BURKE

Managing Storm Water Risks on Construction Sites

Preparing for Change

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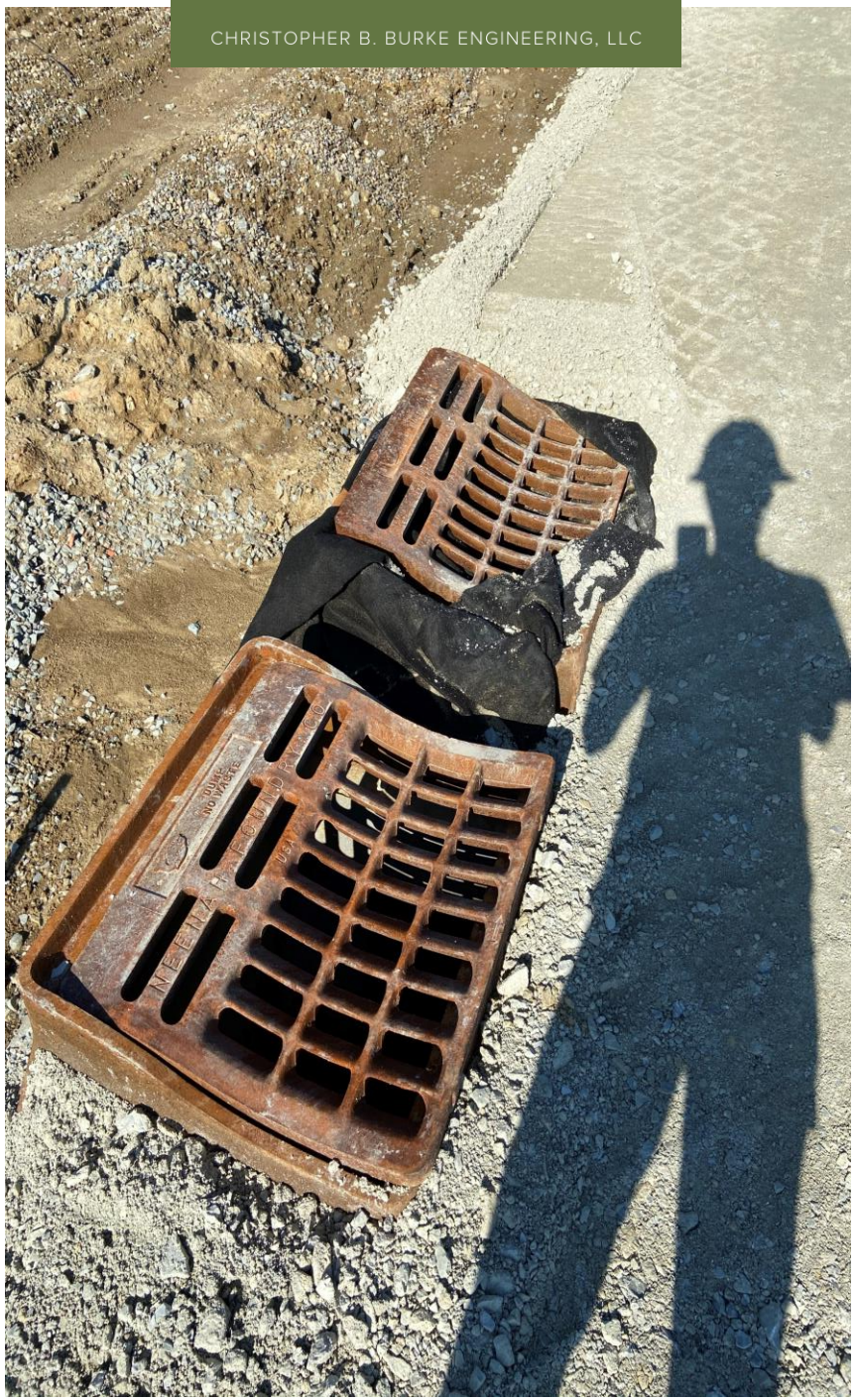
November 17, 2021



Workshop Overview

- Indiana Construction Stormwater General Permit (CGP) Process
- Draft Permit Review
- Managing Risks and Preparing for Change

