ALPINE CITY
801-756-6347

20 North Main St.
Alpine, UT 84004

Building
Permit Number: _____
(office use) ☐ Priority Site

Application Date: _____

LAND DISTURBANCE PERMIT

Application Fee: $300 *(included in building permit)*

Project Name: _____

Project Address: _____

Owner's Name: _____ Cell Phone: _____ Email: _____

Contractor's Name: _____ Cell Phone: _____ Email: _____

SWPPP Contact: _____ Cell Phone: _____ Email: _____

Area of Disturbance: _____ Purpose of Disturbance: _____

UPDES/NOI Permit Number***: _____ Effective Date: _____ Expiration Date: _____.

Select Project Type:

☐ Type A – Greater than one (1) acre of disturbance
☐ Type B – Any lot in a subdivision created after 2003 (aka: Common Plan of Development/CPoD)
☐ Type C – Neither Type A or B

PROJECT TYPE A	**PROJECT TYPE B**	**PROJECT TYPE C**
Type A projects must submit: ☐ Read & initial all pages of this permit ☐ SWPPP Document * ☐ SWPPP drawing (11"x17") ☐ Copy of State Permit (UTRC00000)** ☐ Copy of UPDES Permit (NOI)*** ☐ Payment of application fee ☐ Scan all docs to jason@alpinecity.org ☐ Provide proof of Qualified Inspector* ☐ Hold pre-construction meeting w/ Jason *(all items must be complete for approval)*	Type B projects must submit: ☐ Read & initial all pages of this permit ☐ SWPPP drawing (11"x17") ☐ Copy of State Permit (UTRH00000)** ☐ Copy of UPDES Permit (NOI)*** ☐ Payment of application fee ☐ Scan all docs to jason@alpinecity.org ☐ Hold pre-construction meeting w/ Jason *(all items must be complete for approval)*	Type C projects must submit: ☐ Read & initial all pages of this permit ☐ SWPPP drawing (11"x17") ☐ Payment of application fee ☐ Scan all docs to jason@alpinecity.org ☐ Hold pre-construction meeting w/ Jason *(all items must be complete for approval)*

* State SWPPP Template can be found here: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm THEN FIND the link "Storm Water Pollution Prevention Plan" for Type A projects only. Projects greater than 1 acre require a certified storm water inspector to perform the weekly SWPPP inspections. This can be either a certified staff member or a hired company.

** Land Disturbance Permit documents can be found here. http://www.alpinecity.org/engineer-and-public-works (LDP, CPoD, Copy of State Permits UTRC00000 & UTRH00000). **SWPPP DRAWING MUST SHOW ENGINEERED DRAINAGE FOR NEW HOMES (a site plan application requirement)**

*** UPDES/NOI Permit must be obtained here for porjects Type A or B: http://www.deq.utah.gov/Permits/water/updes/stormwatercon.htm THEN FIND the link "Application for a Storm Water Permit". Not required for projects of Type C. *Note: When acquiring NOI permit online and the question asks for "Total Project Area", enter the area of the entire subdivision. "Area to be disturbed" is your lot/site, rounded to the nearest whole acre. Just enter 1 for anything under 1 acre.*

Initials _____

Permit Revised Date 5-3-17

Signage Requirements

☐ **PROJECT TYPE A SIGNAGE:** The permittee must post a sign (4' x 4') near the main entrance to the project containing the SWPPP drawing, SWPPP Document, current NOI, State General Construction Permit UTR300000, Alpine City Land Disturbance Permit, and verbiage per attached detail. See attached detail – "Project Type A Signage"

☐ **PROJECT TYPE B SIGNAGE:** The permittee must post a sign (18"x24") near the main entrance to the project containing the SWPPP drawing, SWPPP Document, current NOI, State General Construction Permit UTR300000, Alpine City Land Disturbance Permit, and verbiage per attached detail. See detail – "Project Type B Signage"

☐ **PROJECT TYPE C SIGNAGE:** None required

SIGN VERBIAGE: Letters must be printed red in color, 2" tall, on a white background
(Hand written lettering is not acceptable)

SWPPP Storm Water Pollution Prevention Plan
A Utah Pollutant Discharge elimination System (UPDES) permit covers this construction site.
If any non-storm water discharge or severe vehicle tracking occurs please call _____
(insert site SWPPP contact's phone number).

