



The Monthly Dirt
A monthly newsletter on the California
Construction General Permit

Knocking out track-out before it hits the road.

What is track out control and why should I implement it at my construction site? Track out controls are practical and necessary BMPs which keep the immediate streets outside of a construction job site clean and free of dirt and debris. Due to the heavy traffic of vehicles and equipment entering and exiting a job site, sediment being tracked outside the project perimeter is a pretty common issue. Keeping track out under control is important, because when sediment gets tracked out onto a smooth paved surface, it can become mobilized by wind or water and reach nearby storm drains. Not only can this sediment load from track out cause an increase in turbidity, but the said sediment may also carry with it some nasty pollutant friends which should definitely be kept out of the waterways.

Since equipment and vehicles exiting the site is inevitable, how do you control the track out? Aside from limiting how many entrances and exits there are on a site, there are several great



Track out – not the kind of trail you want to have leading to your construction site. In fact, a trail like that can get you in some big trouble. So, what do you do to prevent this from happening? We’re glad you asked. In this month’s edition of *The Monthly Dirt*, we will be taking a look at what is track out control, why it’s important, different track out control methods, what type of maintenance these require, and more.

types of track out control methods which are widely used today.

TC-1 Stabilized Construction Entrances and Exits: “All exit locations intended to be used for more than a two-week period should have stabilized construction entrance/exit BMPs.” Stabilized entrances and exits are created by layering a pad of aggregate over a geotextile fabric. The bumpy rock surface agitates the dirt and mud off of the tires of equipment and vehicles before it gets tracked out onto the main roadway, and produces airborne dust or makes its way into the storm drains. This type of track out control is generally built with 3-6 inch in diameter jagged rock which is laid over the entrance/exit at a depth of 12 inches thick over the span of four complete tire rotations or 50 feet (which ever is greater). This track out control BMP limits the points of entrance and exit from a job site which reduces points of track out, slows traffic down to help control dust, and knocks off the mud and sediment which may be caked onto the tires and undercarriage of construction vehicles.

TC-2 Stabilized Construction Roadways: Instead of leaving construction roadways as dirt roads throughout the duration or early stages of the project, get the roads and streets paved as quickly as possible so as to control erosion, dust, and further sediment disturbance and removal. When soil is



constantly being disturbed, vegetation can’t grow enough to stabilize the soil – which in summer months turns these roadways into dusty messes, and in the winter, into great mud puddles. Temporary gravel roadways are considered an acceptable option for stabilized construction roadways, but they may not be as cost effective as paving, since this is just a temporary fix.



TC-3 Entrance/Outlet Tire Wash: Sometimes agitation doesn’t remove all the sediment which

becomes caked on equipment during the muddy times of year. To help prevent that mud from being tracked out onto the roadways, tire wash stations can be added to the gravel track out control rock pad at the entrance/exit of a site. A wash rack is installed into the gravel track out control with an appropriately sized drainage ditch to capture the wash runoff. The downside of this track out control is that it must be double

in width as a normal stabilized construction entrance/exit to allow for traffic entering the site to go around the wash rack (since they won't need to use it before entering the site).

How are track out controls designed, and are there any specific design specs that you have to follow?

Track out control measures should always slope back into the project. If they slope outward, when it rains, all the water will flow into the roadway, carrying with it collected debris and sediment. Generally, the track out controls are designed to collect sediment off the tires of equipment and vehicles by agitation. And then any water which comes into contact with this sediment is trapped in the track out control system so as to keep run off from occurring.

CASQA and CalTrans have provided helpful BMP fact sheets on Track Out which give specifications

for how these different types of track out controls should be installed. One of the things these BMP cutsheets emphasize is making sure to have appropriate sizing. *Make sure to have a properly sized track out control which allows for 4 complete rotations of the largest tire using it – unless it's very big equipment, that will be roughly 50' of track out controls.* Although track out controls have a minimum recommendation of a 10' width, we recommend track out controls to be a minimum of 15' wide so that it is easier for drivers and equipment operators to stay on the designated track out surface. In the engineering of track out controls, you are going to want to make sure to allow for a big enough turning radii for vehicles. Make sure the track out device is big enough to allow enough room for movement, turns, and maneuvering vehicles and equipment. Also, have a place where your track out controls can drain into a sump or sediment trap. So that if there is excessive water from rainfall, or if you need to wash the tires on your vehicles you can do it over the sediment trap or sump without the water threatening to discharge.