CGP Timeline

- IDEM Creates Advisory Group: **May 31, 2017**

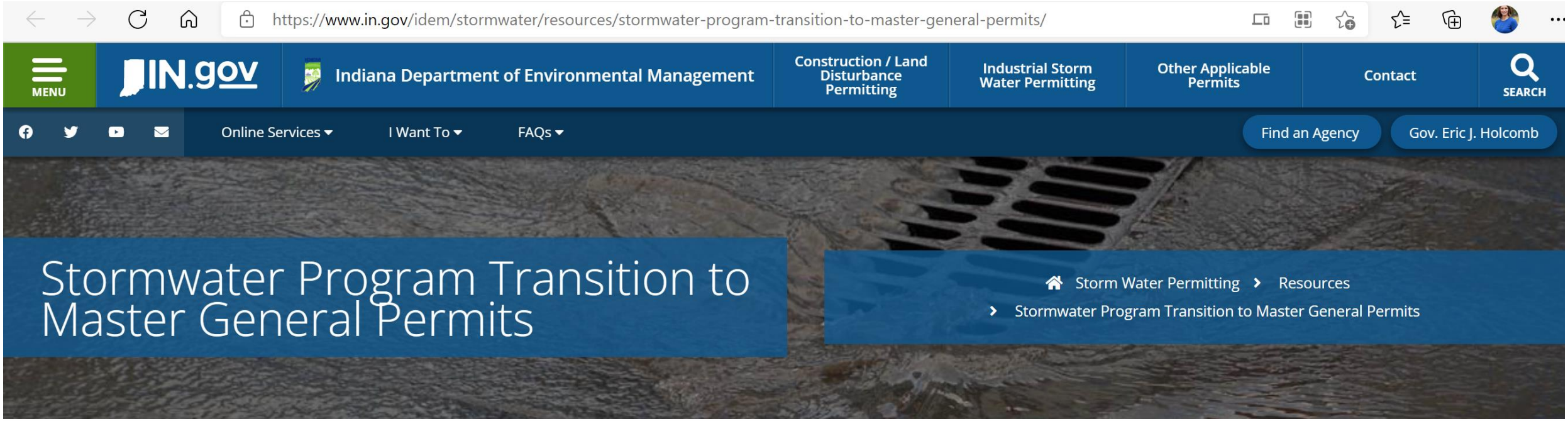
INDOT, American Council of Engineering Companies, Indiana Association of Floodplain and Stormwater Managers, Indiana Builders Association, Indiana Constructors Inc, White River Alliance, Indiana Farm Bureau, Indiana Energy Association & IDEM

- Final Draft of Construction Stormwater General Permit: **February 26, 2018**
- Edits to Draft Construction Stormwater General Permit: **October 22, 2020**
- Public Notice Advertisement: **November 30, 2020**
- Public Comment Closure: **January 25, 2021**
- Draft Revised Construction Stormwater General Permit: **November 3, 2021**
- Draft BMP Standards: **November 3, 2021**
- Response to Public Comments: **November 5, 2021**

Mitigating Risks

- Make the time or delegate stormwater responsibility
- Change is coming
- We gain……..clarity, modern practices, e-portal and common ground
- Over communicate with elected officials, permittees, contractors, trades and colleagues
- Start thinking about budgets
- Ask questions

IDEM Website



Construction Stormwater:

Currently this program is administered through 327 IAC 15-5.

Information related to the new Construction Stormwater General Permit (CSGP):

- Final CSGP Permit [PDF]
- Response to Public Comments [PDF]
- Guidance for Implementation

CGP – Comments Received

Compiled Comments for Construction General Permits

Comments received from:
American Electric Power (AEP)
Associated General Contractors of Indiana (AGCI)
Cheyenne Hoffa (CH)
City of Chesterton (COC)
City of Fort Wayne (FW)
City of Goshen (COG)
City of Indianapolis (COI)
Colby King (CK)
Deborah Hughes (DH)
Earth Works (EW)
Elkhart City (EC)
Indiana Association for Floodplain and Stormwater Management (INAFSM)
Indiana Builders Association (IBA)
Indiana Department of Transportation (INDOT)
Indiana Ready Mixed Concrete Association (IRMCA)
Jon Gotz (JG)
Lennar (Lennar)
Marc Walters (MW)
Mike Conquest (MC)
Moretz (Moretz)
Porter County (PC)
Pulte Group (Pulte)
Sherri Wilson (SW)
Southwestern Indiana Builders Association (SIBA)