- A building permit will not be issued until the SWPPP is installed and approved.
- **Property corners or disturbance limits must be clearly marked before construction begins**.
- Applicant shall maintain all storm water management control measures according to the UPDES, SWPPP and Alpine City codes.
- Notice of Violation: Pursuant to Section 14-400 of Alpine City Code, failure to comply with the SWPPP requirements, the UPDES Permit, Alpine's City Land Disturbance Permit or any City Code may result in a notice of violation. The City will order compliance by a written notice of violation to the responsible person. Such notice may be in the form of a citation or a stop work order.
- Building Inspections: Pursuant to Section 14-400 of Alpine City Code, the Building Official is not permitted to perform any type of building inspection for the site if it is not in compliance with section 14-400 of Alpine City Code.
- In consideration for the granting of a Land Disturbance Permit by Alpine City, the applicant hereby promises:
  1. to perform the work applied for in a professional manner and in conformity with ordinances of Alpine City and
  2. to defend indemnify and hold harmless the City of Alpine, its officers, agents and employees from any and all costs, damages and liabilities which may accrue or be claimed to accrue by reason of any work performed under a permit issued pursuant to this application.

_____ Applicant (Signature)

_____ Alpine City Engineer or assigned (Signature)

(Office use)

This land disturbance permit grants you permission to conduct the following activities:

☐	Clearing and grubbing	☐	Right of way improvements
☐	Placing of fill material	☐	Stock pile materials
☐	Excavation and back fill of utilities	☐	other: _____

Initials _____

Permit Revised Date 5-3-17

Best Management Practices (BMP)
BMP REQUIREMENTS ARE SUBJECT TO CHANGE

BMPs are defined as "structural and nonstructural practices proven effective in sediment and erosion control and management of surface runoff into waters of the State." Eroding soils and surface water runoff transports pollutants, sediment, and nutrients into local rivers, streams, lakes and aquifers.
Certain construction activities may cause more pollution if not properly managed. Not all BMPs will apply to every construction site; however, all of the suggested BMPs should be considered.
The City may change any BMP regulation or requirement, if at any time, the City determines a BMP regulation or requirement to be ineffective and/or an additional BMP measure is deemed applicable. The City will notify project proponents of any changes to BMP regulations or requirements.

Required BMPs

Washout/collection area:

If it is necessary, the Permittee will provide a concrete washout area on-site, designate specific washout areas and design facilities to handle anticipated washout water. Location of washout must be shown on the site map. Washout areas should also be provided for stucco, dry wall and paint operations. Because washout areas can be a source of pollutants from leaks or spills. All washout waste must be removed from the lot and properly disposed of upon completion of construction. Washout areas must be designated as "Concrete Washout" by sign with 2" lettering and red in color.

Perimeter control:

Installing perimeter controls such as sediment barriers, silt fences, construction barriers, dikes, disturbance limit markers or any combination of such measures shall be used. Perimeter controls shall be installed prior to land grading.

Silt fence:

Should be used where: sheet and rill erosion would occur; protection of adjacent property or areas beyond the limits of grading; a barrier between any soil disturbance area and hard surfaces draining to a storm drain or water body, neighboring properties, sensitive areas, etc.

Off-site sediment tracking:

Prevent sediment from being tracked off-site by stabilizing a construction entrance/exit. A rock tracking pad can reduce the amount of mud transported onto paved roads by vehicles. Rock pads shall not contain any rocks smaller than 2" in diameter and no rocks larger than 5" in diameter.

Clean up of building sites:

Building sites should be cleaned on a regular basis. Materials should be secured on the site to prevent the blowing of debris and garbage. The permittee shall leave the site in a clean condition upon completion of construction.

BMPs to consider while designing your project

Erosion Controls

- Chemical Stabilization
- Dust Control
- Geo Textiles/Rolled Erosion Control Products (RECP)
- Gradient Terraces
- Mulching/Bonder Fiber Matrix (BFM)
- Rip Rap
- Seeding/Re-vegetation
- Sodding
- Soil Retention
- Soil Roughening/Tracking
- Temporary Slope Drain
- Temporary Stream Crossings
- Wind Fences and Sand Fences
- Check Dams
- Grass-lined Channels
- Permanent Slop Diversions
- Temporary Diversion Dikes

Sediment Controls

- Brush Barrier
- Compost Filter Berms
- Compost filter Socks
- Sediment Basin and Rock Dams
- Fiber Rolls
- Filter Berms
- Construction Entrances
- Sediment Traps
- Silt Fence