If I install track out control devices at my site, is that all I have to do? Just install it and call it good? No, track out controls aren't something you



install and simply forget. They require maintenance and inspections in order to keep them effective and working. Just like any type of BMP, track out controls need to be inspected weekly to make sure they are working and that the sediment hasn't built up too much. Roadways that are adjacent to the construction site entrance/exit should also be inspected daily for track out. Especially during the wet season, you will be tracking out mud regardless of how many track out controls you have in place, so be prepared to clean up the mess. Sweeping is always going to be needed—either manually with a push broom or with a sweeper truck. In the dry season, hopefully, this won't be as necessary, but come the wet season, you will definitely need to be sweeping all the time to keep the track out and mud at bay. Because there will always be so much sediment getting “rattled” off of tires and equipment, the track out controls get overfilled and understandably, these BMPs will need to be maintained to keep them working properly. Deposited sediment will need to be cleaned out. Sometimes this means removing the rock and separating it from the sediment.



But what about jobsites that have entrances and exits which are constantly moving locations? Creating track out controls each time these get moved is not only a pain, but expensive. Are there any alternative options to crushed gravel? There are several companies which sell reusable track out controls, one is called FODS Reusable Construction Entrances. FODS mats are “designed to be used as a temporary construction entrance which provides site access while minimizing sediment leaving the site. The top surface of the FODS mat contains rows of raised pyramids and are meant to be unidirectional with staggered pyramids parallel to the exit.”² While these may be a little pricey for a site which will use only one entrance and exit throughout the duration of the project, they are great for projects that have constantly moving entrance/exit sites and can be used on the next job.

Happy trails to you! Oh wait, we don't want you to have any sediment trails coming off your site.... happy track out controls to you!

¹CASQA BMP Cutsheet TC-1, pg. 3
²FODS Technical Data Sheet 2021

TRAINING OPPORTUNITIES

Upcoming Live Online Events:

Storm Water Awareness Week 2021
September 27 — October 1

It's a week of free storm water education! Want to host a workshop? [Become a Host](#) Want to attend a workshop? [Workshop registration goes live in September](#) so stay tuned for more details.

stormwaterawareness.org

Oct. 26-28, 2021: Online QSP/QSD Class
Register at <https://secure.wgr-sw.com/training/livecourses/>

Analyzing BMPs At A Real Construction Site

Last year during Storm Water Awareness Week, we went on a virtual field trip of an active construction site! We looked at the BMPs which were in place at the site, and discussed whether they were effective or not. You can come along on this virtual field trip too!



More Construction BMPs

Watch another Storm Water Awareness Week 2020 virtual field trip to WGR's Construction Sandbox demonstration area. You'll be able to see a variety of erosion, sediment and cover controls installed on our simulated construction site.



Please contact us if you have any questions ...

The Monthly Dirt

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END OF SUMMER SALE

VALID THROUGH 9/3/2021



15% OFF CONSTRUCTION SWPPP QUOTE

CONTACT [JTERAVSKIS@WGR-SW.COM](mailto:jteravskis@wgr-sw.com) FOR A QUOTE

VALID UNTIL 9/3/21
CANNOT BE COMBINED WITH ANY OTHER DISCOUNT. LIMIT TO ONE PER CUSTOMER.



QSP INSPECTIONS - FIRST TWO WEEKLY INSPECTIONS ARE FREE

CONTACT [MLEWIS@WGR-SW.COM](mailto:mlewis@wgr-sw.com) FOR A QUOTE.

VALID UNTIL 9/3/21. CANNOT BE COMBINED WITH ANY OTHER DISCOUNT. LIMIT TO ONE PER CUSTOMER

CONTRACTED PROJECT DURATION MUST EXCEED 3 MONTHS.



