

Section 5

Tracking Control

Best Management Practices

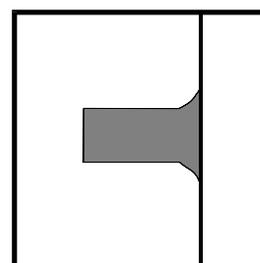
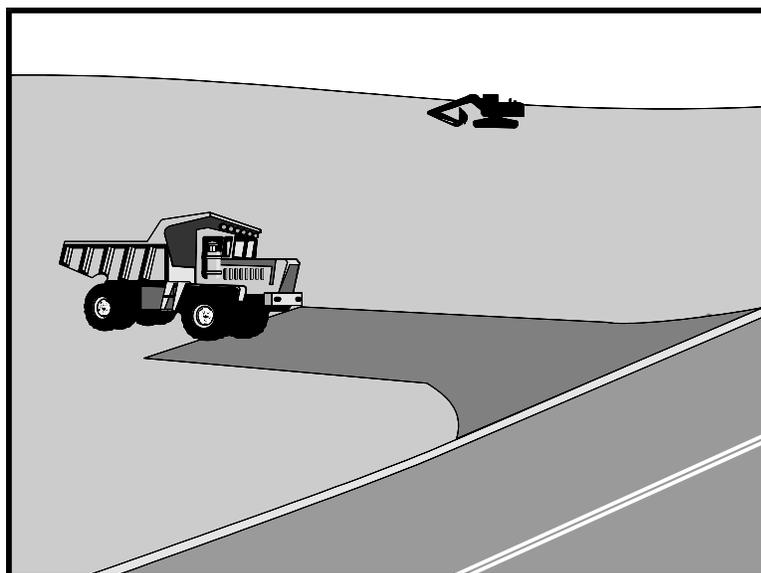
5.1 Tracking Control

Tracking control consists of preventing or reducing off-site vehicle tracking from entering a storm drain or watercourse. Tracking control best management practices (BMPs) are shown in Table 5-1.

Table 5-1 TRACKING CONTROL BMPs	
ID	BMP NAME
TC-1	Stabilized Construction Entrance/Exit
TC-2	Stabilized Construction Roadway
TC-3	Entrance/Outlet Tire Wash

The remainder of this Section shows the working details for the tracking control BMPs.

Adapted from Caltrans Construction Site BMPs



- BMP Objectives**

 - Soil Stabilization
 - Sediment Control
 - Tracking Control
 - Wind Erosion Control
 - Non-Storm Water Management
 - Materials and Waste Management

Definition and Purpose A stabilized construction approach is defined by a construction site ingress/egress point that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

- Appropriate Applications**
- Use at construction sites:
 - Where dirt 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.
 - This BMP may be implemented on a project-by-project basis in addition to other BMPs.

Limitations ■ Site conditions will dictate design and need.

- Standards and Specifications**
- Minimize the points of ingress/egress to the construction site.
 - Limit vehicle speeds to 15 mph on all unpaved routes and parking areas.
 - Properly grade each construction ingress/egress to prevent runoff from flowing onto paved roads.
 - Route runoff from stabilized ingress/egress points through a sediment-trapping device before discharge.
 - Design stabilized ingress/egress points to support the heaviest vehicles and equipment that will use it.

- Install gravel pad(s) consisting of 1 in. rough diameter, clean, well-graded gravel and crushed rock in conformance with Class 150 Riprap Bedding. Dimensions should be approximately 15 ft. wide by 6 inches deep, and 50 ft. long, or the length of the longest haul truck, whichever is greater. Re-screen, wash or apply additional rock in to maintain effectiveness.
- Clearly designate combination or single purpose entrances and exits to the construction site. Require all employees, subcontractors and others to use them.
- Implement BMP SC-7, "Street Sweeping and Vacuuming" as needed to maintain dust control and prevent sediment from leaving the site.
- Maintain dust control during working hours and clean trackout from paved surfaces at the end of each work shift/day. Trackout must be cleaned daily, at minimum in conformance with Standard Specification 107.
- Install wheel shakers consisting of constructed/manufactured steel plates with ribs in the event that trackout cannot be controlled with gravel pads. Ribbed or corrugated steel plates must be manufactured to support all expected loads.
- Install wheel washers (TC-3) and maintain on a regular basis to maintain effectiveness in the event that trackout cannot be controlled with gravel pads and wheel shakers.
- Clark County Health District "Dust Control Handbook" provides additional guidance for ribbed plate wheel shakers.