IDEM Response to CGP Comments

2.1 Permit Coverage

Comment: The meaning of the last sentence, "Municipal Separate Storm Sewer System (MS4) stormwater ordinances will be considered to have the same authority as this permit," is not clear. MS4 permits normally go through a hearing and public comment period where the regulated community has an opportunity to revise and comment on draft regulations. Does this sentence grant an MS4 any different authority than what they already have? Does the Construction General Permit (CGP) become incorporated into the MS4 permit or vise versa? The statement that the MS4 stormwater ordinances will be considered to have the same authority as this permit should either be clarified as to its intent or removed from the Draft CGP. (Lennar)

Response:

This permit applies to all projects that meet the requirements in Section 2.1. Projects that occur in a designated municipal separate storm sewer system (MS4) jurisdictional area and are regulated by the MS4 entity must also comply with all appropriate MS4 ordinances and regulations related to stormwater discharges. The local MS4s will be required to update their local ordinances to at least meet the minimum requirements of the Construction Stormwater General Permit (CSGP). IDEM has modified the language in the CSGP and removed "Municipal Separate Storm Sewer System (MS4) stormwater ordinances will be considered to have the same authority as this permit,"

Preparing for Change

- New FINAL permit by the end of 2021
- 5-year permit cycle
- 8 new BMP standards
- New MS4 Permit, local change

Preparing for Change

- 90 days to finish work, apply for a new permit or continue coverage
- 30 days for procedural items (construction site BMPs)
- Expect updated MS4 ordinances, technical standards and processes
- Expect new inspection forms and project management log (tracking tools)
- More defined action item completion dates, stabilization implementation

Construction Stormwater General Permit – Permitted Projects

Section 5.3 (b) (2) Deadlines for Notice of Intent Submittal : For a project that has existing, effective coverage under the former general permit rule (327 IAC 15-5), on the effective date of this general permit, the existing coverage shall be automatically extended, provided that the permittee takes one of the following actions within 90 days. **Projects that are currently permitted under 327 IAC 15-5 were developed under specific requirements and it is not the intent of the department to require extensive modifications to the design elements.**

(1) The project site owner submits a new NOI in accordance with this Section to affirm his/her intention to comply with the requirements of this general permit.

(2) The permittee submits a NOI – Continuation of Coverage, unless otherwise directed by the commissioner to submit a new NOI. By submitting a NOI-Continuation of Coverage, the permittee agrees to operate under the new general permit, including ***most*** *of the Section 3.0* performance requirements

Construction Stormwater General Permit – Buffers

Section 3.1 (a) (5) (A) and (B) Natural Buffer: Natural buffers must be preserved, including the entire buffer bordering and/or surrounding the water resource. Buffers:

1) 50 feet or more in width must be preserved to a minimum of 50 feet.

2) Less than 50 feet in width must be preserved in their entirety.

3) May be enhanced with vegetation that is native and promotes ecological improvement and sustainability.

Run-off directed to the natural buffer must be:

1) Treated with appropriate erosion and sediment control measures prior to discharging to the buffer.

2) Managed with appropriate run-off control measures to prevent erosion from occurring within the buffer area.

Construction Stormwater General Permit – Buffers

IDEM should incorporate the acceptable alternatives in Appendix G to the current U.S. EPA general permit into IDEM's proposed Permit. (AGCI)

Response:

IDEM is not requiring buffers to be implemented or modified. Our objective in meeting this U.S. EPA requirement is to only preserve existing buffers. Our draft permit does meet the U.S. EPA CSGP with the exception of implementing buffers. Implementation of buffers (filter strip) is always an option of a stormwater quality measure.

IDEM has also eliminated the requirement to perform an assessment of the buffer for its ability to treat sediment loads. We believe the options we have included in the permit will reduce the justification requirements for sediment loading that the applicant would need to provide to IDEM and/or the MS4s.

In addition, item iii, as listed above and from the U.S. EPA CGP references infeasibility. IDEM is considering options that would be infeasible and this information will be provided in a guidance document. The commenter above does not mention that U.S. EPA also requires double the sediment control measure to meet this item. Several Region V states have implemented this option. IDEM believes that if a buffer is not required due to infeasibility, the appropriate sediment control measure should be used, and it is not a necessity to double the application of the measure.