20% OFF FORGE

USE THE CODE: "FALLBREAK"

BROWSE AVAILABLE COURSES AT:
WGR-SW.COM/TRAINING

VALID UNTIL 9/3/21
CANNOT BE COMBINED WITH ANY OTHER DISCOUNT. LIMIT TO ONE PER CUSTOMER.



REUSABLE CONSTRUCTION ENTRANCE

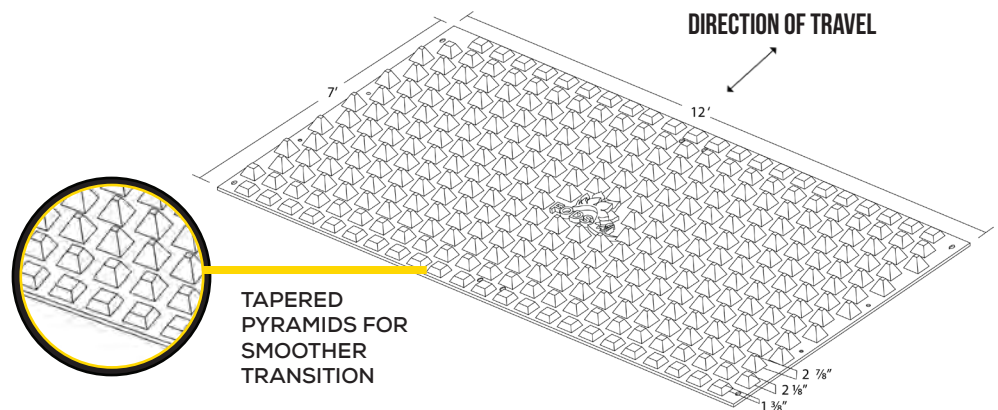
Technical Data Sheet

GENERAL INFORMATION

The FODS Composite trackout control system is designed to be used as a temporary construction entrance which provides site access while minimizing sediment leaving the site. The top surface of the FODS mat contains rows of raised pyramids and are meant to be unidirectional with staggered pyramids parallel to the exit. The more effective direction of travel is straight over the staggered rows of pyramids. Individual mats are connected together with hardware to form various configurations to fit your jobsite.

FEATURES & BENEFITS

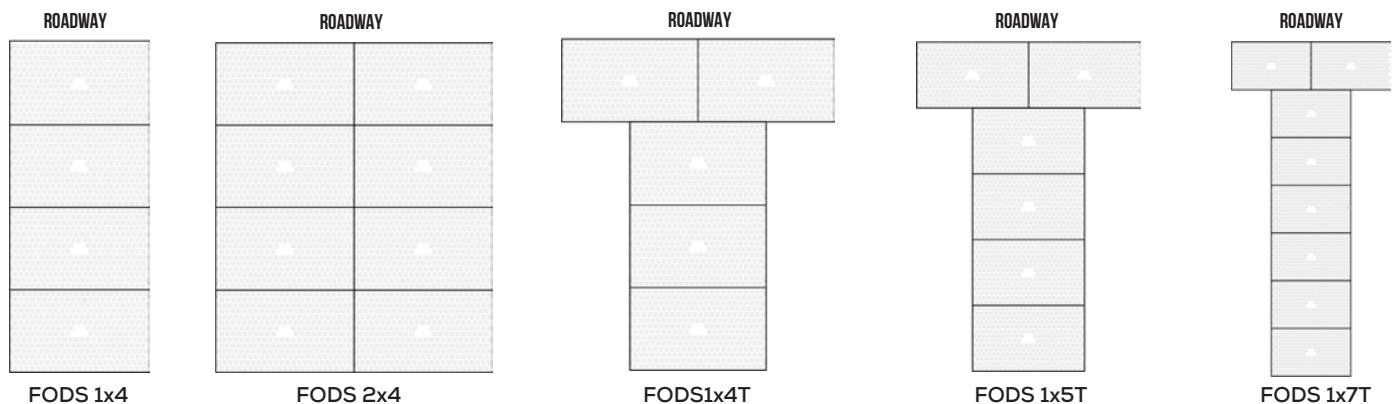
- Increased Effectiveness at Reducing Site Trackout
- Extreme Durability
- Rapid Installation & Removal
- Economical & Reusable
- Tapered Pyramids for easy on-off transition
- UV Stable
- Highly Visible
- Chemical Resistant
- Excavation not Required
- Rockless/Easy to Clean
- Easy to transport from site to site
- Recyclable/Reduces Waste 
- 100% Made In the USA from US parts