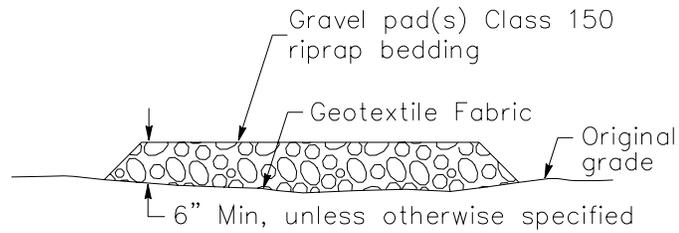
Maintenance and Inspection

- Inspect routinely for damage and assess effectiveness of the BMP. Remove aggregate, separate and dispose of sediment if gravel is clogged with sediment or as directed by the RE.
- Keep all temporary roadway ditches clear.
- Inspect for damage and repair as needed.

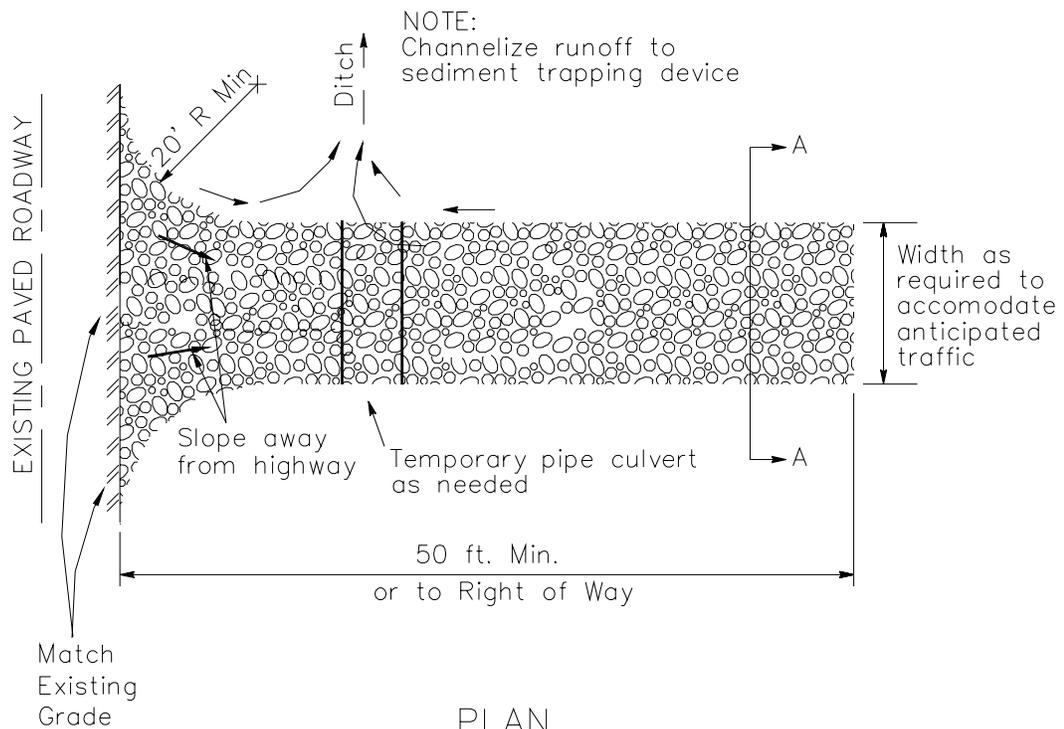
Stabilized Construction Approaches

TC-1

Adapted from Caltrans Construction Site BMPs

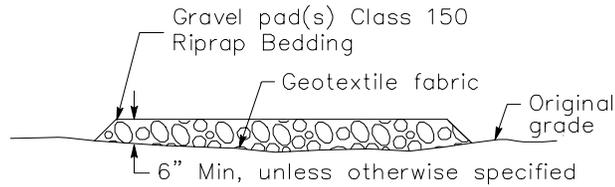


SECTION A-A
NTS

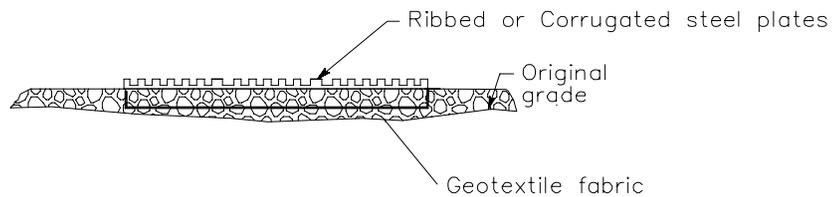


PLAN
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Stabilized Construction Approach

