BMP construction

# Improving Accountability (Phase 1)

- ◆ Detailed plans for bid documents
  - Construction sequencing, site stabilizations, contact lists, etc.
- ◆ As-built plans
- ◆ PE construction verification
- ◆ Financial assurance
- ◆ Regulatory spot checks

Missing link: Construction Oversight

# Improving Accountability (Phase 2)

- ◆ PE Construction Oversight
  - BMP installation/verification
  - Erosion control oversight
- ◆ Construction Inspection Plan
  - For permanent storm water BMPs
  - Integrated with erosion control inspections
- ◆ Project Closure (next session)
  - Verification, recording as-built data & permit termination process

# Plan?



# Implementation?



# Continued Problems

- ◆ Projects bid out before final plans are approved
  - Leads to arguments/change orders
- ◆ Lack of contractor involvement in plan preparation
- ◆ Lack of buy-in from owner/funding
- ◆ Preconstruction meetings are too late to make plan changes
- ◆ Violations!

# Improving Accountability (Phase 3)

- ◆ Plan Implementation Sign-off
- ◆ Plan Implementation Meeting (PIM)

# Plan Implementation Sign-off

- ◆ All parties agree on final plan
- ◆ Minimum: Owner, PE and Contractors
- ◆ Recommended: Utilities
- ◆ Signed statement says:
  - I read the plans (final plan date)
  - I have a copy for my reference
  - I understand my role in implementation
  - I understand I am subject to enforcement

# Plan Implementation Meeting

- ◆ LRD hosts/PE coordinates with the owner and contractors
  - LRD invites other regulators involved
- ◆ PE and contractors review the plans
- ◆ If amendments are needed, make decisions there
  - Follow-up copies to be distributed & approved by LRD

# Sign-off on Final Plan

- ◆ By faxing form to LRD
  - Or at future preconstruction meeting
- ◆ PLAN DATE is VERY IMPORTANT!
- ◆ No Storm Water Permit without all signatures
- ◆ Note: If the applicant coordinates the PIM with the Municipal Engineer, it could also serve as the preconstruction meeting

# Experiences with the Plan Implementation Meeting

*Eric Nitschke, P.E.  
Village of Sussex Engineer*



# Why Hold Another Meeting?

- ◆ The PIM should not be looked at as another meeting; it is a working session for the Owner, Contractor, and Engineer
  - Working session to get everyone on the same page is the most important point of the meeting
  - Engineer and Owner know the ins and outs of proposed project from a design and permitting point of view, but there may be constructability issues with the project
  - The Contractor should come to the meeting fully prepared to discuss site access, construction sequencing, traffic control, etc

# Why Hold Another Meeting (cont.)?

- ◆ This is the Contractors chance to communicate their plan of attack to the Engineer, Owner, and Regulators
  - Up to this point the Engineer has had little or no contact with the Contractor
  - Proposed changes to the plans may need local, state, and federal approval
  - Eliminates costly change orders during construction

# Why Hold Another Meeting (cont.)?

- ◆ Helps to ensure a smooth “hand-off” from the Engineer to the Contractor at the pre-con meeting
  - Any changes to the plans and permits should be made and approved prior to the pre-con. All parties should be on the same page
  - The stamped and numbered plans will have proposed PIM changes, eliminating multiple variations of plan sets
  - The Contractor will have taken more ownership of the project and should have a greater understanding of the Owner’s desires, Engineer’s designs, and Regulator’s do’s and don’ts
  - Should facilitate a timely start of construction following the pre-con meeting
  - Eliminates finger pointing at the end of the project

# Why Hold Another Meeting (cont.)?

- ◆ Avoid Unnecessary Problems with Regulators
  - The PIM is the time for the Contractor to propose changes to necessary permits
  - Any proposed changes to the plans that may impact permits should be approved prior to holding the pre-con meeting
  - All regulatory agencies (Local, County, MMSD, WisDNR, DCOM, FEMA) should be invited to the PIM, and also be kept informed of the meeting's outcomes

# Benefits

- ◆ Forces ownership in the project for all parties involved
- ◆ Starts the lines of communication early on in the construction phase
- ◆ Reduces the chance of permit violations
- ◆ Expedites the construction process
- ◆ Reduces costly change orders during construction

# Disadvantages

One more meeting?

The End