- Mat Size: 12'(w) x 7' (l) x 3 3/4" (t) (2 7/8" pyramid height)
- Mat Weight: 430lbs
- Pallet Size: 8-Mats
- Truck-Load: 96-Mats
- Hardware boxes are contained within pallets

TYPICAL INSTALLATION LAYOUTS

Each site must be evaluated to determine the proper layout, width, and duration for the application of the FODS Trackout Control System (FTCS) based on site conditions, entry and exit egress, traffic levels, site soil conditions, and ability to the maintain trackout system. Outlined below are a number of common layouts, the mats are unidirectional and due to the versatility of the mats design the FTCS can be engineered to fit the needs of any site:





FODS Reusable Construction Entrance - Technical Data Sheet



COMMON USERS

- Heavy Civil Construction
- Urban Construction / Urban In-Fill
- Bridge & Highway Projects
- Residential Construction
- Land Development
- Forestry
- Energy Exploration
- Oil & Gas Pipeline
- Electrical Power-line
- Temporary Event Access
- Landfill & Waste Management
- Mining



SUITABLE INSTALLATION SUBSTRATE

- Un-Excavated Soil
- Excavated Soil (Min CBR: 4)
- Asphalt
- Concrete

FODS Trackout Control System should be installed near the site exit point, as close to the location where vehicles enter the roadway as safely as possible. FODS mats should not be installed at a low point on the site where water will pool.



FODS ANCHORING SYSTEMS

- Form-Stakes (18" or 24")
- FODS Round Head Form Stake
- FODS Heavy Duty Screw Anchor
- Concrete Sleeve Anchor (asphalt)
- Suitable Anchor for Substrate

CLEANING / MAINTENANCE

- Skid-steer broom attachment
- FODS Shovel
- Street Sweeper (requires adjustable bristle head)
- Pressure Washer (must have ability to contain water)
- Pressure Washer (must have ability to contain water)

*****Before using earth anchors, call 811 for locates to mark underground utilities*****



SCAN



Friends don't let friends miss out on cool things...

www.stormwaterawareness.org

Storm Water Awareness Week

Hey, did you hear that Storm Water Awareness Week is happening again this year? It's September 27 - October 1... You should sign up to be a presenter!

Storm Water Professional

Oh really? Where can I sign up? I think I have a great idea for a workshop...

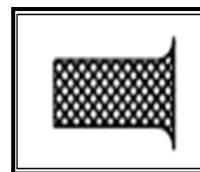
You can sign up at www.stormwaterawareness.org. Plus, this year you can register your workshop as either virtual or in-person...

That is so awesome. Is there a cost for hosting a workshop? And how long does the workshop have to be?

100% free.
1 hour.

Signing up now....

Read



Standard Symbol

BMP Objectives	
Soil Stabilization	<input checked="" type="checkbox"/>
Sediment Control	<input type="checkbox"/>
Tracking Control	<input checked="" type="checkbox"/>
Wind Erosion Control	<input checked="" type="checkbox"/>
Non-Stormwater Management	<input type="checkbox"/>
Materials and Waste Management	<input type="checkbox"/>

Definition and Purpose

A temporary construction entrance/exit is defined by a point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Appropriate Applications

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.

Limitations

Site conditions will dictate design and need.

Limit the points of entrance/exit to the construction site.

Limit speed of vehicles to control dust.

Standards and Specifications

General Requirements

Temporary construction entrance/exit must comply with Standard Specification Section 13-7.03 Temporary Construction Roadways and Entrances.



Corrugated steel panels must be pressed or shop welded. They should have a slot or hook for coupling the panels together.

Class 8 RSP fabric shall be used to line temporary construction entrance/exit. Do not drive on the fabric until the rock is spread. Repair damaged fabric by placing new fabric over the damaged area with at least an 18-inch overlap on all edges.

Type A rock should be used for a Type 1 temporary construction entrance/exit. Type A rock must comply with Section 13-7.03B (2) of the Standard Specifications.