Inlet Protection

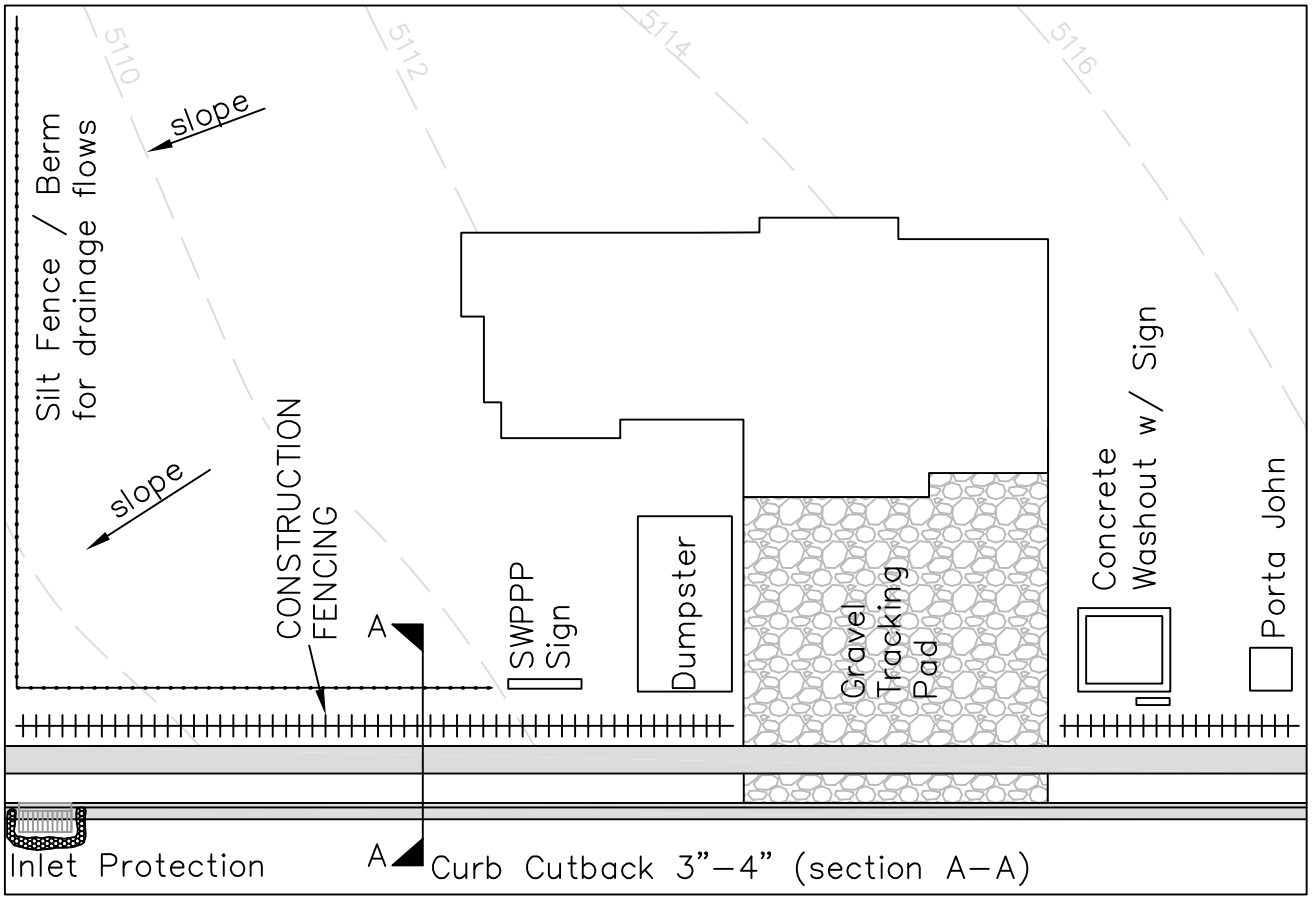
- Sediment filters and Sediment Chambers
- Straw or Hay Bales
- Vegetated Buffers
- Curb cut back
- Dewatering

