



# Construction Site Inspection Checklist

By making use of some simple Best Management Practices (BMPs) a construction site operator can do his or her share to protect Ohio's water resources from the harmful effects of sediment. The topography of the site and the extent of the construction activities will determine which of these practices are applicable to any given site, but the BMPs listed here are applicable to most construction sites. For details on the installation and maintenance of these BMPs, please refer to *Rainwater and Land Development, Ohio's Standards for Storm Water Management, Land Development and Urban Stream Protection* (Ohio Department of Natural Resources, 1996), available from your county Soil and Water Conservation District (SWCD) or by contacting the ODNR Division of Soil and Water Conservation.

## **Temporary Stabilization**

This is the most effective BMP. All disturbed areas that will lie dormant for over 21 days must be stabilized within 7 days of the date the area becomes inactive. The goal of temporary stabilization is to provide cover, quickly. Areas within 50 feet of a stream must be stabilized within 2 days of inactivity. This is accomplished by seeding with fast-growing grasses then covering with straw mulch. Apply only mulch between November 1 and March 31. To minimize your costs of temporary stabilization, leave natural cover in place for as long as possible. Only disturb areas you intend to work within the next 21 days.

## **Construction Entrances**

Construction entrances are installed to minimize off-site tracking of sediments. A stone access drive should be installed at every point where vehicles enter or exit the site. Every individual lot should also have its own drive once construction on the lot begins.

## **Sediment Ponds**

This is the sediment control of choice for areas, which exceed the design capacity of silt fence (see page 119 of the *Rainwater* manual) or to control concentrated runoff. There are two types of sediment ponds: sediment basins and sediment traps. A sediment trap is appropriate where the contributing drainage area is 10 acres or less. The outlet is an earthen embankment with a simple stone spillway. A sediment basin is appropriate for drainage areas larger than 10 acres. The outlet is an engineered riser pipe. Often a permanent storm water management pond, such as a retention or detention basin, can be modified to act as a sediment basin during construction. All sediment ponds, regardless of whether they are a trap or a basin and regardless of whether they will become a permanent storm water pond, must provide a minimum storage of 67 cubic yards per acre of total contributing drainage area. Sediment ponds must be installed within 7 days of first grubbing the area they control.

## **Silt Fence**

This is typically used at the perimeter of a disturbed area. It's only for small drainage areas on relatively flat slopes or around small soil storage piles. Not suitable where runoff is concentrated in a ditch, pipe or through streams. For large drainage areas where flow is concentrated, collect runoff in diversion berms or channels and pass it through a sediment pond prior to discharging it from the site. Combination barriers constructed of silt fence supported by straw bales or silt fence embedded within rock check dams may be effective within small channels. As with all sediment controls, silt fence must be capable of ponding runoff so that sediment can settle out of suspension. Silt fence must be installed within 7 days of first grubbing the area it controls.

## **Inlet Protection**

This must be installed on all yard drains and curb drains when these inlets do not drain to a sediment trap or basin. Even if there is a sediment trap or basin, inlet protection is still recommended, as it will increase the overall sediment removal efficiency. These are best used on roads with little or no traffic. If working properly, inlet protection will cause water to pond. If used on curb inlets, streets will flood temporarily during heavy storms. Check with your municipality before installing curb inlet protection. They may prefer an alternate means of sediment control such as silt fence or ponds.

## **Permanent Stabilization**

All areas at final grade must be permanently stabilized within 7 days of reaching final grade. This is usually accomplished by using seed and mulch, but special measures are sometimes required. This is particularly true in drainage ditches or on steep slopes. These measures include the addition of topsoil, erosion control matting, rock rip-rap or retaining walls. Permanent seeding should be done March 1 to May 31 and August 1 to September 30. Dormant seeding can be done from November 20 to March 15. At all other times of the year, the area should be temporarily stabilized until a permanent seeding can be applied.

## **Non-Sediment Pollution Control**

Although sediment is the pollutant of greatest concern on most construction sites, there are other sources of pollution. Most of these BMPs are easy to implement with a little bit of planning and go a long way toward keeping your site clean and organized. Please be sure to inform all contractors how these BMPs affect their operations on the site, particularly those that will be working near a stream.

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## Inspection Sheet

**INSPECTIONS MUST BE CONDUCTED ONCE EVERY 7 DAYS AND WITHIN 24 HOURS OF A 0.5" OR GREATER RAINFALL. ALL SEDIMENT CONTROLS MUST BE INSTALLED PRIOR TO GRADING AND WITHIN 7 DAYS OF FIRST GRUBBING**

### TEMPORARY STABILIZATION

Key things to look for ...