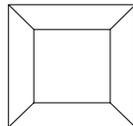


SECTION B-B
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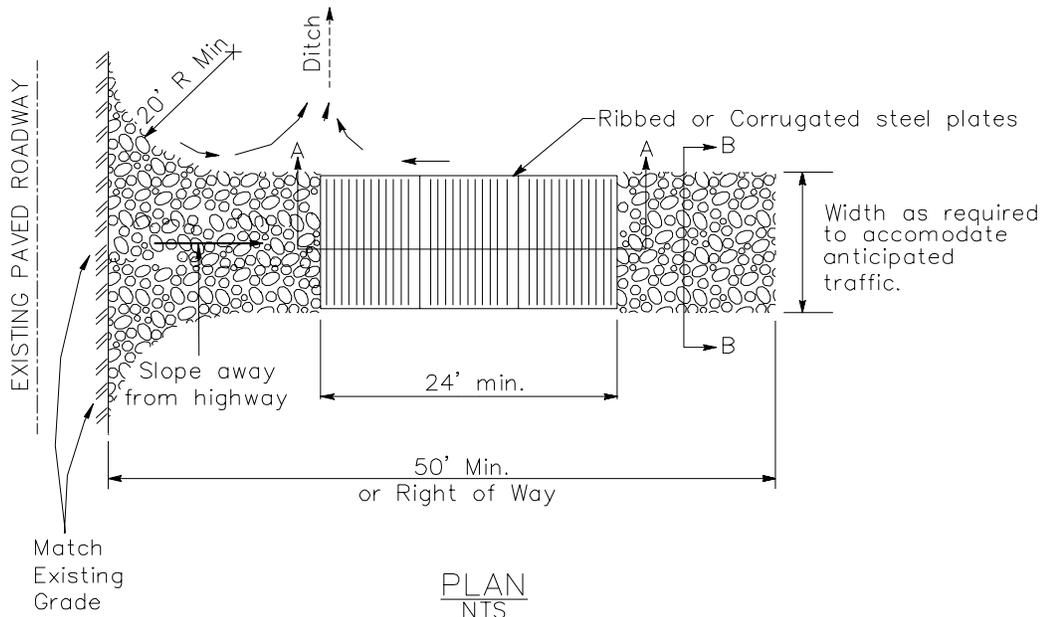


SECTION A-A
NOT TO SCALE

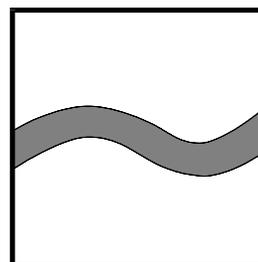
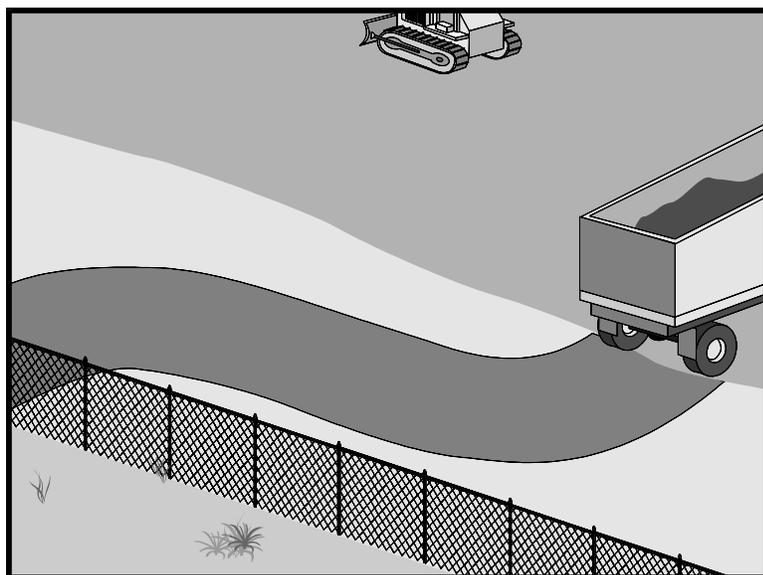
NOTE:
Channelize runoff to
sediment trapping device



Sediment trapping
device



Adapted from Caltrans Construction Site BMPs



- BMP Objectives**

 - Soil Stabilization
 - Sediment Control
 - Tracking Control
 - Wind Erosion Control
 - Non-Storm Water Management
 - Materials and Waste Management

Definition and Purpose A stabilized construction roadway is a temporary access road or haul road. It is designed for the control of dust and erosion created by vehicular traffic. Construction roads with heavier traffic such as haul roads may require increased protection over smaller lateral roads such as employee parking.