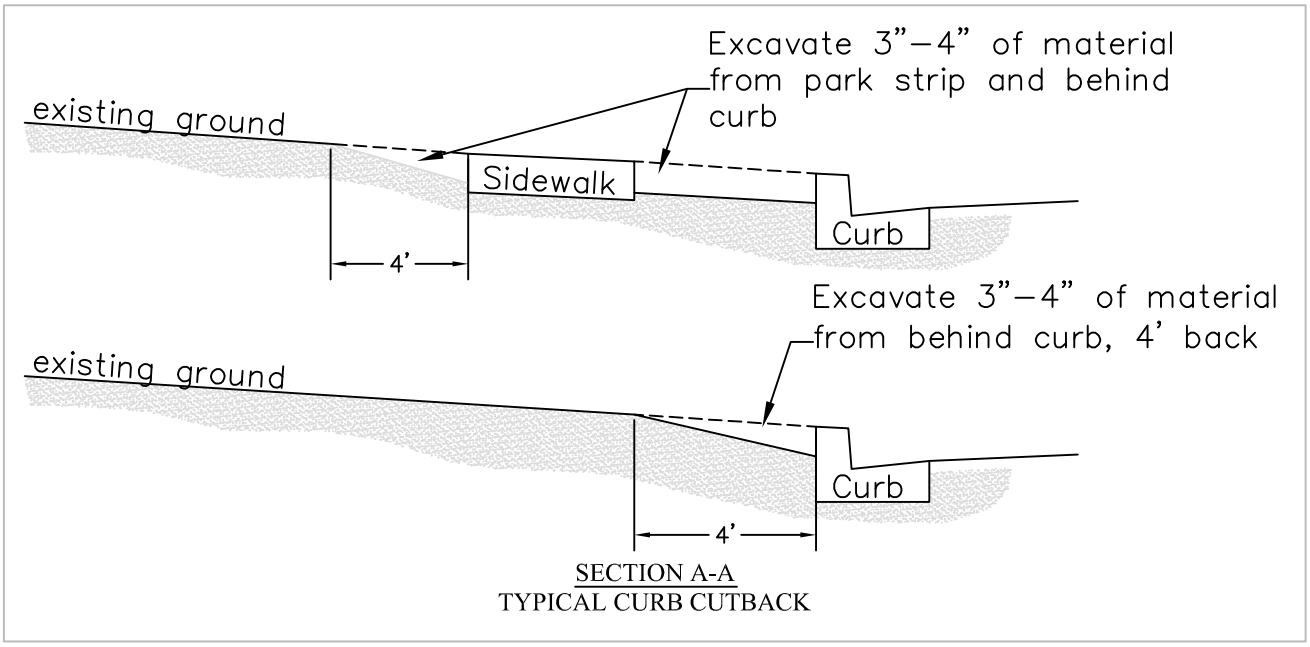
Good House Keeping

- Porta John
- Dumpster
- Street Cleaning/Sweeping

Initials _____

Permit Revised Date 5-3-17





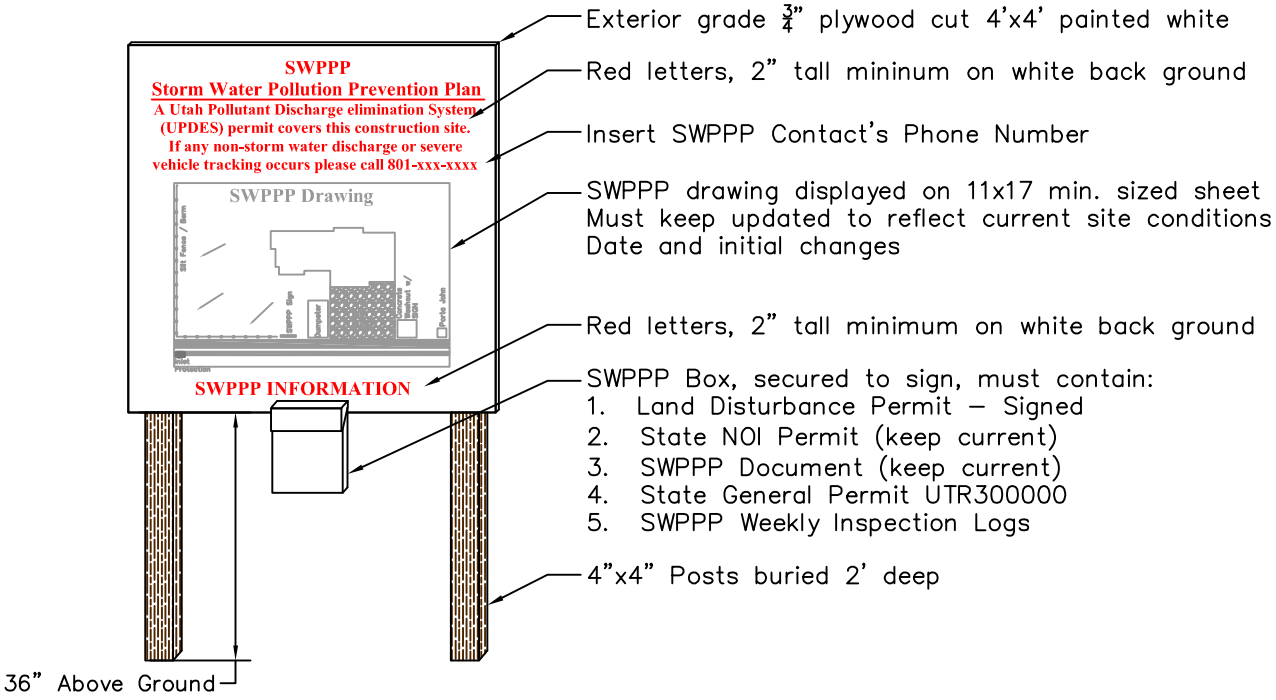
This drawing was created to show what a typical residential SWPPP Site Plan looks like. Please note that all sites are different but generally require the same BMP's to be compliant with State and Local Codes.