Construction Stormwater General Permit – Buffers

Comment: How will the preservation of natural buffers be regulated? Who ultimately makes the decision whether natural buffer preservation is feasible or not? (EW)

Response:

The final decision related to buffers will be made by the regulating entity (IDEM and/or MS4). The guidance provided by IDEM will be the basis for decisions made by the plan designer as to whether the buffer will need to be preserved. Upon submittal of the construction plans and review this decision will be made. IDEM will also provide early coordination to help clarify in the early stages of planning.

(41) "Natural buffer" means an existing (prior to land disturbance) undisturbed area adjacent to or surrounding surface waters within which construction activity is restricted.

(42) "Natural Vegetation" means "vegetation that occurs spontaneously without regular management and/or maintenance. This definition also includes mitigation sites.

Construction Stormwater General Permit – Buffers

Construction Stormwater General Permit – Sediment Basins

Section 3.2 (a) (7) Sediment Basins: Sediment basins, where feasible, must withdraw water from the surface of the water column unless equivalent sediment reduction can be achieved by use of alternative measures. Alternative measures include but are not limited to increasing the basin length to width ratio to 4:1 or greater, implementation of porous baffles, use of flocculants/polymers, and/or phasing of project land disturbance that also incorporates a rapid stabilization program. During freezing conditions, the implementation of alternative withdrawal methods may be utilized.

Construction Stormwater General Permit – Post Construction

Section 3.2 (a) (9) (A) (C) (D) Post Construction Measures:

(A) The run-off rate of stormwater run-off and/or volume from the project site must meet local requirements to address stormwater quantity as established by ordinance or other regulatory mechanism. When a local requirement does not exist, the post-development run-off discharge from the project site must not exceed the pre-development discharge based on the two-year, ten-year, and one-hundred-year peak storm events.

(C) Utilize one (1) or more post-construction measures working in tandem or series to treat stormwater run-off and increase the overall efficiency of individual and specialized measures

(D) In combination with proper post-construction measure selection, design and development strategies must be selected and incorporated into the plan to reduce the contribution of pollutants from the project area to the post-construction measures. These strategies include but are not limited to:

1) Low Impact Development (LID) and green infrastructure.

2) Infiltration measures, when selected must take into consideration the pollutants associated with run-off and the potential to contaminate ground water resources. Where there is a potential for contamination, implement measures that pre-treat run-off to eliminate or reduce the pollutants of concern.

Construction Stormwater General Permit – Street Sweeping

3.3 (a) (1) Street Sweeping: Public roadways and roadways not exclusive to construction traffic must be kept cleared of accumulated sediment that is a result of run-off or tracking.

(A) Clearing of sediment must not include the utilization of mechanical methods that will result in mobilization of dust off the project site or flushing the area with water unless the flushed water is directed to an appropriate sediment control measure.

(B) Cleared sediment must be redistributed or disposed of in a manner that is in accordance with all applicable statutes and regulations.

(C) Sediment discharged or tracked onto roadways that are open to traffic must be removed as directed by a regulatory authority or at a minimum, removed by the end of the same day.

Construction Stormwater General Permit – Waste

Section 3.3 (a) (11) Construction and Domestic Waste:
Construction and domestic waste must be managed to prevent the discharge of pollutants and windblown debris. Surplus plastic or hardened concrete are not required to be placed in trash receptacles and are considered clean fill that may reused, disposed of onsite, or recycled in accordance with applicable state and federal regulations.

Receptacles that are not appropriately managed will require alternatives that include but are not limited to:

1) A cover (e.g., lid, tarp, plastic sheeting, temporary roof) to minimize exposure of wastes to precipitation or
2) A similarly effective method designed to minimize the discharge of pollutants.

(B) Waste that is not disposed of in trash receptacles must be protected from exposure to the weather and/or removed at the end of the day from the site and disposed of properly.

Construction Stormwater General Permit – Temp Stabilization

Section 3.4 (a) (1) Temporary Stabilization: Stabilization must be initiated by the end of the seventh day the area is left idle. The stabilization activity must be completed within fourteen (14) days after initiation. Initiation of stabilization includes, but is not limited to, the seeding and/or planting of the exposed area and applying mulch or other temporary surface stabilization methods where appropriate. Areas that are not accessible due to an unexpected and disruptive event that prevents construction activities are not considered idle.

Construction Stormwater General Permit – Inspections

Section 3.6 (a) Monitoring and Project Management: Monitor and manage project construction and stormwater activities through administration of a self-monitoring program (SMP) that includes:

(1) A written evaluation of the entire project site, with the exception of those areas that are considered unsafe.

