

Basins to BMPs Using 4C Method & Peer Site Visits

Mr. Michael Horan, CPESC
City of Wilson Local Erosion Control Program

Mr. Donald M. Perry, PE, CPESC
City of Rocky Mount Stormwater Engineer



SOP (Standard Operating Procedure)

◉ **Decommissioning a sediment basin**

1. Call for an on-site determination/meeting when requesting to decommission/phase out a temporary sediment basin.
2. Determination can only be made by the Local Program Erosion Control Specialist and/or his or her equivalent
3. Once it has been determined that the temporary sediment basin can come out it must be marked and initialed by the inspector on the approved set of erosion control plans.
4. If sediment basin has water in it, the water must be pumped out from the surface into a filter bag on a level area free of debris or another approved method at non-erosive velocities.
5. Remove skimmer and plug any holes in the riser (if applicable), remove all baffle materials.
6. Basin must be cleaned out to existing constructed grade then filled in with like material.
7. Fill or convert basin as to the approved elevation or product on the approved plans.
8. After final grading has been completed area must be stabilized with lime, seed, fertilizer, straw and tack according to the City of Wilson's seeding application rates and specs.
 - a. Seeding must be done within 7 days of grading on slopes steeper than 3:1 and 14 days for all other.

4C Method

**Consistency,
Communication,
Consideration and
Cooperation**



Establishing Guidelines

What Are the Initial Steps to Convert a Temporary Basin to a BMP?

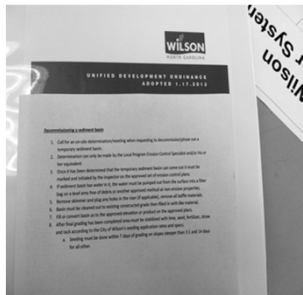
Guidelines

- ⦿ For each entity, your guidelines will be different, due to the region you are in.
- ⦿ Are strictly guidelines and does not fit all situations.
- ⦿ Can make the process easier and not unexpected.

Guidelines

HELP WITH
MISCOMMUNICATION

HELP WITH CONSISTENCY



4 C Method Consistency

“conformity in the application of something, typically that which is necessary for the sake of logic, accuracy, or fairness.”

Suggested guidelines to have

Covering exposed areas



Establish ground cover



What Percent do you require?



Would this count?



Taking out/converting a sediment basin

1. *Call for an on-site determination/meeting when requesting to decommission/phase out a temporary sediment basin.*

4 C Method Communication

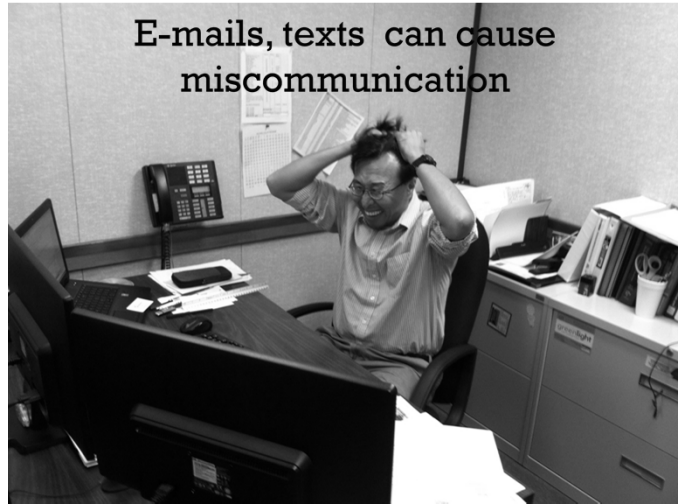
An open line of communication can do wonders. It will help others directly involved to have a better understanding of what you expect from them and what they can expect from you.



It is nice to have the Engineer onsite when making the decision.



E-mails, texts can cause miscommunication

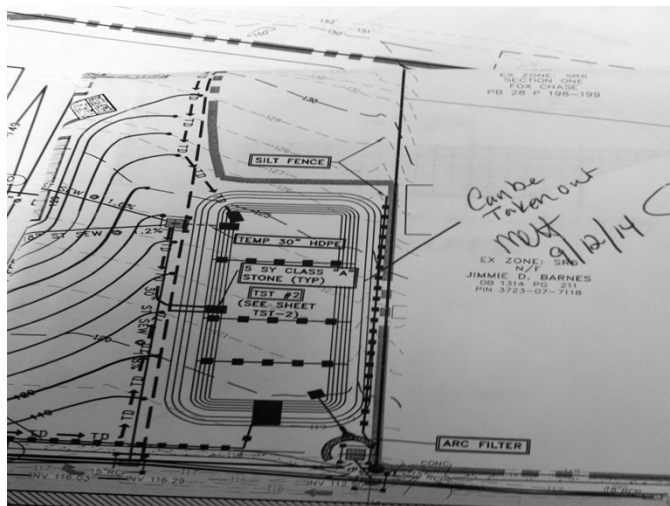


Solve the issue together.