SWPPP Drawing - Typical

Common Required SWPPP Items

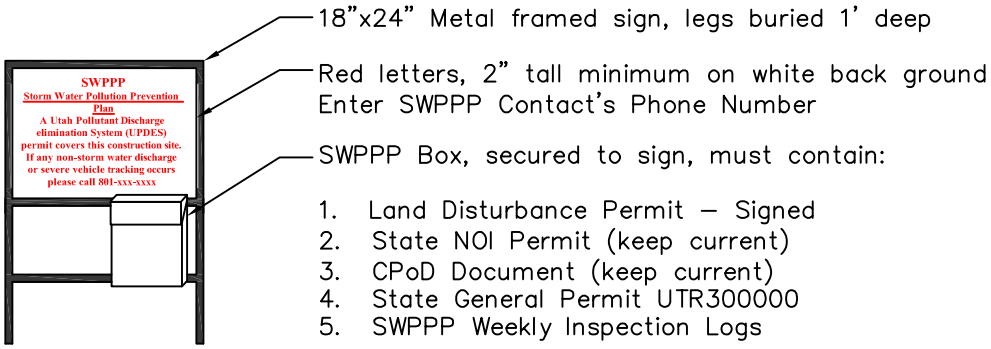
Initials _____

SWPPP DETAILS



SWPPP SIGN - Over 1 Acre Projects

Project Type A Signage

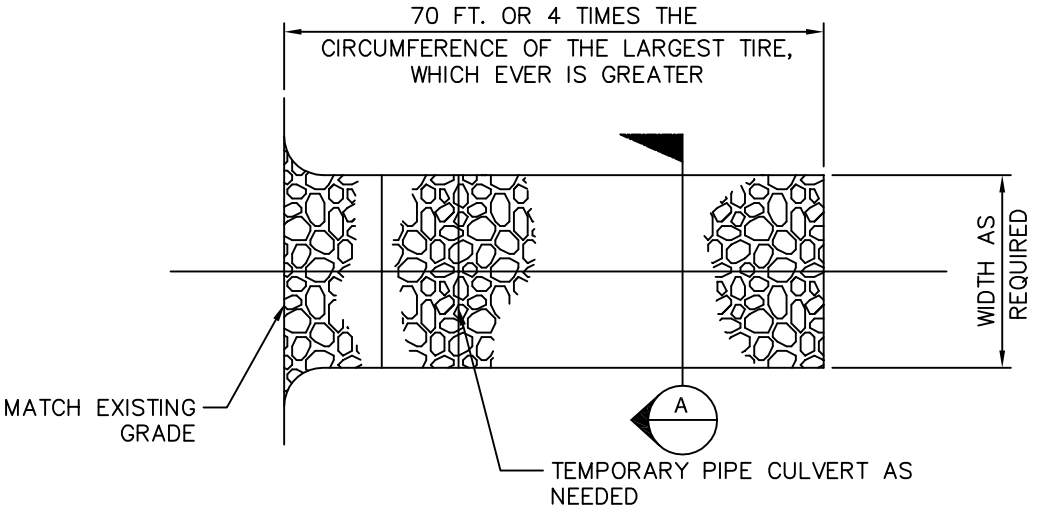


SWPPP SIGN - Under 1 Acre Projects

