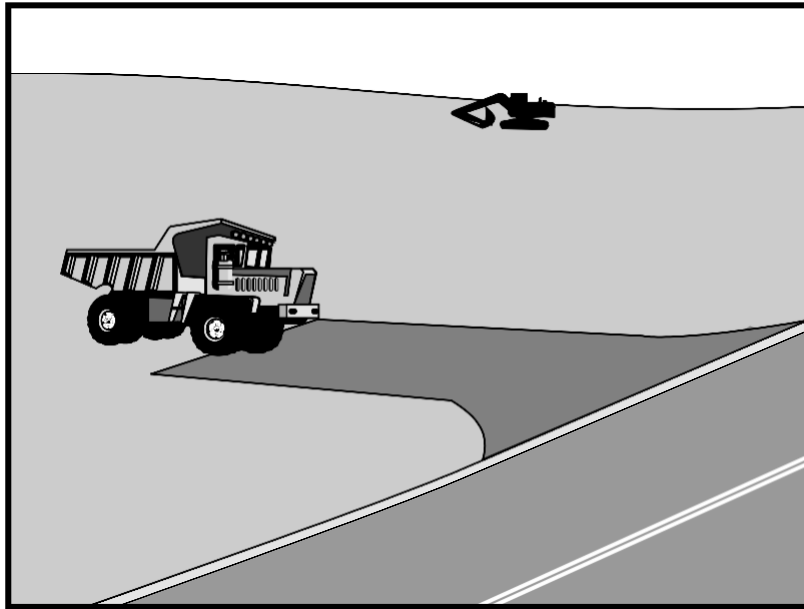


Stabilized Construction Entrance/Exit TC-1



Description and Purpose

A stabilized construction access is defined by a point of entrance into and exit from a construction site that is designed to reduce the tracking of sediment and mud onto public roads by construction vehicles. Stabilized access points work by removing mud or soil from vehicle tires through a bouncing or shaking action as the vehicle drives over aggregate and/or rumble racks.

Suitable Applications

Use at construction sites:

- Where sediment or mud can be tracked onto public roads.
- Adjacent to water bodies.
- Where poor soils are encountered.
- Where dust is a problem during dry weather conditions.

Limitations

- Construct entrances/exits on level ground.
- Aggregate pads typically require periodic top dressing with additional stones.
- Use this BMP in conjunction with street sweeping on adjacent roadways.
- Entrances/exits can be expensive to construct when a wash rack is included. A sediment trap must also be provided to collect wash water.

Categories

EC	Erosion Control	<input checked="" type="checkbox"/>
SE	Sediment Control	<input checked="" type="checkbox"/>
TC	Tracking Control	<input checked="" type="checkbox"/>
WE	Wind Erosion Control	<input checked="" type="checkbox"/>
NS	Non-Stormwater Management Control	<input checked="" type="checkbox"/>
WM	Waste Management and Materials Pollution Control	

Legend:

- Primary Objective
- Secondary Objective

Targeted Constituents

Sediment	<input checked="" type="checkbox"/>
Nutrients	
Trash	
Metals	
Bacteria	
Oil and Grease	
Organics	

Potential Alternatives

None

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Stabilized Construction Entrance/Exit TC-1

Implementation

General

The purpose of a stabilized construction entrance/exit is to reduce or eliminate the tracking of sediment and mud onto paved streets. The General Permit requires that appropriate measures be implemented to prevent tracking of sediments onto paved roadways, where sediment derived from mud and dirt can be carried out from unpaved roads and construction sites. Reducing tracking of sediments and other pollutants onto paved roads helps prevent deposition of sediments into local storm drains and production of airborne dust.

A stabilized construction entrance/exit should be located at any point where construction traffic will be entering or leaving a construction site to or from a public right of way, street, alley, sidewalk, or parking area.

A stabilized construction entrance/exit can consist of an angular aggregate pad underlain with filter fabric or pre-manufactured rumble racks designed with corrugated steel panels or a composite pyramidal geometric pattern (aka tracking control mats).