Type B rock should be used for a Type 2 temporary construction entrance/exit. Type B rock must comply with Section 13-7.03B (2) of the Standard Specifications.

Submit details for alternative construction entrances at least 5 business days before installation. This may include alternatives for the sump and corrugated steel panels or to eliminate the sump.

Installation

Prepare the location for the temporary construction entrance/exit as follows:

- Remove vegetation and clear debris.
- Grade the ground to a uniform plane.
- Remove sharp objects that could damage the fabric.
- Compact the top 1.5 feet of soil to at least 90 percent relative compaction.

Construct the temporary construction entrance/exit as follows (standard plans attached below):

- Place the fabric along the length of the construction entrance/exit.
- Overlap fabric ends by at least 12 inches.
- Cover the fabric with rock within 24 hours.
- Spread rock over the fabric in the direction of traffic.
- Keep a 6-inch layer of rock over the fabric to prevent damage from the spreading equipment.

For a Type 2 temporary construction entrance/exit, place rock under the corrugated steel panels. Use at least 6 corrugated steel panels for each entrance. Couple the panels together to prevent movement.

If a sump is used, install it within 20 ft of the temporary construction entrance/exit.

Other Considerations

Implement BMP SC-7, "Street Sweeping" as required under Section 13-4.03F and 13-7 of the Standard Specifications.

Require all employees, subcontractors, and suppliers to utilize the temporary construction entrance/exit. If the construction entrance/exit has metal plates as part of the BMP, all vehicles must be required to utilize them.

Route runoff from temporary construction entrances/exits through a sediment-trapping device before discharge.

Design a temporary construction entrance/exit to support the heaviest vehicles and equipment that will use it.



The use of asphalt concrete (AC) grindings is not allowed (high potential for leaching hydrocarbons) unless it complies with Section 6.8 of the 2016 Caltrans SWMP. Designate combination or single purpose entrances and exits to the construction site to maintain smooth flow of traffic.

Maintenance and Inspection

Inspect before and after each rainfall event, and weekly year-round.

Inspect immediate site access roads daily, implement SC-7, “Street Sweeping” as needed.

Remove aggregate, separate, and dispose of sediment if temporary construction entrance is clogged with sediment.

