



SOIL EROSION & SEDIMENT CONTROL

Documentation of Common
Construction Site Deficiencies



DOCUMENTATION OF COMMON CONSTRUCTION SITE DEFICIENCIES

The documentation of site deficiencies and corrections is a required element for all sites one acre or greater in Mecklenburg County and the City of Charlotte. The best documentation is not only accurate and timely, it also serves as an effective means of communication and follow up between the inspector and individuals responsible for maintenance, repair or revision.



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DOCUMENTING DEFICIENCIES

Effective inspections document three elements:

1. Measures are installed according to plan (location and dimensions)
2. Measures damaged, in need of maintenance or otherwise ineffective (deficiencies)
3. Correction of deficiencies



DOCUMENTING LOCATION AND DIMENSIONS

- Erosion & sediment control devices must be measured or numbered to ensure they are sized and located per the approved plan
- Document only when measures are installed or changed
- Includes; basins, sediment fence, entrances, ditches, grade control, inlet protection, etc.



DOCUMENTING DAMAGE OR MAINTENANCE NEEDS

- Damage from equipment, vehicles or misuse must be documented (along with repair)
- Failing or ineffective measures must be documented
- Measures not installed per manual or standard specification must be documented
- Measures that need maintenance (sediment removal) must be documented



DOCUMENTATION OF COMMON DEFICIENCIES

Examples:

On the following pages look at the pictured soil erosion or sediment control BMP and think about how you may document the conditions on a report. Following each example picture is sample documentation, see how your assessment compares...



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Erosion and Sedimentation Control Measures Inspected						Inspection Date	Describe Actions Needed <u>Corrective actions should be performed as soon as possible and before the next storm event</u>	Corr D
Name/Number/ Location of Measure (List all measures on Plan)	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	<i>New Measures Installed *</i>					
			<i>Proposed Dimensions (ft.)</i>	<i>Actual Dimensions (ft.)</i>	<i>Significant Deviation from Plan? (Y/N)</i>			
Construction Entrance	N	Y	8' x 25'	0 x 0	Y	7/11/14	Install Entrance per plan (lots 68-72); broom and shovel streets to remove sediment	
Sed. Fence	N	Y	75'	0'	Y	7/11/14	Install sediment fencing per plan (lots 68-72); broom and shovel streets to remove sediment	

How would you document?



EXAMPLE PICTURE:



How would you document?

EXAMPLE DOCUMENTATION:



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Name/Number/ Location of Measure (List all measures on Plan)	Operating Property? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	<i>New Measures Installed *</i>				
			<u>Proposed Dimensions (ft.)</u>	<u>Actual Dimensions (ft.)</u>	<u>Significant Deviation from Plan? (Y/N)</u>		
Sed. Fence	N	Y	125'	125'	N	7/11/14	Lot 12; repair sediment fence. Ensure repair to specification (posts 6' on center or 8' on center with wire backing). Clean adjacent street

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



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Name/Number/ Location of Measure (List all measures on Plan)	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	New Measures Installed *				
			<u>Proposed Dimensions (ft.)</u>	<u>Actual Dimensions (ft.)</u>	<u>Significant Deviation from Plan? (Y/N)</u>		
Skimmer Basin 1	N	Y	275' x 145'	270' x 180'	Y*	7/11/14	*Basin footprint ok, but skimmer invert lies below basin bottom. Correct the elevation for skimmer invert to provide 1' storage between basin bottom and skimmer invert; ensure storage height and spillway depth per plan after correction

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



PART 2C: GROUND STABILIZATION Must be recorded after each Phase of Grading

Area Where Temporary or Permanent Ground Cover is Required	Date Land-Disturbance Stopped or Completed	Time Limit for Ground Cover <u>7 days or 14 days</u>	Is Ground Cover Sufficient to Restrain Erosion? (Y/N)	Inspection Date	Describe Actions Needed	Co
Tracked fill slope south of Perimeter Circle	7/11/2014	7 (slope)	N	7/11/2014	Establish vegetation on slope per plan (with matting) by July 18 th , 2014	

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Erosion and Sedimentation Control Measures Inspected						Inspection Date	Describe Actions Needed <u>Corrective actions should be performed as soon as possible and before the next storm event</u>	Co
Name/Number/ Location of Measure (List all measures on Plan)	Operating Property? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	<u>New Measures Installed *</u>					
			<u>Proposed Dimensions (ft.)</u>	<u>Actual Dimensions (ft.)</u>	<u>Significant Deviation from Plan? (Y/N)</u>			
Silt fence (Carter Street Lots)	N	Y	140'	140'	Y	7/11/2014	Repair and maintain as needed to keep sediment from discharging to Carter Street. Carter Street curb and gutter must be shoveled and <u>broomed</u> to remove accumulated sediment	
Construction Entrances (Carter Street Lots)	N	Y	25' x 8'	Varies	Y	7/11/2014	Refresh/rebuild construction entrances of sufficient width and length to prevent offsite sedimentation to Carter Street. Carter Street curb and gutter must be shoveled and <u>broomed</u> to remove accumulated sediment	
Inlet Protection (Carter Street)	N	Y	NA	NA	Y	7/11/2014	Remove accumulated sediment from inlet protection bags	