The evaluation must be performed by a trained individual and completed:

(A) Twenty-four (24) hours prior to a qualifying precipitation event or by the end of the next business day following each measurable storm event; which is defined as a precipitation accumulation equal to, or greater than, one-half (0.50) inch of rainfall within a 24-hour period. If no rain event occurs within the work week a minimum of one inspection must occur. In the event of multiple qualifying events during the work week, no more than three (3) inspections would be required to meet the self-monitoring commitment.

(B) At a minimum of one (1) time per month for specific areas within the project which are stabilized with permanent vegetative cover at seventy (70) percent density and/or erosion resistant armoring is installed. A reduction to once per month is also applicable for the entire project site for stabilized common areas, basins, conveyances, outfalls, and inactive building sites. Prior to reducing the monitoring to monthly, records must identify the area and the date the area became eligible for monthly monitoring.

Construction Stormwater General Permit – Project Management

Section 3.7 (B) Project Management: Maintain a project management log that contains:

(1) Information related to all off-site borrow sites, disposal areas, and staging areas that are off-site including: (A) The location of each activity.

(2) Information related to all project activities including, but not limited to:

(A) SMP reports.

(B) Regulatory inspections.

(C) Responses to a compliance action or enforcement action.

(D) Records showing the dates of all SWP3 modifications. The records must include the name of the person authorizing each change and a summary of all changes. (c) Ensure the SWP3 and supporting documentation associated with the SMP and project management log are accessible at the project site office or in the possession of on-site individuals with responsibility for the overall project management or associated with the management and operations of construction activities.

Construction Stormwater General Permit – Corrective Action

Section 3.6 (a) (2) (G) Corrective Action: The established corrective action, at a minimum, must be initiated:

1) On the day the deficiency was discovered or when it is not practical to initiate on the discovery date, no later than forty- eight (48) hours for the repair of a measure or installation of a temporary measure until a new and/or replacement measure is installed as specified in item 2) below.

2) Within seven (7) days of discovery for the installation of a new (alternative) measure or replacement of an existing measure, unless a shorter timeframe is required as part of a regulatory inspection. The inspecting authority may also allow additional time to take corrective action. If corrective action cannot be achieved within the timelines outlined in 1) or 2) above, a reason for incompletion must be provided and documented, including the anticipated completion date.

Construction Stormwater General Permit – NOI Amendments

Section 6.4 (b) (3) (A-E) Change of Ownership: Change of Ownership under this permit must be made when the project is sold to a new owner or operator and the following occurs:

(A) The change of ownership is requested for portions of the site based on eligibility and concurrence of IDEM, when the following conditions are met:

1) The portion(s) of the project site being sold are specifically designated by section, phase, etc. that is represented on the plans and the active NOI.

(B) The seller notifies IDEM in advance of the proposed transfer date. 1) The seller must submit an amended NOI that reflects the change and indicates the portion(s) of the project site (section, phase, etc.) they are retaining, or 2) The seller must submit a NOT if they are transferring/selling the entire project site as identified in the original NOI to the buyer

(C) Stormwater measures required as part of the overall project and located within common areas of the project are operational and are under the control of the new owner(s).

(D) The new owner or operator certifies to IDEM their intent to operate the project site without making such material and substantial alterations or additions to the project as would significantly change the nature or quantities of pollutants discharged.

(E) The new owner or operator submits a new NOI before the transfer in accordance with the provisions of Section 5.0 of this permit.

Construction Stormwater General Permit – NOT Conditions

Section 6.3 (a-c) Notice of Termination: (a)The permittee must plan an orderly and timely termination of the construction activities, including the implementation of permanent stormwater management measures that are to remain on the project site.

(b) After a NOT has been received, maintenance of the remaining stormwater management measures will be the responsibility of the individual lot owner or occupier of the property, unless a contractual agreement exists for another entity such as a municipal separate storm sewer system (MS4) to take responsibility for the measures.