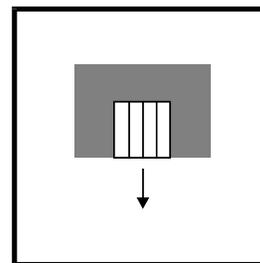
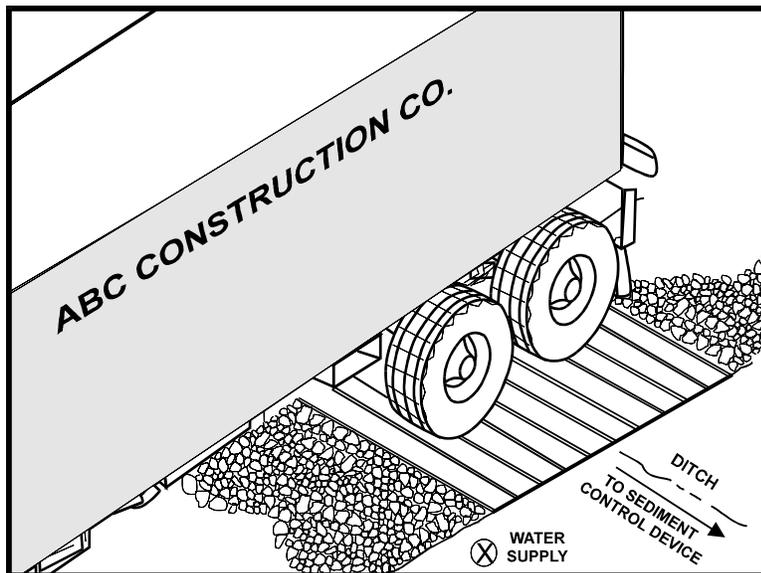
- Appropriate Applications**
- Construction roadways and short-term detour roads:
 - Where mud tracking is a problem during wet weather.
 - Where dust is a problem during dry weather.
 - Adjacent to water bodies.
 - Where silt or clay content is higher than 15%.
 - Where there are steep grades and additional traction is needed.
 - This BMP may be implemented on a project-by-project basis with other BMPs.

- Limitations**
- Materials will likely need to be removed prior to final project grading and stabilization.
 - Site conditions will dictate design and need.

- Standards and Specifications**
- Properly grade roadway to prevent runoff from leaving the construction site.
 - Design stabilized construction roadways to support the heaviest vehicles and equipment that will use it.

- Stabilize roadways using water, dust palliative, aggregate, asphalt concrete, or concrete; based on required longevity, performance, and site conditions and maintain in a stabilized condition.
 - Coordinate materials with those used for stabilized construction ingress/egress points (TC-2).
 - If aggregate is selected, use clean, well-graded gravel or crushed rock in conformance with Class 150 Riprap Base. Minimum dimensions should be approximately 15 feet wide by 6 inches deep or as needed to accommodate the types of vehicles that will use the road.
 - Limit vehicles speeds to 15 mph on all unpaved routes and parking areas.
 - The use of bumps or dips for speed control is encouraged.
 - Apply bituminous or concrete paving as soon as possible to all future permanent roadway or parking areas.
- Maintenance and Inspection
- Inspect routinely for damage and repair as needed, or as directed by the RE.
 - Keep all temporary roadway ditches clear.
 - When no longer required, remove stabilized construction roadway and re-grade and restore slopes to match site conditions.

Adapted from Caltrans Construction Site BMPs



- BMP Objectives**

 - Soil Stabilization
 - Sediment Control
 - Tracking Control
 - Wind Erosion Control
 - Non-Storm Water Management
 - Materials and Waste Management

Definition and Purpose Tire wash stations can be located at stabilized construction egress points to remove sediment from tires and under-carriages, and to prevent sediment from being transported onto public roadways.

- Appropriate Applications**
- Tire washes may be used on construction sites where dirt and mud tracking onto public roads by construction vehicles may occur.
 - This BMP may be appropriate when stabilized ingress/egress points and construction roads are not sufficient in preventing sediment tracking onto adjacent roads or highways or in Environmentally Sensitive Areas (ESAs).
 - Tire and vehicle washing may also be required to prevent the spread of noxious weeds. Refer to the contract documents to verify compliance with noxious weed requirements.