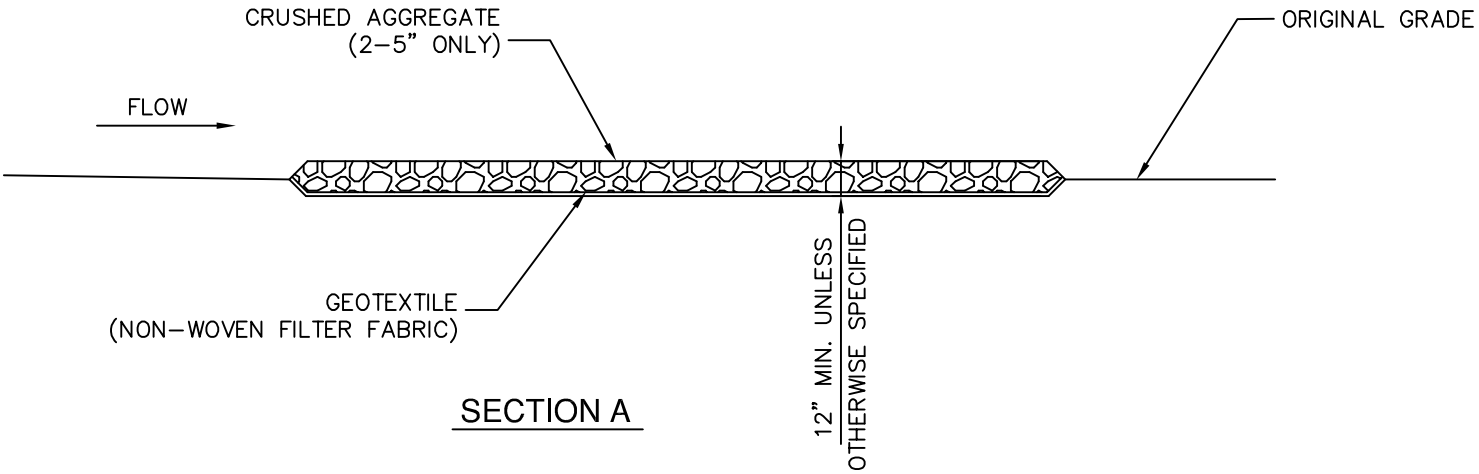
Project Type B Signage

Initials _____

** NO ROCKS SMALLER THAN 2" IN THE TRACKING PAD **



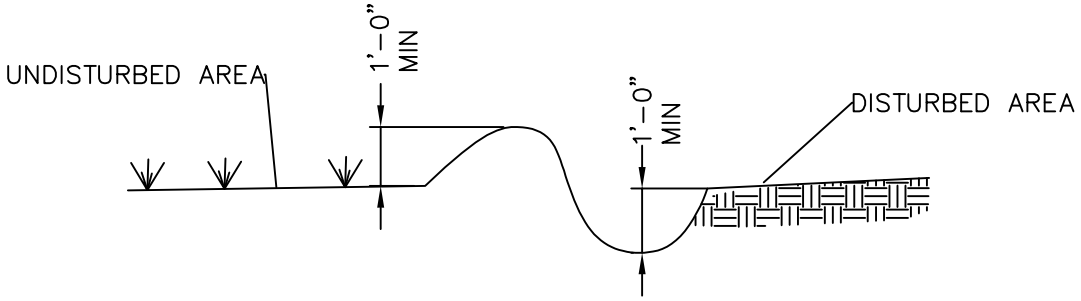
PLAN VIEW



SECTION A

STABILIZED CONSTRUCTION ENTRANCE DETAIL

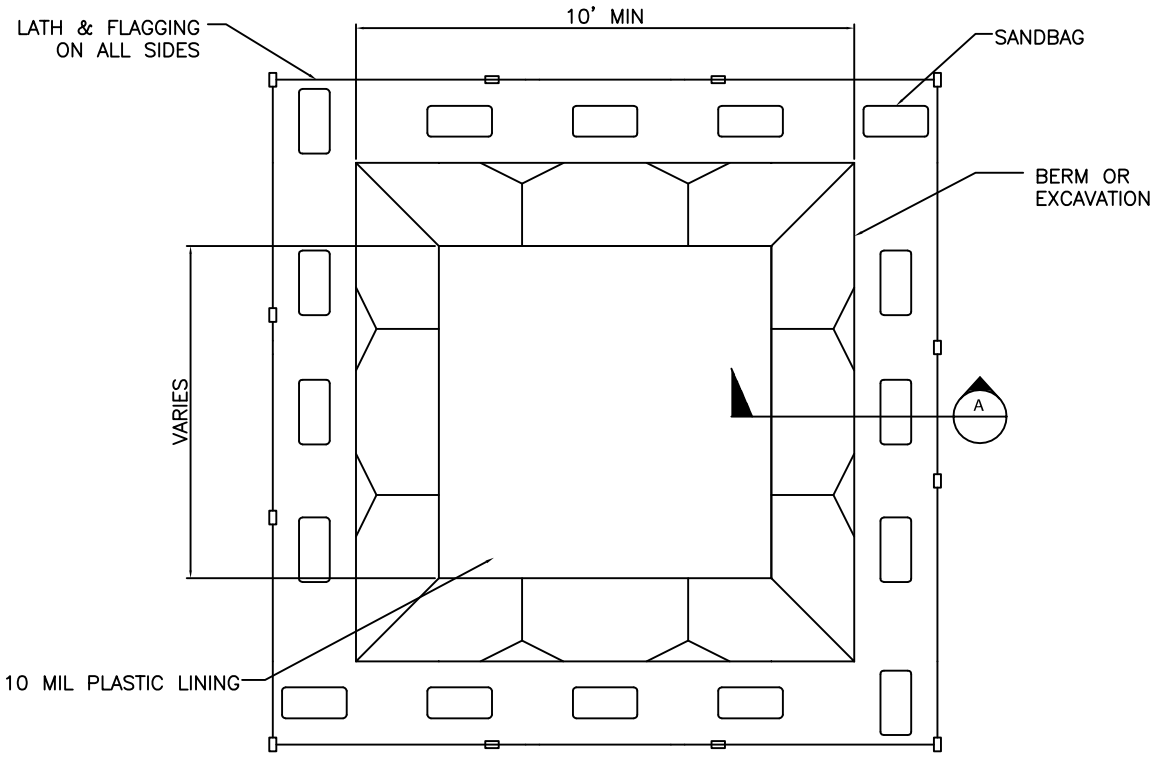
SCALE: N. T. S.



