

# Stabilized Construction Entrance



<u>BENEFITS</u>			
	L	M	H
Flow Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sediment Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Runoff Reduction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Flow Diversion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Description:** A stabilized construction entrance is a temporary, stabilized layer of large aggregate that is located at any point where traffic enters or leaves a construction site and enters a public road or other paved areas. Effectiveness depends on length, depth of rock, frequency of use, and maintenance of temporary rock entrance.

**Typical Uses:** Used where construction vehicles leave a construction site and enter onto a public street. The purpose of the rock entrance is to prevent mud from being tracked out onto the roadway, where it can cause plugging of storm sewers and fugitive dust problems.

**Advantages:**

- Low cost (based on stone availability) and easily installed.
- Helps prevent tracking of mud onto public streets, reducing fugitive dust and clogged storm sewers.
- Provides stable exit/entrance for construction traffic.

**Limitations:**

- Rock must be replaced once the voids become plugged with mud.
- May not remove all soil from vehicles, especially on muddy sites.
- Rock and sediment must be disposed of upon completion.

**Longevity:** Varies, based upon site conditions and volume of traffic

**SUDAS Specifications:** Refer to [Section 9040, 2.14](#) and [3.19](#)

## A. Description/Uses

A stabilized construction entrance consists of a pad of large aggregate, often underlain with engineering fabric. Rock entrances should be located at any point where traffic will be leaving a construction site and entering a public roadway. The stabilized construction entrance reduces the amount of sediment (dust, mud, etc.) tracked offsite by construction equipment, especially if a wash-rack is incorporated for removing caked sediment.

## B. Design Considerations

The entrance from a construction site is a significant source for offsite sediment deposition. Entrance and parking areas are continuously disturbed, leaving no opportunity for vegetation stabilization. During wet weather, these areas often become muddy, and construction vehicles track this mud off of the site and deposit it onto the public roadway where it clogs storm sewers and creates fugitive dust problems.

A stabilized construction entrance can reduce the amount of sediment that is tracked into the street by construction traffic. A rock entrance stabilizes the access to the site, and helps remove mud and clay from vehicle tires before they leave the site. A stabilized construction entrance should be constructed on every construction site, prior to the mobilization of construction equipment.

- 1. Location:** A stabilized construction entrance should be located at every point where construction traffic leaves a construction site. Vehicles leaving the site should travel over the entire length of the rock entrance. When possible, the entrance should be located on level ground, at a location with appropriate sight distance. Construction vehicles should be prohibited from leaving the site at locations other than the stabilized construction entrance. Fence should be constructed if necessary. If additional access to the site is required, additional rock entrances should be constructed
- 2. Site Preparation:** The area of the entrance should be excavated to the proposed thickness of the stone, stripping any topsoil, vegetation, and soft soils as necessary to provide a stable subgrade. When soft soil conditions exist, or when earthmoving or other heavy equipment will use the entrance, a subgrade stabilization fabric should be placed over the entire length and width of the entrance prior to placing the rock.
- 3. Drainage:** Slopes should not exceed 15% and should be carefully graded to drain transversely to prevent runoff from the entrance from flowing into the street. All surface water flowing off of the construction entrance should be directed to a sediment removal device (sediment basin or trap, silt fence, filter sock, etc.).
- 4. Tire Washing or “Wash-rack”:** A properly constructed rock entrance should not be relied upon to remove all the mud from construction traffic. In some cases, the action of tires moving over a gravel pad may not adequately clean tires. If conditions on the site are such that the majority of the mud is not removed by the vehicles traveling over the rock, then the tires of the vehicles should be washed before entering the public road. Manual washing of the tires should be provided, or automated wash racks should be installed. Wash water must be carried away from the entrance to a sediment removal device (sediment basin or trap, silt fence, filter tube, etc.). All sediment shall be prevented from entering storm drains, ditches, or watercourses.

### C. Application

1. **Length:** Minimum of 50 feet with an exception for single family residential lots which should be 30 feet. For sites that will be utilizing the entrance to haul a large volume of earth, the length of the entrance should be increased.
2. **Width:** Minimum of 20 feet wide. Busy entrances will need the capability of handling a lane of traffic each way, typically 30 feet wide. Flare the entrance where it meets the existing road to provide a turning radius.
3. **Geotextile:** If soft soil conditions exist, or when earthmoving or other heavy equipment will utilize the entrance, a layer of subgrade stabilization fabric should be placed over the prepared subgrade prior to placement of the rock to minimize migration of stone into the underlying soil by heavy vehicle loads. The barrier created by the fabric also aids in removal of the stone upon completion of the project, or as required for maintenance.
4. **Stone:** The rock for the entrance should consist of a nominal 2 to 3 inch clean crushed stone or recycled concrete. A 6 to 12-inch thick layer of stone, depending on anticipated traffic, should be placed over the entire length and width of the construction entrance. Rock with smaller aggregate does not adequately remove mud and clay from vehicles, and may be picked up by vehicle tires and carried out into the street.

### D. Maintenance

Construction entrances should be inspected daily to ensure that mud and dirt are not being tracked onto roadways. All sediment deposited on paved roadways should be removed, not washed into the stormwater system or into waterways, at the end of each workday.

Rock entrances may require that additional stone be placed if the existing material becomes buried or if the subgrade is soft or becomes saturated.

Upon completion of the project the rock entrance, engineering fabric and any accumulated sediment should be removed and disposed.