A stabilized construction entrance/exit is moderately effective in removing sediment and mud from vehicles and equipment leaving a construction site. The entrance/exit should be built on level ground. Advantages of the stabilized construction entrance/exit are that it removes some sediment and mud from equipment and serves to channel construction traffic in and out of the site at specified locations. Sediment and mud removal efficiency is increased when a wash rack is included as part of a stabilized construction entrance/exit.

Design and Layout

- Construct on level ground where possible.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Install the construction entrance/exit to prevent vehicles from bypassing it.
- Aggregate Pad Implementation
 - Delineate an area 50 feet (ft) long, or the maximum length the site will allow, by 10 ft wide, or a width that prevents bypassing the aggregate pad.
 - Select 3- to 6- inch (in.) diameter angular aggregate.
 - Place aggregate over filter fabric to at least a 12 in. depth, or place aggregate to a depth recommended by a geotechnical engineer.
 - Rumble racks, if installed in conjunction with an aggregate pad, will help remove additional sediment and keep adjacent streets cleaner.

Stabilized Construction Entrance/Exit TC-1

- Rumble Rack Implementation
 - Rumble racks can consist of steel or composite geometric panels (aka trackout control mats) designed to shake vehicles and equipment traveling over them to remove mud and dirt.
 - Delineate an area 50 feet (ft) long, or the maximum length the site will allow, by 10 ft wide, or a width that prevents bypassing the rumble racks.
 - Implement rumble racks in a manner to be at least as effective as an aggregate pad. Implementation recommendations will vary by manufacturer and product.
 - Follow the manufacturer's installation and anchoring specifications for manufactured composite panels.
- Small Site Adaptations
 - On smaller sites, install the maximum length and width that the site can accommodate where the recommended stabilized entrance/exit dimensions (e.g., 50 ft long by 10 ft wide) cannot be achieved.
- General Implementation for all Entrances/Exits
 - Provide a 20 ft turning radii, where feasible, as part of the entrance/exit adjacent to paved roadways.
 - Limit the points of entrance/exit into and from the construction site.
 - Limit the speed of vehicles entering/exiting the construction site to control dust.
 - If a tire wash is used when entering/exiting the construction site, route the runoff to a sediment trap or sediment basin. If a tire wash is used, refer to TC-3, Entrance / Outlet Tire Wash.
 - Design a stabilized entrance/exit to support the heaviest vehicles and equipment that will use it.
 - Select the stabilization materials (e.g., rock aggregate, concrete rubble, rumble racks) based on longevity, required performance, site conditions, and availability of the materials.
 - Do not use asphalt concrete (AC) grindings or crushed concrete for stabilized construction entrances/exits or roadways.
 - Designate a combination or a single purpose entrance/exit into and from the construction site.
 - Require that all employees, subcontractors, and suppliers utilize the stabilized construction entrance/exit.
 - Implement SE-7, Street Sweeping and Vacuuming, as needed.

Stabilized Construction Entrance/Exit TC-1

Inspection and Maintenance

- Inspect and verify that activity-based BMPs are in place prior to the commencement of associated activities. While activities associated with the BMPs are under way, inspect BMPs in accordance with General Permit requirements for the associated project type and risk level. Recommend at a minimum, that BMPs are inspected weekly, prior to forecasted rain events, daily during extended rain events, and after the conclusion of rain events.
- Inspect paved roads adjacent to the site daily. Sweep and vacuum visible sediment tracked onto these roads. When mud is present on paved roads, shoveling may be required. Refer to SE-7, Street Sweeping and Vacuuming.
- Remove sediment and mud deposited on paved roadways within 24 hours.
- Keep drainage ditches associated with stabilized construction entrance/exits free from obstructions.
- When the aggregate pad clogs with sediment, remove and segregate the aggregate and then remove and dispose of the sediment. A new layer of filter fabric may be required prior to replacing the aggregate.
- Check for damage and repair as needed.
- Check and repair anchors on rumble racks.
- Remove accumulated dirt from rumble racks before the panels become clogged.
- Remove aggregate and filter fabric at completion of construction or when relocating entrances/exits.
- Construction Entrances/Exits associated with Caltrans projects must comply with Standard Specification Section 13-7.03 – “Temporary Construction Roadways and Entrances” and should refer to Caltrans BMP Fact Sheet, TC-1, Temporary Construction Entrance.