SWALE / BERM DETAIL

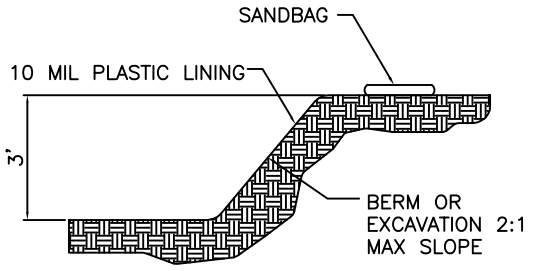
SCALE: N. T. S.

Initials_____

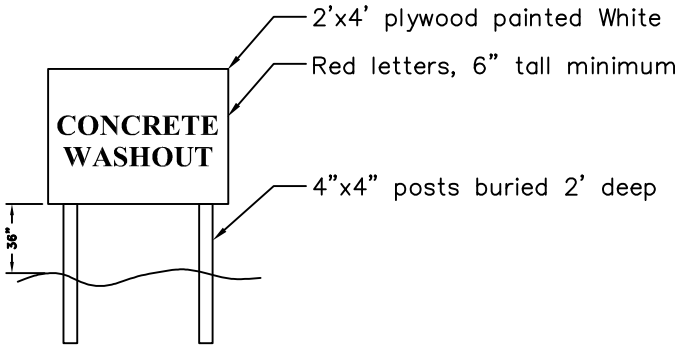


PLAN

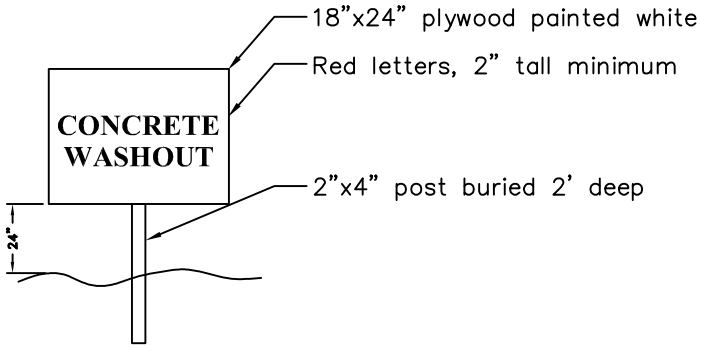
NOTES:
1. ACTUAL LAYOUT DETERMINED IN FIELD.
2. CONCRETE WASHOUT SIGN REQUIRED. SIGN SHALL BE INSTALLED WITHIN 30 FT. OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. WASHOUT NEEDS TO BE EMPTIED AND REPAIRED WHEN 75% OF STORAGE CAPACITY IS FILLED.
4. DEVELOPER/CONTRACTOR RESPONSIBLE FOR REMOVAL & PROPER DISPOSAL OF CONCRETE PRIOR TO FILING N.O.T