	Yes	No
1. Are there any areas of the site that are disturbed, but will likely lie dormant for over 21 days?	<input type="checkbox"/>	<input type="checkbox"/>
2. Have all dormant, disturbed areas been temporarily stabilized in their entireties?	<input type="checkbox"/>	<input type="checkbox"/>
3. Have disturbed areas outside the silt fence been seeded or mulched?	<input type="checkbox"/>	<input type="checkbox"/>
4. Have soil stockpiles that will sit for over 21 days been stabilized?	<input type="checkbox"/>	<input type="checkbox"/>
5. Has seed and mulch been applied at the proper rate? In general, seed is applied at 3 to 5 lbs per 1000 sq ft and straw mulch is applied at 2-3 bales per 1000 sq ft.	<input type="checkbox"/>	<input type="checkbox"/>
6. Has seed or mulch blown away? If so, repair.	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

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### CONSTRUCTION ENTRANCES

Key things to look for ...

	Yes	No
1. Has the drive been constructed by placing geotextile fabric under the stone?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is the stone 2-inch diameter?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the stone been placed to a depth of 6 inches, with a width of 10 feet and a length of at least 50 feet (30 feet for entrances onto individual sublots)?	<input type="checkbox"/>	<input type="checkbox"/>
4. If the drive is placed on a slope, has a diversion berm been constructed across the drive to divert runoff away from the street or water resource?	<input type="checkbox"/>	<input type="checkbox"/>
5. If drive is placed across a ditch, was a culvert pipe used to allow runoff to flow across the drive?	<input type="checkbox"/>	<input type="checkbox"/>

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# SEDIMENT PONDS

## Key things to look for ...

	Yes	No
1. Are concentrated flows of runoff directed to a sediment pond?	<input type="checkbox"/>	<input type="checkbox"/>
2. Is sheet-flow runoff from drainage areas that exceed the design capacity of silt fence (generally 0.25 acre or larger) directed to a sediment pond?	<input type="checkbox"/>	<input type="checkbox"/>
3. Is runoff being collected and directed to the sediment pond via the storm sewer system or via a network of diversion berms and channels?	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the sediment pond appropriately sized (67 cubic yards per acre of total drainage area)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Have the embankments of the sediment pond and the areas that lie downstream of the pond been stabilized?	<input type="checkbox"/>	<input type="checkbox"/>
6. For sediment basins that dewater 100% between storms, is the riser pipe wrapped with chicken wire and double wrapped with geotextile fabric?	<input type="checkbox"/>	<input type="checkbox"/>
7. Does the riser have 1-inch diameter holes spaced 4 inches apart, both horizontally and vertically?	<input type="checkbox"/>	<input type="checkbox"/>
8. For sediment basins, which dewater 60% between storms, is the diameter of the dewatering hole per plan (see page 105 of <i>Rainwater</i> manual)?	<input type="checkbox"/>	<input type="checkbox"/>
9. For sediment traps, is there geotextile under the stone spillway and is the spillway saddle-shaped?	<input type="checkbox"/>	<input type="checkbox"/>
10. For sediment traps, which dewater 100% between storms, is the dewatering pipe end-capped, no larger than 6 inches in diameter, perforated and double-wrapped in geotextile?	<input type="checkbox"/>	<input type="checkbox"/>
11. Is the length-to-width ratio between inlet(s) and outlet at least 2:1? <b>NOTE:</b> If not, a baffle should be added to lengthen the distance.	<input type="checkbox"/>	<input type="checkbox"/>
12. Is the depth from the bottom of the basin to the top of the primary spillway no more than 3 to 5 feet?	<input type="checkbox"/>	<input type="checkbox"/>
13. For a modified storm water pond being used as a sediment pond, is the connection between the riser pipe and the permanent outlet water-tight?	<input type="checkbox"/>	<input type="checkbox"/>
14. Was the basin installed prior to grading the site?	<input type="checkbox"/>	<input type="checkbox"/>
15. Is it time to clean-out the sediment pond to restore its original capacity? Generally, sediment should be removed once the pond is half-full. Stabilize the dredged sediments with seed and mulch.	<input type="checkbox"/>	<input type="checkbox"/>

Note areas where repairs or maintenance is needed or where this practice needs to be applied:

