



# Lake County, Indiana

2013 Changes to the  
“Stormwater Management and Clean  
Water Regulations Ordinance” and the  
“Stormwater Technical Standards  
Manual”  
And Review of Key Provisions

# Stormwater Management and Clean Water Regulations Ordinance

## Review:

- Applicable to ALL land Disturbing Activities
- SWPPP Required for Disturbance > 1 ac **OR**
- Part of a Larger Development

# Stormwater Management and Clean Water Regulations Ordinance

## CHANGES:

- Authorization to Update the Design Manual Through Adoption by Drainage after Public Hearing
- Authorization to Enforce Obligations of Private Property Owners
- Plan Commission or Surveyor's Office may Request Video Inspection of Underground Stormwater Facilities
- A current Drain Tile Survey is required
- Prohibited Connection of Detention Facilities to Drain Tiles

# Stormwater Management and Clean Water Regulations Ordinance

“It shall be the property owners’ responsibility to maintain the natural features and drainage patterns on their lots and to take preventive measures against any and all erosion and/or deterioration of natural or constructed drainage features on their lots including overland flow patterns.”

Be aware of the drainageways on each lot!

# Stormwater Management and Clean Water Regulations Ordinance

(ALL PROJECTS) The project site owner shall submit to the Lake County Planning Commission a Preliminary Stormwater Application for all land disturbing activity with project name, address, description and proposed disturbed area. County Plan Commission determines if project is exempt or complete submittal required.

# Stormwater Management and Clean Water Regulations Ordinance

“For individual lots disturbing or impacting less than 1 acre, developed within a larger permitted project, a formal review and issuance of an Individual Lot Plot Plan Permit will be required before a building permit can be issued. All stormwater management measures necessary to comply with this Ordinance must be implemented in accordance with permitted plan for the larger project.”

Individual lot owners are required to comply with the SWPPP approved for the development!

# Stormwater Management and Clean Water Regulations Ordinance

“Any person found in violation of any provision of this Ordinance shall be responsible in a civil action and subject to any and all sanctions permitted according to IND.CODE 36-1-3-8 and other applicable law. To the greatest extent permitted according to law each day such violation occurs or continues shall be deemed a separate offense and shall make the violator liable for the imposition of a penalty for each day. Outstanding fines shall be a basis for denial of permits and approvals.”

There can be consequences beyond a single site!

# Stormwater Management and Clean Water Regulations Ordinance

“Any person who aids or abets a person in a violation of this Ordinance shall be subject to the penalties provided in this section.”

Sub-contractors can be held responsible!



# Stormwater Management and Clean Water Regulations Ordinance

“Any person found in violation of any provision of this Ordinance shall be responsible in a civil action and subject to any and all sanctions permitted according to IND.CODE 36-1-3-8 and other applicable law, provided that in the event of an alleged first violation for a location, the alleged violator shall first be given a written warning, and if the alleged violation is not abated within seventy two (72) hours thereafter , the alleged violator shall be subject to a penalty of a fine in the amount of two hundred fifty dollars (\$250.00) per day per violation.”

# Stormwater Technical Standards Manual

Technical Design Manual Changes:

- Huff Rainfall Distribution
- Permit Information Requirements
- Specifications for Construction BMPs
- Specifications for Post-Construction BMPS

# Stormwater Technical Standards Manual

The title sheet shall also include the following data summary tables:

- Water Quality Structure Table – Provide a table listing each post-construction water quality practice proposed for compliance with clean water standards, the type (e.g. pond, wetland, manufactured unit, etc.) and the state plane coordinates of the center;
- Storm Structure Data Table – A Table summarizing the total number of proposed manholes, inlets, and the total length of each pipe material and size;
- Surface Type Summary – A table summarizing the total proposed impervious area and pervious area for the site

# Stormwater Technical Standards Manual

A low-impact practices discussion. The discussion should evaluate the application of planning, bioretention, stormwater harvesting, suspended solids settling facilities, filtration methods, floatable capture and runoff reduction methods to the proposed project.

Be aware the gardens and swales on plans may not just be for aesthetics!

# Stormwater Technical Standards Manual

## **Change Notification**

Notification must be sent to the Lake County Surveyor's Office when **ANY** changes are made to the final approved design, plans or technical report after approval by the office.

Field changes must be reported to the LCSO!

# Stormwater Technical Standards Manual

Minimum swale slopes are 0.5%. All flow shall be confined to the specific easements associated with each rear and side lot swale that are part of the minor drainage system. Unless designed to act as a stormwater quality BMP, vegetated swales with a slope less than 1.5 % shall have tile underdrains to dry the swales.

Rear-yard swales may have unseen components. Minimize your potential impact with heavy equipment etc.!

# Stormwater Technical Standards Manual

“Spoil from any excavation shall not be placed such that existing flow of surface water onto or from the property shall be impacted without mitigation actions approved in writing by the Lake County Surveyor’s Office.”