References

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, May 1995.

National Management Measures to Control Nonpoint Source Pollution from Urban Areas, USEPA, 2002.

Stormwater Quality Handbooks Construction Site Best Management Practices (BMPs) Manual, State of California Department of Transportation (Caltrans), March 2024.

<https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks>

Stormwater Management of the Puget Sound Basin, Technical Manual, Publication #91-75, Washington State Department of Ecology, February 1992.

Virginia Erosion and Sedimentation Control Handbook, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, 1991.

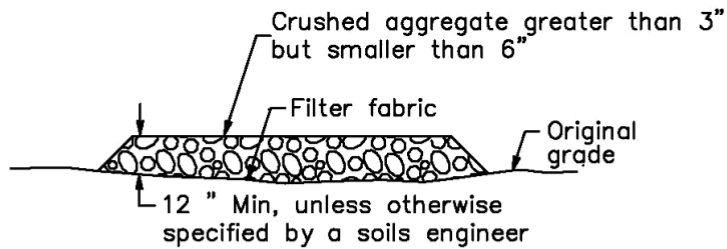
Guidance Specifying Management Measures for Nonpoint Pollution in Coastal Waters, EPA 840-B-9-002, USEPA, Office of Water, Washington, DC, 1993.

Stabilized Construction Entrance/Exit TC-1

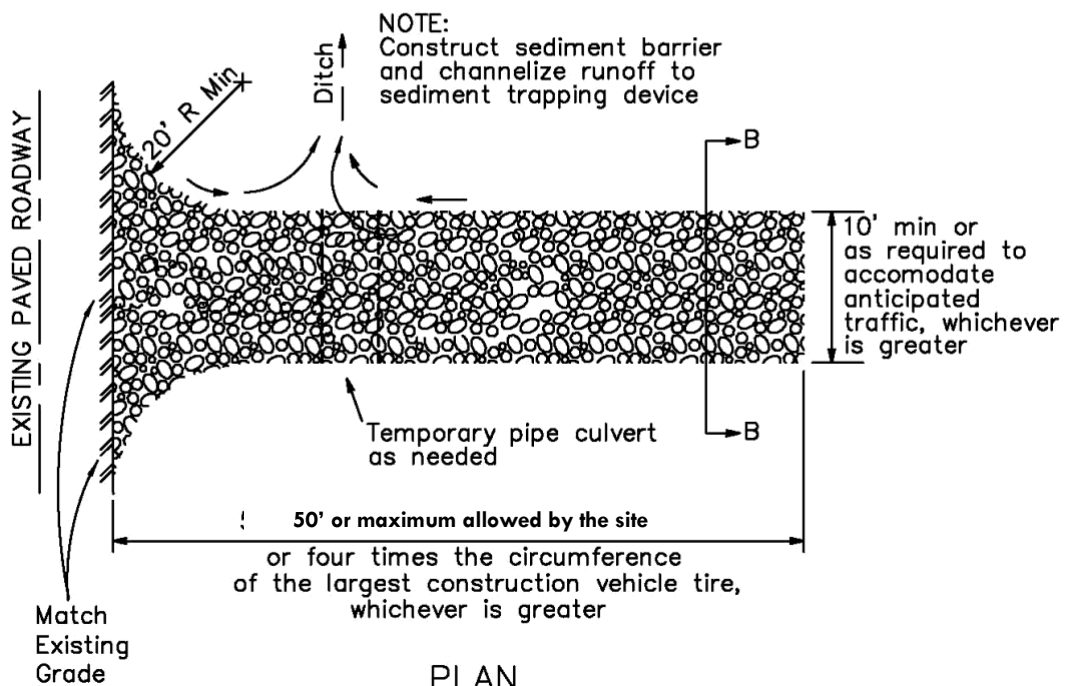
Water Quality Management Plan for the Lake Tahoe Region, Volume II, Handbook of Management Practices, Tahoe Regional Planning Agency, November 1988.