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



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Name/Number/ Location of Measure (List all measures on Plan)	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	New Measures Installed *					
			<u>Proposed Dimensions (ft.)</u>	<u>Actual Dimensions (ft.)</u>	<u>Significant Deviation from Plan? (Y/N)</u>			
Silt Fence (east side adjacent to Williamson Property driveway)	N	Y	368'	392'	N	7/11/2014	Remove accumulated sediment from sediment fence to ensure adequate storage volume. Remove offsite sedimentation by hand and monitor area for performance	

PART 2C: GROUND STABILIZATION Must be recorded after each Phase of Grading

Area Where Temporary or Permanent Ground Cover is Required	Date Land-Disturbance Stopped or Completed	<u>Time Limit for Ground Cover 7 days or 14 days</u>	Is Ground Cover Sufficient to Restrain Erosion? (Y/N)	Inspection Date	Describe Actions Needed	C
Fill slope on east side of development	Unknown	7	N	7/11/2014	Track slope, establish temporary or permanent vegetation sufficient to restrain accelerated erosion	

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Erosion and Sedimentation Control Measures Inspected						Inspection Date	Describe Actions Needed <u>Corrective actions should be performed as soon as possible and before the next storm event</u>
Name/Number/ Location of Measure (List all measures on Plan)	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	New Measures Installed *				
			<u>Proposed Dimensions (ft.)</u>	<u>Actual Dimensions (ft.)</u>	<u>Significant Deviation from Plan? (Y/N)</u>		
Diversion Ditch #3	N	Y	212'	235'	N	7/11/2014	Add grade control and stabilize per plan requirements

How would you document?



EXAMPLE PICTURE:



How would you document?



EXAMPLE DOCUMENTATION:



PART 2B: STORMWATER DISCHARGE OUTFALLS (SDOs): SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Stormwater Discharge Outfalls Inspected					Inspection Date	Report Visible Sedimentation to streams or wetlands to DWQ within 24 Hours http://portal.ncdenr.org/web/wq/ Describe Actions Needed <u>Corrective actions should be performed as soon as possible and before the next storm event</u>
Stormwater Discharge Outfall ID or Location	Any Visible Sedimentation in Streams, Wetlands or Outside Site Limits? (Y/N)	Any Increase in Stream Turbidity from Discharge? (Y/N)	Any Visible Erosion below SDO? (Y/N)	Any visible oil sheen, floating or suspended solids or discoloration? (Y/N)		
003	N	Y	N	Y	7/11/2014	Turbidity from site impacting receiving waterway; implement flocculants and stabilization within the drainage area to reduce turbidity impacts

How would you document?



DOCUMENTING CORRECTIONS

- Repairs and corrections must be implemented as quickly as possible within reason
- Repairs and corrections must be documented
- All documented deficiencies must have documented corrections with dates
- Prioritize re-inspection (for corrections) as severity of deficiency dictates

DOCUMENTING CORRECTIONS

PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Erosion and Sedimentation Control Measures Inspected							
Name/Number/ Location of Measure (List all measures on Plan)	Operating Properly? (Y/N)	Any Repair or Maintenance Needed? (Y/N)	<i>New Measures Installed *</i>			Inspected Date	Corrected Date
			<i>Proposed Dimensions (ft.)</i>	<i>Actual Dimensions (ft.)</i>	<i>Significant Deviation from Plan? (Y/N)</i>		

*New erosion and sedimentation control measures installed since the last inspection should be documented here or by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control plan.

PART 2B: STORMWATER DISCHARGE OUTFALLS (SDOs): SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

Stormwater Discharge Outfalls Inspected						Inspected Date	Corrected Date
Stormwater Discharge Outfall ID or Location	Any Visible Sedimentation in Streams, Wetlands or Outside Site Limits? (Y/N)	Any Increase in Stream Turbidity from Discharge? (Y/N)	Any Visible Erosion below SDO? (Y/N)	Any visible oil sheen, floating or suspended solids or discoloration? (Y/N)			

Don't forget to log "Corrected Date"!



FOR MORE INFORMATION:

You may download the North Carolina Erosion and Sediment Control Inspector's Guide from the following link:

http://portal.ncdenr.org/c/document_library/get_file?uuid=95e7e411-b2f0-4a95-a6e2-cce3dcf0fc9f&groupId=38334

If you have site specific questions please contact:

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