**Do not store or spread soil anywhere!**

# Stormwater Technical Standards Manual

## Drainage System Overflow Design

“Ponding and overflow path throughout the development resulting from a 100-year storm event, calculated based on all contributing drainage areas, on-site and off-site, in their proposed or reasonably anticipated land use and with storm pipe system assumed completely plugged, shall be determined, clearly shown as hatched area on the plans, and a 30 feet along the centerline of the overflow path contained in permanent drainage easements. *A statement shall be added to the plat that would refer the viewer to the construction plans to see the entire extent of overflow path as hatched areas.* No fences or landscaping can be constructed within the easement areas that may impede the free flow of Stormwater. These areas are to be maintained by the property owners or be designated as common areas that are to be maintained by the homeowners association.”



# Stormwater Technical Standards Manual

## **Drainage System Overflow Design**

Again, be aware of where soil is placed or stored!

# Stormwater Technical Standards Manual

“Table 8-1 and Appendix C lists the practices and specifications for preventing stormwater pollution from construction sites. Details of each practice may also be found in Appendix C. These practices should be used to protect *every* potential pollution pathway to stormwater conveyances.”

You can use this Appendix as a reference. Contact the LCSO MS<sub>4</sub> Department for assistance.

# Stormwater Technical Standards Manual

“... until the individual lot is stabilized, the builder must take steps to:

- protect adjacent properties from sedimentation
- prevent mud/sediment from depositing on the street
- protect drainageways from erosion and sedimentation
- prevent sediment laden water from entering storm sewer inlets...”

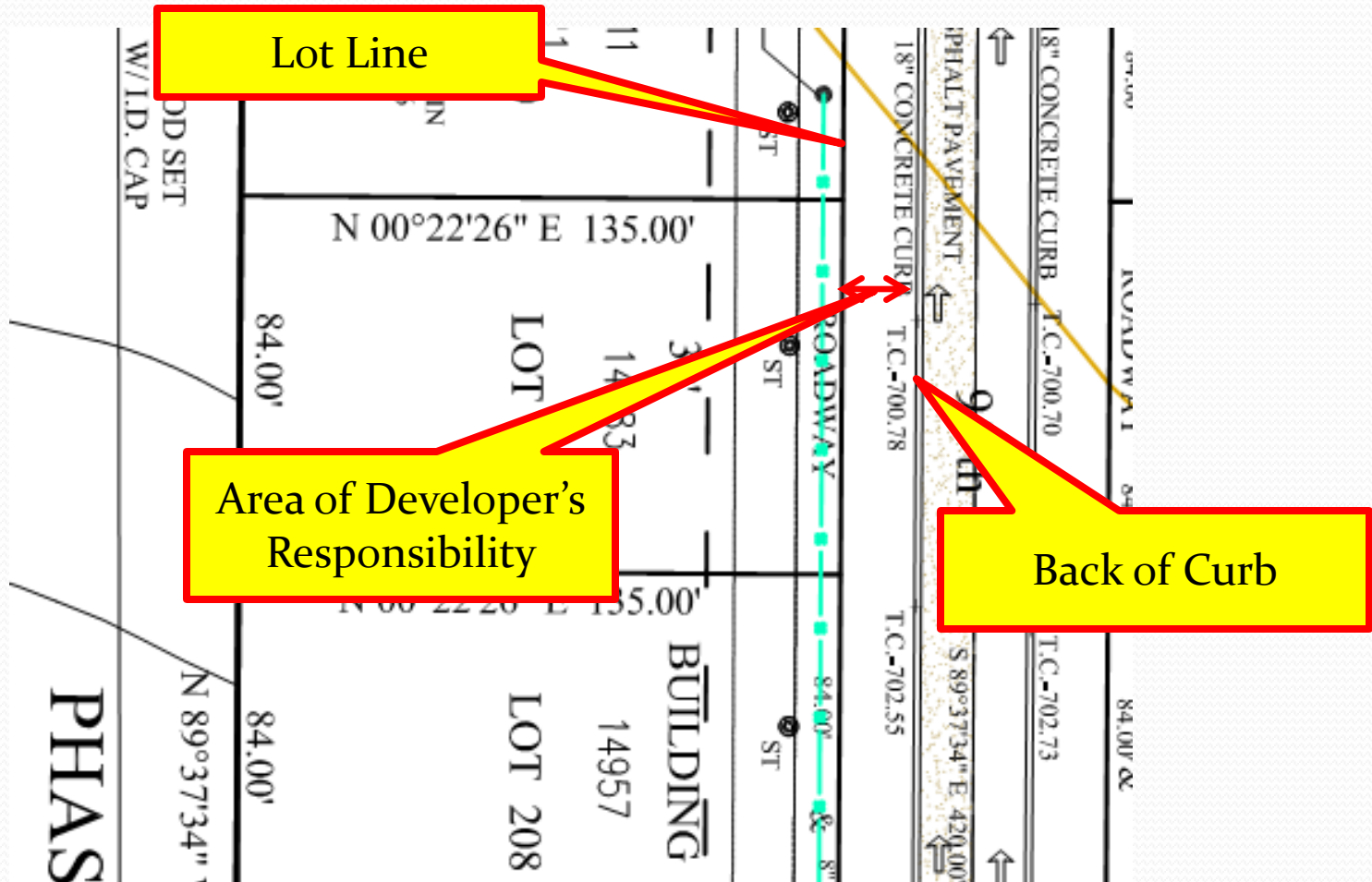
**Builders have obligations!**

# Stormwater Technical Standards Manual

Individual Lot Owners must comply with the approved SWPPP. They must work with the developer