Stormwater Management Practices Construction Track-Out Controls, EPA-832-F-21-028DD, USEPA, December 2021. <https://www.epa.gov/system/files/documents/2021-11/bmp-construction-track-out-controls.pdf>

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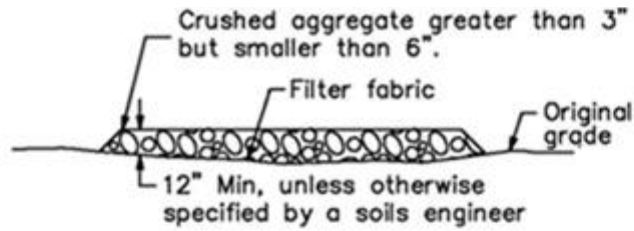
SECTION B-B
NTS



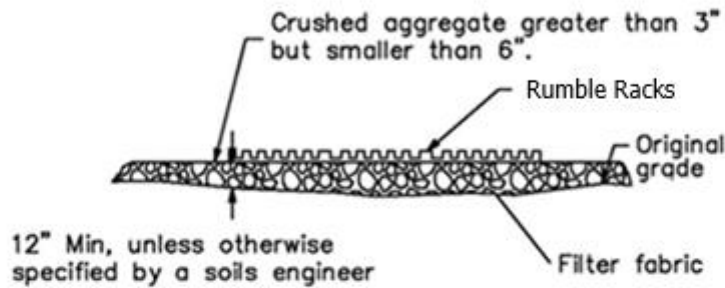
PLAN
NTS

- (1) Length should be extended to 12 times the diameter of the largest construction vehicle tire.
- (2) On small sites length, should be the maximum allowed by the site.

Stabilized Construction Entrance/Exit TC-1

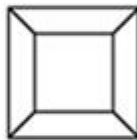


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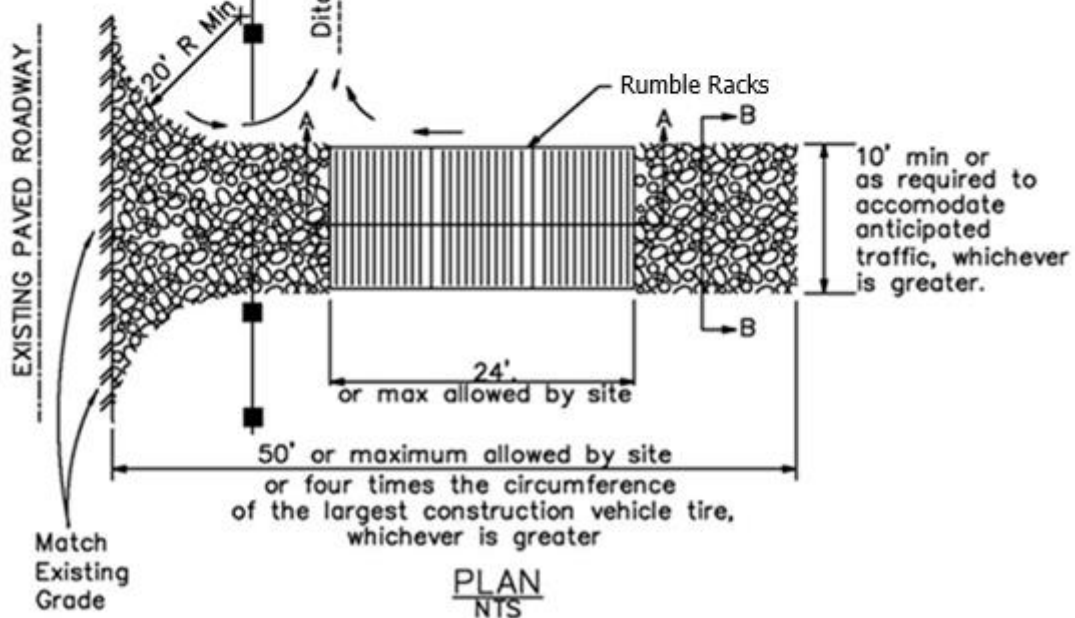