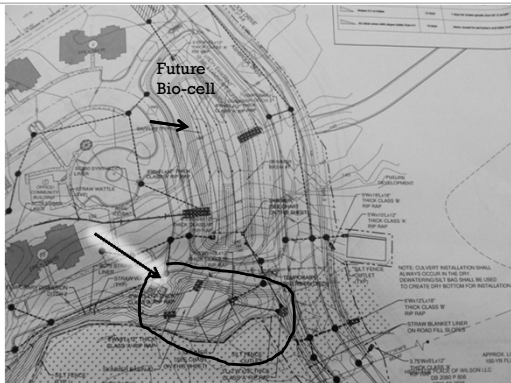


Who has the Authority

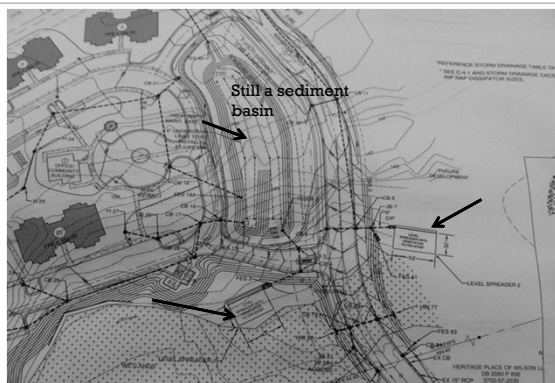
Determination to take out a basin can only be made by the Governing party Erosion Control Specialist and/or his or her equivalent (or Higher UP).



Example Plan to convert Temporary Basin to Level spreader



Do you see a problem?



Look at drainage



Site Conditions



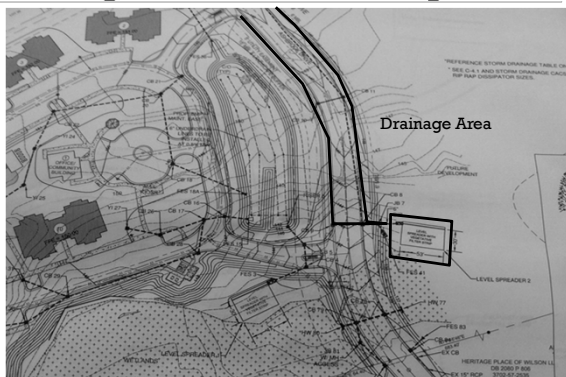




Would you choose to take out smaller basin and put in Level spreader?



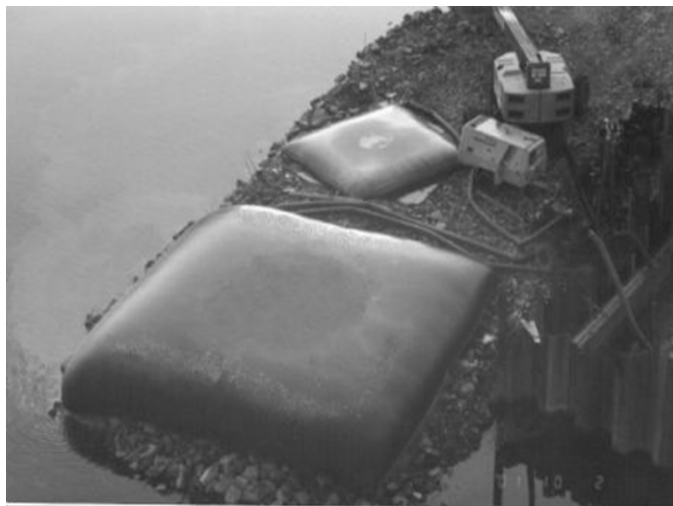
No, but I would consider letting them put in other level spreader



4 C Method Consideration

Being considerate by looking at all avenues with everyone on the construction site. What about the contractor, the owner, and what is best for the environment?





This is not diffuse







Things I have learned over the years!