(c) Failure to maintain a post-construction stormwater quality measure that results in a violation of water quality standards, following project termination, may require the responsible entity that manages the measure to obtain permit coverage and/or implement a compliance plan to ensure long-term functionality

Managing Risks

- Inspector vs. consultant
- Trained individual
- MS4 program prioritizes sites and frequency of inspection

Managing Risks

- **Inspect frequently during high-risk activities**
  - Demolition, clearing and grubbing
  - Pond grading and mass earthwork
  - Sub-surface utility installation
  - Dewatering
  - CWO/AST/potential pollutants

Communication is the key

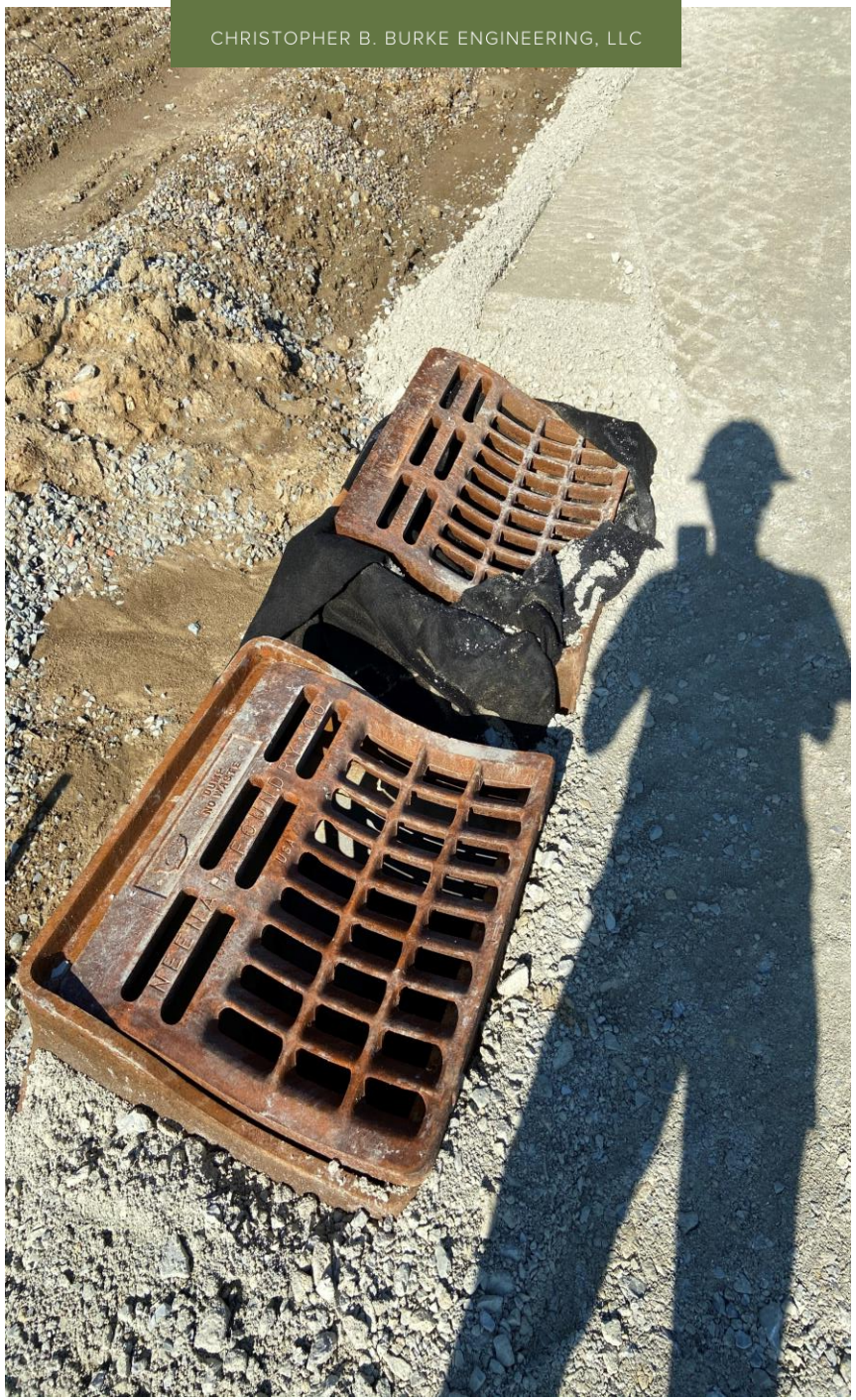
- Talk with permittees, contractors and vendors
- Learn their language and ask questions
- Be patient and recognize improvement
- Solicit help, even when it takes more time
- Assume all aim to comply




Communication in a pandemic

- Long delays - more time
- Focus on the relationship
- Find something positive
- Assist the contractor, PM or permittee
- Short videos, Facetime: use technological tools



Questions?

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