Example:

# Stormwater Technical Standards Manual

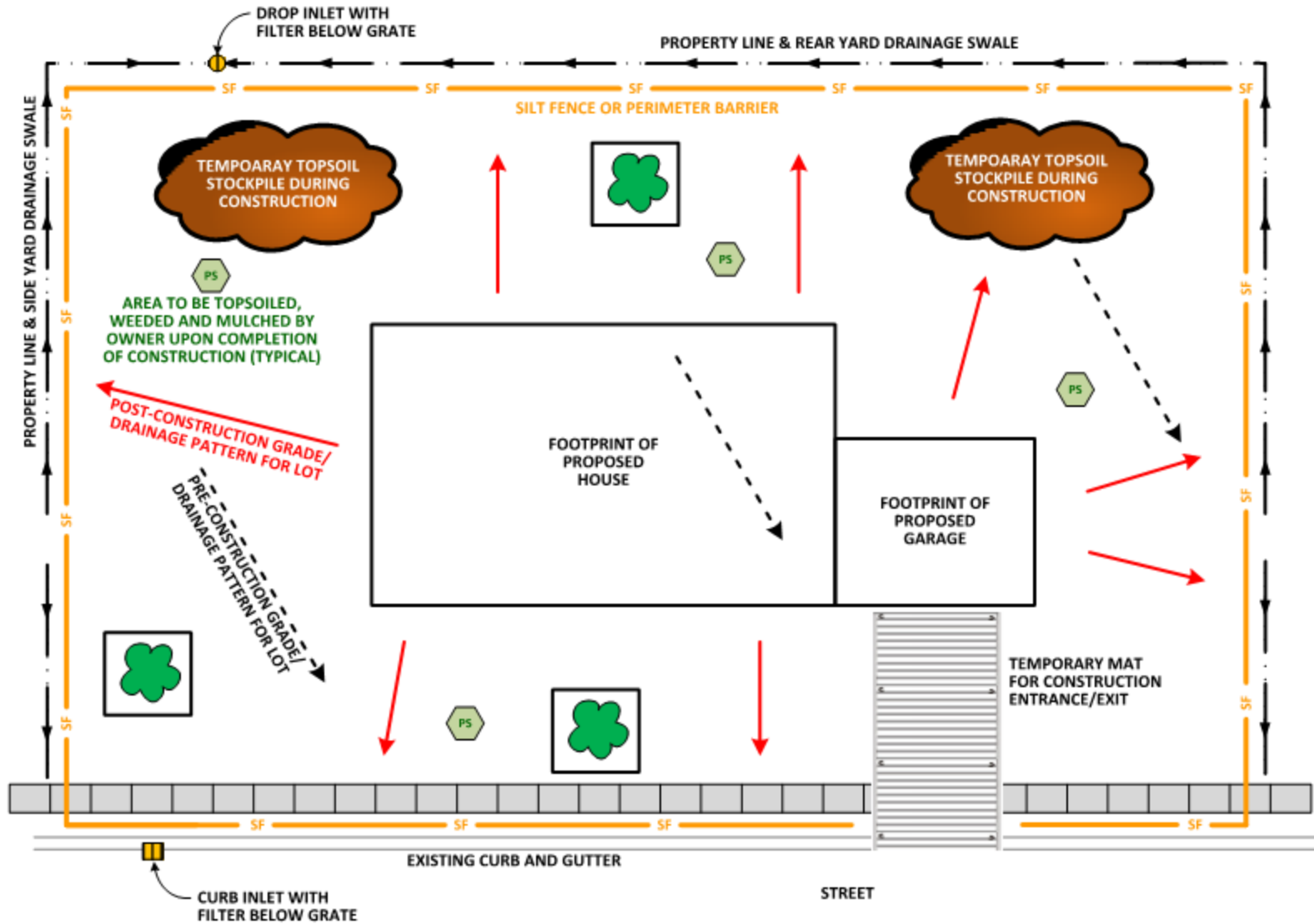


# Stormwater Technical Standards Manual

Individual Lot SWPPP should be a part of all SWPPPs from residential developments.

Example:

# SAMPLE INDIVIDUAL LOT EROSION/SEDIMENT CONTROL PLAN:





Questions?