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## SILT FENCE

### Key things to look for ...

- |  | Yes                      | No                       |
|--|--------------------------|--------------------------|
| 1. Is the fence at least 4" to 6" into the ground?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the trench backfilled to prevent runoff from cutting underneath the fence?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the fence pulled tight so it won't sag when water builds up behind it?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are the ends brought upslope of the rest of the fence so as to prevent runoff from going around the ends?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is the fence placed on a level contour? If not, the fence will only act as a diversion.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Have all the gaps and tears in the fence been eliminated.   | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is the fence controlling an appropriate drainage area? Refer to page 119 of <i>Rainwater</i> manual.<br><b>RULE OF THUMB:</b> Design capacity for 100 linear feet of silt fence is 0.5 acres for slopes < 2%, 0.25 acres for slopes 2% to 20%, & 0.125 acres for slopes 20% or more. Generally, no more than 0.25 acres should lie behind 100 feet of fence at 2% to 10% slope, i.e., the distance between the fence and the top of the slope behind it should be no more than 125 feet. The allowable distance increases on flatter slopes and decreases for steeper slopes. | <input type="checkbox"/> | <input type="checkbox"/> |

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## INLET PROTECTION

### Key things to look for ...

- |  | Yes                      | No                       |
|--|--------------------------|--------------------------|
| 1. Does water pond around the inlet when it rains?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Has the fabric been replaced when it develops tears or sags?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. For curb inlet protection, does the fabric cover the entire grate, including the curb window?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. For yard inlet protection, does the structure encircle the entire grate?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is the fabric properly entrenched or anchored so that water passes through it and not under it?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. For yard inlet protection, is the fabric properly supported to withstand the weight of water and prevent sagging? The fabric should be supported by a wood frame with cross braces, or straw bales. | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Is sediment that has accumulated around the inlet removed on a regular basis?   | <input type="checkbox"/> | <input type="checkbox"/> |

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## PERMANENT STABILIZATION

### Key things to look for ...

	Yes	No
1. Are any areas at final grade?	<input type="checkbox"/>	<input type="checkbox"/>
2. Has the soil been properly prepared to accept permanent seeding?	<input type="checkbox"/>	<input type="checkbox"/>
3. Has seed and mulch been applied at the appropriate rate (see page 169 of the <i>Rainwater</i> manual)?	<input type="checkbox"/>	<input type="checkbox"/>
4. If rainfall has been inadequate, are seeded areas being watered?	<input type="checkbox"/>	<input type="checkbox"/>
5. For drainage ditches where flow velocity exceeds 3.5 ft/s from a 10-year, 24-hour storm has matting been applied to the ditch bottom?	<input type="checkbox"/>	<input type="checkbox"/>
6. If the flow velocity exceeds 5.0 ft/s, has the ditch bottom been stabilized with rock rip-rap? <b>NOTE:</b> Rock check dams may be needed to slow the flow of runoff.	<input type="checkbox"/>	<input type="checkbox"/>
7. Has rock rip-rap been placed under all storm water outfall pipes to prevent scouring in the receiving stream or erosion of the receiving channel?	<input type="checkbox"/>	<input type="checkbox"/>
8. For sites with steep slopes or fill areas, is runoff from the top of the site conveyed to the bottom of the slope or fill area in a controlled manner so as not to cause erosion?	<input type="checkbox"/>	<input type="checkbox"/>

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## NON-SEDIMENT POLLUTION CONTROL

### Key things to look for ...

	Yes	No
1. Has an area been designated for washing out concrete trucks? Washings must be contained on site within a bermed area until they harden. The washings should never be directed toward a watercourse, ditch or storm drain.	<input type="checkbox"/>	<input type="checkbox"/>
2. Is waste and packaging disposed of in a dumpster? Do not burn them on site.	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fuel tanks and drums of toxic and hazardous materials stored within a diked area or trailer and away from any watercourse, ditch or storm drain?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are streets swept as often as necessary to keep them clean and free from sediment? <b>NOTE:</b> Sediment should be swept back onto the lot - not down the storm sewers.	<input type="checkbox"/>	<input type="checkbox"/>
5. Are stockpiles of soil or other materials stored away from any watercourse, ditch or storm drain?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have stream crossings been constructed entirely of non-erodible material?	<input type="checkbox"/>	<input type="checkbox"/>
7. If an area of the site is being dewatered, is it being pumped from a sump pit or is the discharge directed to a sediment pond? <b>NOTE:</b> if you must lower ground water, the water may be discharged to the receiving stream as long as the water remains clean. Be sure not to co-mingle the clean ground water with sediment-laden water or to discharge it off-site by passing it over disturbed ground.	<input type="checkbox"/>	<input type="checkbox"/>