- Limitations**
- Requires a supply of wash water. Potential sources include existing water service connections if available, fire hydrants, or temporary water storage tanks. The contractor shall verify that the use of any municipal or other existing water service is allowable with the appropriate agency.
 - Requires a turnout or doublewide exit to avoid having entering vehicles drive through the wash area.

- Standards and Specifications**
- This BMP should be used in combination with TC-1, "Stabilized Construction Entrance/Exit".
 - Construct on level ground when possible, on a pad of coarse aggregate. A geotextile fabric shall be placed below the aggregate.
 - The wash rack must be designed for anticipated traffic loads.

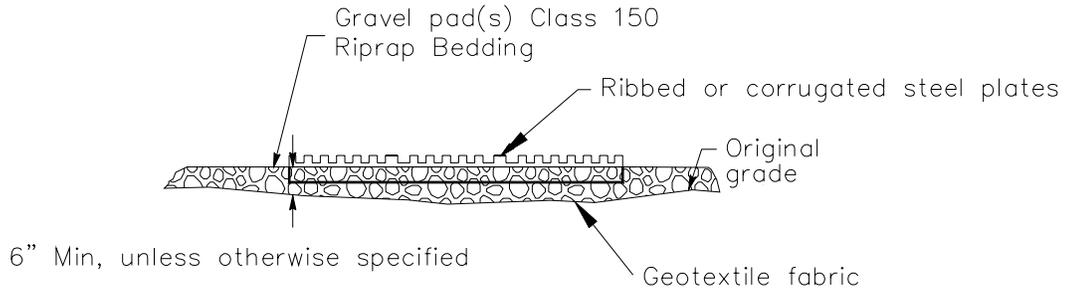
Maintenance and
Inspection

- Provide a drainage ditch that will convey the runoff from the wash area to a sediment-trapping device. See SC-3 for additional guidance regarding sediment traps. The drainage ditch shall be of sufficient grade, width, and depth and adequately stabilized to safely carry the wash runoff.
- Require that all employees, subcontractors, and others use the wash facility as appropriate.
- Implement BMP SC-7, "Street Sweeping and Vacuuming" as needed.
- Remove accumulated sediment in wash rack and/or sediment trap to maintain system performance and dispose of in accordance with Standard Specifications Section 107.
- Inspect routinely for damage and repair as needed.

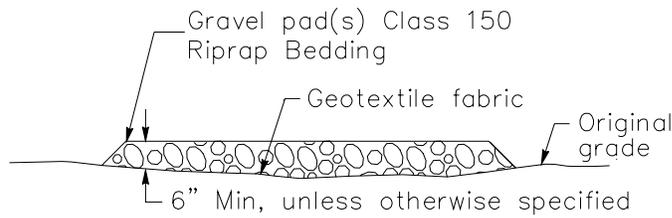
Entrance/Outlet Tire Wash

TC-3

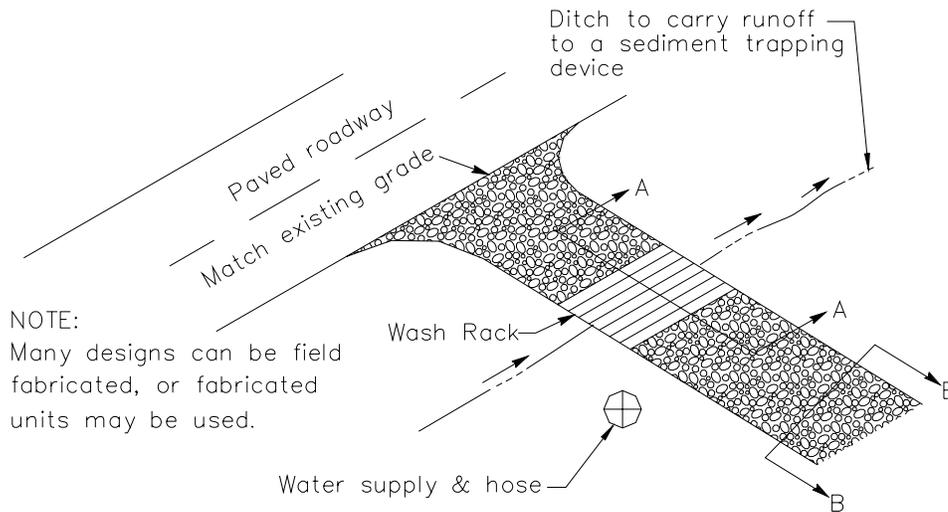
Adapted from Caltrans Construction Site BMPs



SECTION A-A
NOT TO SCALE



SECTION B-B
NTS



TYPICAL TIRE WASH
NOT TO SCALE