Sometimes it is better to put in the footprint of the permanent structure

A technical site plan diagram showing a large oval structure, likely a pond or reservoir, with various annotations. The diagram includes labels such as 'P. 12 CLASS ZONE (LTP)', '148.5', '145.2', '24" ST', '145.5', '145.0', '144.5', '144.0', '143.5', '143.0', '142.5', '142.0', '141.5', '141.0', '140.5', '140.0', '139.5', '139.0', '138.5', '138.0', '137.5', '137.0', '136.5', '136.0', '135.5', '135.0', '134.5', '134.0', '133.5', '133.0', '132.5', '132.0', '131.5', '131.0', '130.5', '130.0', '129.5', '129.0', '128.5', '128.0', '127.5', '127.0', '126.5', '126.0', '125.5', '125.0', '124.5', '124.0', '123.5', '123.0', '122.5', '122.0', '121.5', '121.0', '120.5', '120.0', '119.5', '119.0', '118.5', '118.0', '117.5', '117.0', '116.5', '116.0', '115.5', '115.0', '114.5', '114.0', '113.5', '113.0', '112.5', '112.0', '111.5', '111.0', '110.5', '110.0', '109.5', '109.0', '108.5', '108.0', '107.5', '107.0', '106.5', '106.0', '105.5', '105.0', '104.5', '104.0', '103.5', '103.0', '102.5', '102.0', '101.5', '101.0', '100.5', '100.0', '99.5', '99.0', '98.5', '98.0', '97.5', '97.0', '96.5', '96.0', '95.5', '95.0', '94.5', '94.0', '93.5', '93.0', '92.5', '92.0', '91.5', '91.0', '90.5', '90.0', '89.5', '89.0', '88.5', '88.0', '87.5', '87.0', '86.5', '86.0', '85.5', '85.0', '84.5', '84.0', '83.5', '83.0', '82.5', '82.0', '81.5', '81.0', '80.5', '80.0', '79.5', '79.0', '78.5', '78.0', '77.5', '77.0', '76.5', '76.0', '75.5', '75.0', '74.5', '74.0', '73.5', '73.0', '72.5', '72.0', '71.5', '71.0', '70.5', '70.0', '69.5', '69.0', '68.5', '68.0', '67.5', '67.0', '66.5', '66.0', '65.5', '65.0', '64.5', '64.0', '63.5', '63.0', '62.5', '62.0', '61.5', '61.0', '60.5', '60.0', '59.5', '59.0', '58.5', '58.0', '57.5', '57.0', '56.5', '56.0', '55.5', '55.0', '54.5', '54.0', '53.5', '53.0', '52.5', '52.0', '51.5', '51.0', '50.5', '50.0', '49.5', '49.0', '48.5', '48.0', '47.5', '47.0', '46.5', '46.0', '45.5', '45.0', '44.5', '44.0', '43.5', '43.0', '42.5', '42.0', '41.5', '41.0', '40.5', '40.0', '39.5', '39.0', '38.5', '38.0', '37.5', '37.0', '36.5', '36.0', '35.5', '35.0', '34.5', '34.0', '33.5', '33.0', '32.5', '32.0', '31.5', '31.0', '30.5', '30.0', '29.5', '29.0', '28.5', '28.0', '27.5', '27.0', '26.5', '26.0', '25.5', '25.0', '24.5', '24.0', '23.5', '23.0', '22.5', '22.0', '21.5', '21.0', '20.5', '20.0', '19.5', '19.0', '18.5', '18.0', '17.5', '17.0', '16.5', '16.0', '15.5', '15.0', '14.5', '14.0', '13.5', '13.0', '12.5', '12.0', '11.5', '11.0', '10.5', '10.0', '9.5', '9.0', '8.5', '8.0', '7.5', '7.0', '6.5', '6.0', '5.5', '5.0', '4.5', '4.0', '3.5', '3.0', '2.5', '2.0', '1.5', '1.0', '0.5', '0.0'. The diagram also shows various lines, curves, and annotations related to the structure's footprint and surrounding area.



Involve your self



4 C Method Co-operation

“...working or acting together for their common/mutual benefit”

Sometimes you have to work with what you got.



When all else fails
STOCK UP!



Peer Visit
What Are We Missing?