SECTION A-A
NOT TO SCALE

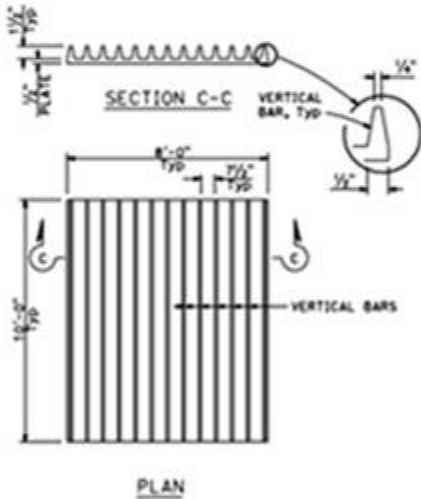
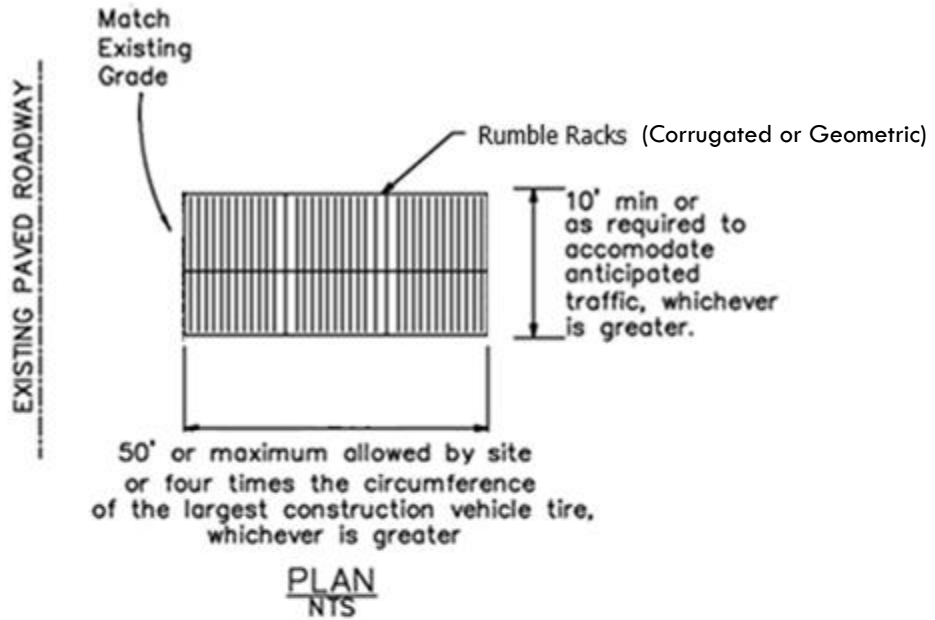
NOTE:
Construct sediment barrier and channelize runoff to sediment trapping device



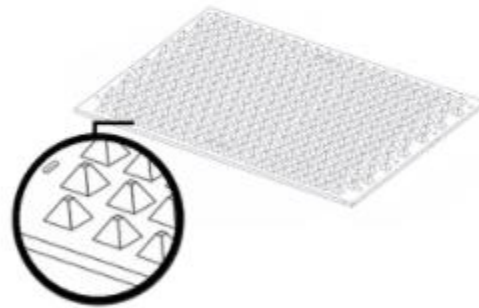
Sediment trapping device



Stabilized Construction Entrance/Exit TC-1



Example Rumble Rack Panel Detail (Corrugated)



Example Rumble Rack Panel Detail (Geometric)

Image Source (right): FODS. Proprietary system depicted is for general information only and is not intended for endorsement by CASQA