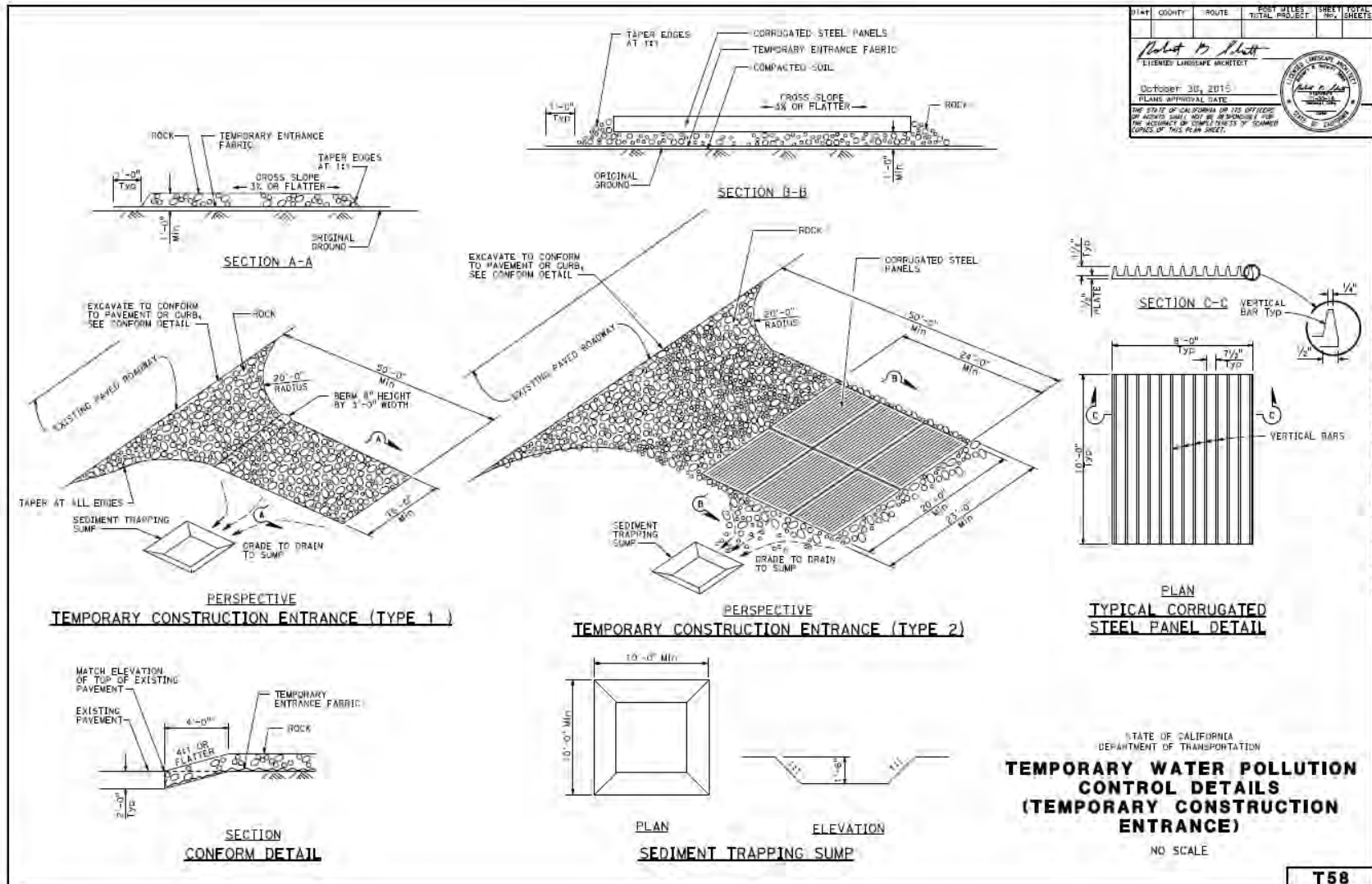
Keep all temporary construction entrance/exit ditches clear.

SWPPP or WPCP

Tracking Control BMPs are to be included and discussed in section 500.3.4 or Section 600.2 for SWPPP and Section 30.2.3 of the WPCP.

Temporary Construction Entrance/Exit

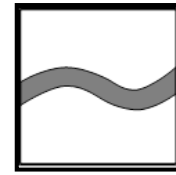
TC-1



DATE	COOBY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
October 30, 2015					

Robert D. Roberts
 LICENSED LANDSCAPE ARCHITECT
 October 30, 2015
 PLANS WITH FINAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS AND AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ANY INFORMATION CONTAINED IN THESE PLANS UNLESS SPECIFICALLY STATED OTHERWISE.





Standard Symbol

BMP Objectives	
Soil Stabilization	W
Sediment Control	W
Tracking Control	W
Wind Erosion Control	W
Non-Stormwater Management	W
Materials and Waste Management	W

Definition and Purpose

A temporary construction roadway is a stabilized access road. It is designed for the control of dust and erosion created by vehicular tracking.

Appropriate Applications

Use construction roadways and short-term detour roads:

- Where mud tracking is a problem during wet weather.
- Where dust is a problem during dry weather.
- When road is adjacent to water bodies.
- Where poor soils are encountered.
- Where there are steep grades and additional traction is needed.

Limitations

Materials will likely need to be removed prior to final grading and stabilization.

Site conditions will dictate design and need.

May not be applicable to very short duration projects.

Limit speed of vehicles to control dust.

Standards and Specifications

General Requirements

Refer to Standard Specification Section 13-7.03 for temporary roadway standards.

Class 10 RSP fabric must be used to line temporary construction roadways. Do not drive on the fabric until the rock is spread. Repair damaged fabric by placing new fabric over the damaged area with at least an 18-inch overlap on all edges.

Type A or Type B rock may be used for temporary construction roadways. Type A and B rock must comply with Standard Specifications Section 13-7.03B(2). Coordinate materials with those used for stabilized construction entrance. Refer to TC-1, “Temporary Construction Entrance/Exit.”