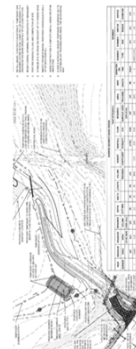


This is Not a Detailed Visit, Just a Pulse Check



Review of Plans Along With Plan Comments

- Erosion Control**
1. Provide items and standard notes from the accompanying checklist. Please contact Donald Perry to discuss, not all items are applicable.
 2. Place Lat and Long in decimal degrees on the plan at the construction entrance.
 3. Plans must use City of Rocky Mount Standard Details where applicable, e.g. Construction Entrance, Silt Fence Outlet etc.
 4. Construction entrance length should be 100', draw to scale.
 5. Clearly illustrate and label Limits of Disturbance with disturbed acreage labeled as well. Make certain that the limits of disturbance allows for proper maintenance of measures.
 6. Sediment Fence is appropriate for approximately 100' of drainage per linear foot of fence. Install additional measures as needed to address this limitation. You may want to extend the temporary diversions as necessary to capture all off the on-site stormwater flow. Modify skimmer basins & calculations as necessary if temporary diversions are extended.
 7. Provide channel flow and stability calculations for the temporary diversions.
 8. Draw the Skimmer Basins to scale with proposed contours.
 9. Provide outlet protection for the skimmer basins.
 10. Provide pipe in temporary diversion for construction traffic to cross.
 11. Locate any material laydown or storage areas.
 12. Provide Concrete Washout location and detail.
 13. Place New Stabilization Timetables Chart on plan that accompanies this letter.
 14. Add a note indicating that the streets in front of the project will be kept clean at all times or a wash station will be required.
 15. Financially Responsible Owner does not own the property, therefore, the FRO must have a letter from the landowner giving the FRO permission to actively construct on their land.
 16. Indicate on plans the entity (contractor, engineer etc.) responsible for completing the DIVO-CLR Monitoring Form associated with the NCQS10000 General Permit.



Visit of Active Sites With Peer Visitor



Plan a Day That Coincides With a Pre-Construction Conference

10-11 Meet Mrs. Griffin @ 301 Fox Hill Drive	10-11 DRC Meeting	
11-12p Meet Mrs. Frazier @ 1874 Herneville Road		
1p-2p Busy	1p-2p S&EC Pre-Construction Conference, Falls Road	2p-3:30p Battleboro Bas Meeting
3p-4p Jonathan & Donald General		3:30p-4:30p Battleboro Project Kick-off meeting

Review Standard Documents and Forms

Erosion Control Checklist

- Project: _____
- Review: 1st 2nd 3rd Reapproved Approved
- 1. Provide Grading Permit Application Form.
- 2. Provide Financial Responsibility Form.
- 3. Plans must use City of Rocky Mount Special Ordinance 2012-05.
- 4. Project location. We must be able to locate a vicinity map as well as latitude and longitude.
- 5. North Arrow: Which way is north on the proposed plan?
- 6. Scale: What is the scale of the plan? (Include)
- 7. Size of area: (include the total drainage area)
- 8. Boundaries of the total tract show the boundary lines.
- 9. Existing and planned drainage patterns (Must)

December 10, 2014

Brianne Sibley Carter, LLC
 13768 Buchanan Corporate Plaza Area 120
 Charlotte, NC 28217

LETTER OF APPROVAL
 FOR SEWERAGE TREATMENT & EROSION CONTROL

Re: Project Name: Energy Sibley Impervious/Brianne Sibley Carter
 Parcel Number: 2013040000001
 Location: I-85 Highway off
 Industrial Blvd
 Disturbed Area: 30.0 acres

August 14, 2013

NOTICE OF SATISFACTION OF VIOLATION OF THE SEWERAGE TREATMENT TRENCH CONSTRUCTION ACT AND CITY OF ROCKY MOUNT SOIL EROSION AND SEDIMENTATION CONTROL ORDINANCE

VIA EMAIL
 Parcel Identification No.: XXXXXXXXXXXXX
 Due On: \$10,000.00

On August 8, 2013 pursuant to this office inspected the site referenced above located at Brianne Sibley Carter, LLC Parcel Number 2013040000001. This inspection was performed to determine compliance with the terms of Ordinance 2012-05, and Ordinance 2012-06, and to ensure that the contractor has implemented the City of Rocky Mount Soil Erosion and Sedimentation Control Ordinance of the City of Rocky Mount. Local Ordinance 2012-05, 2012-06.

After this inspection (see attached report), we found the site to be in substantial compliance with the current Subdivision & Erosion Control Plan. However, we do not have a letter of satisfaction of the Act and Code. We appreciate your efforts in bringing this site into compliance.

It is imperative that continued progress and adherence to the Subdivision & Erosion Control Plan is strictly followed in order to avoid any future Notices of Violation. Please be advised that any future enforcement action will take into consideration all past violations and non-compliance history for this site.

Provide Awareness of New Products and Procedures



An Open Mind for Constructive Criticism



A HAPPY PEER VISITOR!!!



QUESTIONS/COMMENTS