The use of cold mix asphalt, AC grindings, or blast furnace slag for stabilized construction roadway is not allowed (high potential to leach hydrocarbons) unless it complies with Section 6.8 of the 2016 Caltrans SWMP.

Installation

Prepare the location for the temporary roadway as follows:

- Remove vegetation and clear debris.
- Grade the ground to a uniform plane.
- Grade the ground surface to drain in a way that prevents runoff from leaving the construction site.
- Remove sharp objects that could damage the fabric.
- Compact the top 1.5 feet of soil to at least 90% relative compaction.

Construct the temporary construction roadway as follows (standard plans attached below):

- Place the fabric along the length of the roadway.
- Overlap fabric ends by at least 12 inches.
- Cover the fabric with rock within 24 hours.
- Spread rock over the fabric in the direction of traffic.
- Keep a 6-inch layer of rock over the fabric to prevent damage from the spreading equipment.

Other Considerations

Design stabilized access to support the heaviest vehicles and equipment that will use it.

Implement TC-1 “Temporary Construction Entrance/Exit” and TC-3 “Entrance/Outlet Tire Wash” in combination with temporary construction roadway for maximum tracking control.

Maintenance and Inspection

Inspect before and after each rainfall event, and weekly year-round.

Inspect immediate site access roads daily, implement SC-7, “Street Sweeping” as needed.



Keep all temporary roadway ditches clear.

When no longer required, remove stabilized construction roadway and re-grade, re-vegetate and repair slopes.

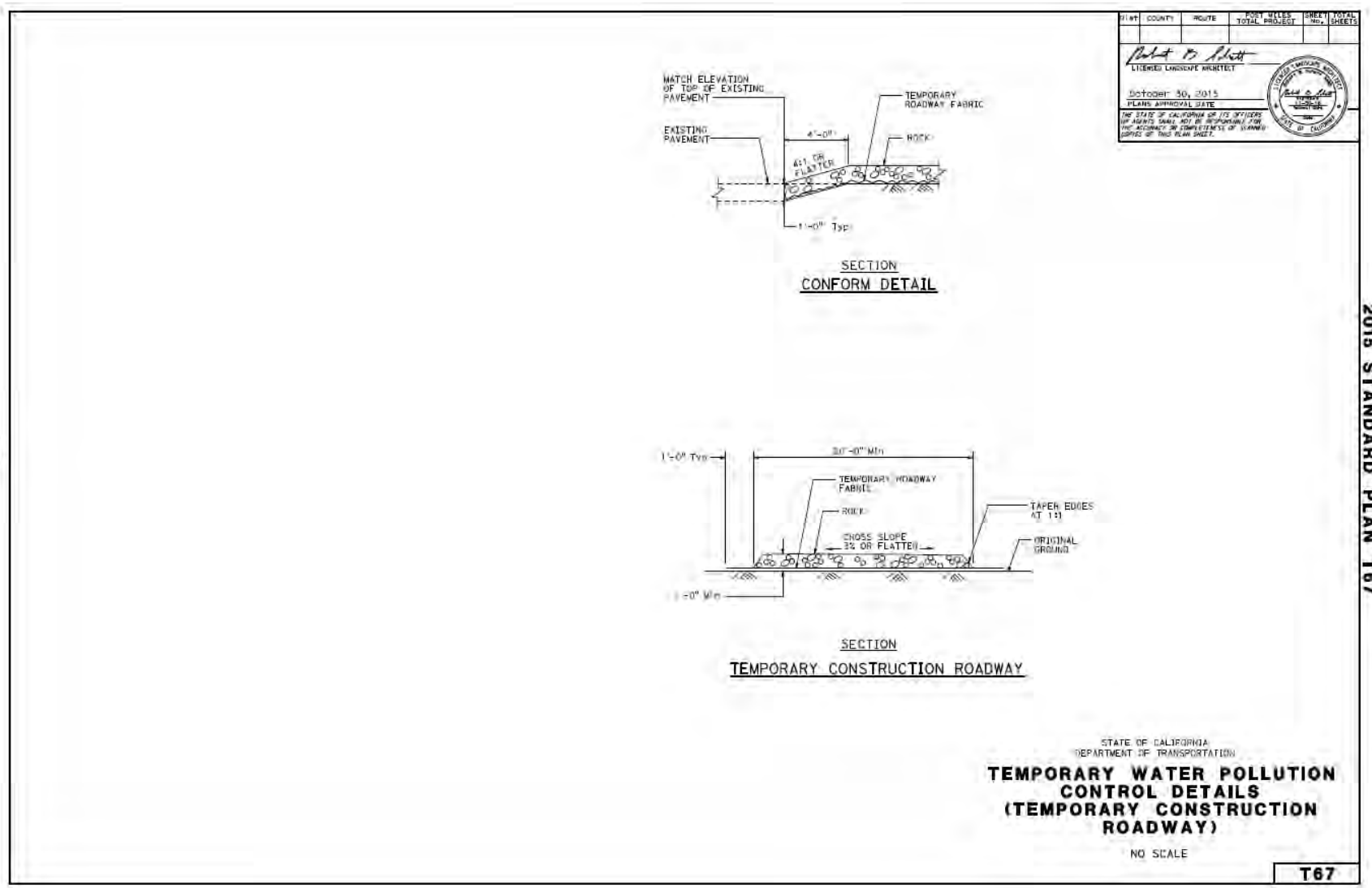
SWPPP or WPCP

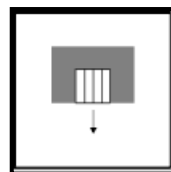
Tracking Control BMPs are to be included and discussed in Section 500.3.4 or Section 600.2 SWPPP or Section 30.2.3 of the WPCP.



Temporary Construction Roadway

TC-2





Standard Symbol

BMP Objectives	
Soil Stabilization	<input type="checkbox"/>
Sediment Control	<input type="checkbox"/>
Tracking Control	<input checked="" type="checkbox"/>
Wind Erosion Control	<input type="checkbox"/>
Non-Stormwater Management	<input type="checkbox"/>
Materials and Waste Management	<input type="checkbox"/>

Definition and Purpose

A tire wash is an area located at stabilized construction access points to remove sediment from tires and undercarriages, and to prevent sediment from being transported onto public roadways.

Appropriate Applications

Tire washes may be used on construction sites where construction vehicles may track dirt and mud onto public roads.

This BMP may be implemented on a project-by-project basis with other BMPs when determined necessary and feasible by the RE.

Limitations

Requires a supply of wash water and way to collect or capture tire wash area runoff.

Requires a turnout or doublewide exit to prevent entering vehicles from driving through the wash area.

Standards and Specifications

Require all employees, subcontractors, and others that leave the site with mud-caked tires and/or undercarriages to use the wash facility.

Incorporate with a temporary construction entrance/exit. See TC-1, “Temporary Construction Entrance/Exit.”

Construct on level ground when possible, on a pad of Type A or Type B rock. Either Class 8 or 10 RSP fabric should be placed below the rock.



Wash rack must be designed and constructed/manufactured for anticipated traffic loads.

Vehicle wash water is non-stormwater that requires management and disposal. See NS-8, “Vehicle and Equipment Cleaning.”

Provide a drainage ditch that will convey the runoff from the wash area to a sediment trapping device or similar device. The drainage ditch should be of sufficient grade, width, and depth to carry the wash runoff.

Implement BMP SC-7, “Street Sweeping” as needed.

Refer to TC-1, “Temporary Construction Entrance/Exit,” for details regarding design and installation of construction entrance and exits to the project site.

Maintenance and Inspection

Inspect before, daily during extended rain events, after each rain event, and weekly year round.

Inspect immediate site access roads daily, implement SC-7, “Street Sweeping” as needed.

Remove accumulated sediment in wash rack and/or sediment trap to maintain system capacity and performance.

Inspect routinely for damage and repair as needed. Document non-stormwater (sediment trapping device or similar device) in appropriate inspection form.

SWPPP or WPCP

Temporary Entrance/Outlet Tire Wash is to be included and discussed in section 500.3.4 or Section 600.2 for a SWPPP or Section 30.2.3 of the WPCP.