SECTION A



Concrete Washout
> 1 Acre Sign Detail

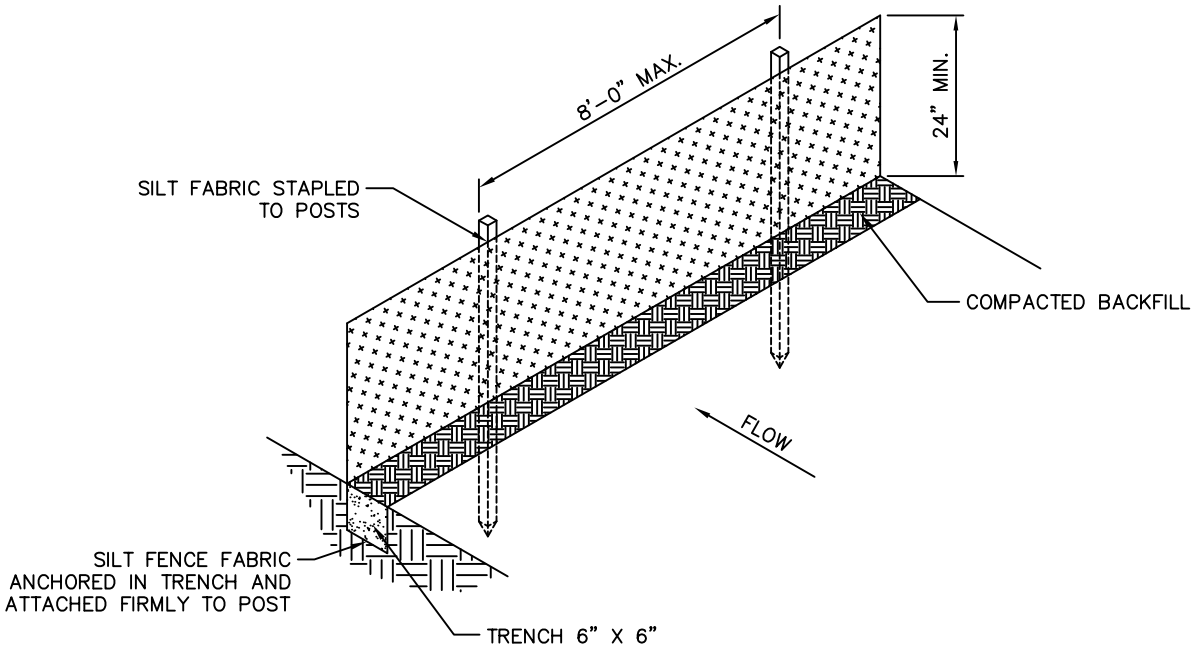


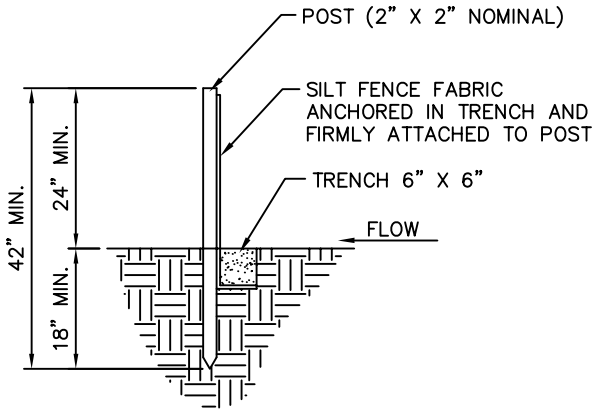
Concrete Washout
< 1 Acre Sign Detail

CONCRETE WASHOUT DETAIL
SCALE: N. T. S.

NOTE:
RENTABLE CONCRETE BINS ARE ACCEPTABLE – SIGN REQUIRED

Initials _____





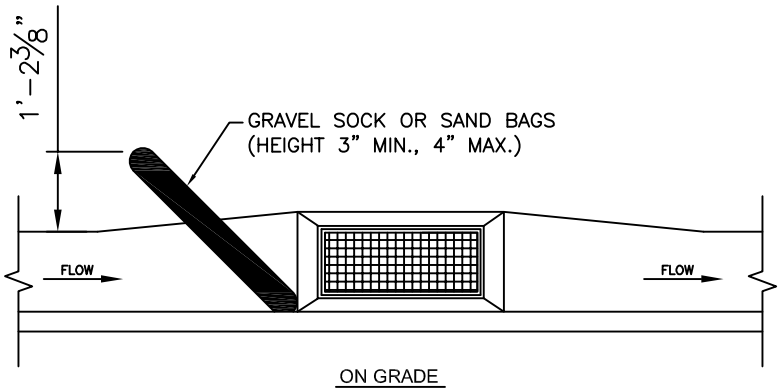
NOTES:

1. MINIMUM FILTER FABRIC HEIGHT SHALL BE 24".
2. POSTS FOR SILT FENCES SHALL BE METAL OR HARD WOOD WITH A MINIMUM LENGTH OF 36". WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION OF 2". METAL POSTS SHALL BE "STUDDED TEE" OR "U" TYPE WITH MINIMUM WEIGHT OF 1.33 LBS/FOOT.
3. DRIVE POSTS VERTICALLY INTO THE GROUND TO A MINIMUM DEPTH OF 18", AND EXCAVATE A TRENCH APPROXIMATELY 6" WIDE AND 6" DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER. NO LESS THAN THE BOTTOM 1 FOOT OF THE FABRIC SHALL BE BURIED INTO THIS TRENCH.
4. THE FILTER FABRIC MATERIALS SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO THE WOOD POSTS WITH ¾" LONG #9 HEAVY DUTY STAPLES.
5. POSTS SHALL BE SPACED A MAXIMUM OF 8 FEET APART.

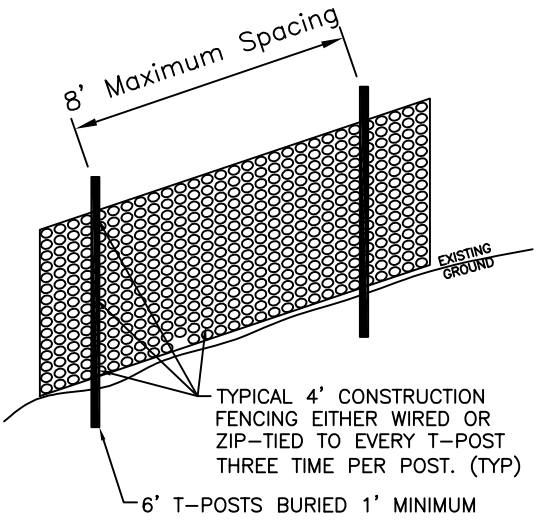
SILT FENCE DETAIL

SCALE: N. T. S.

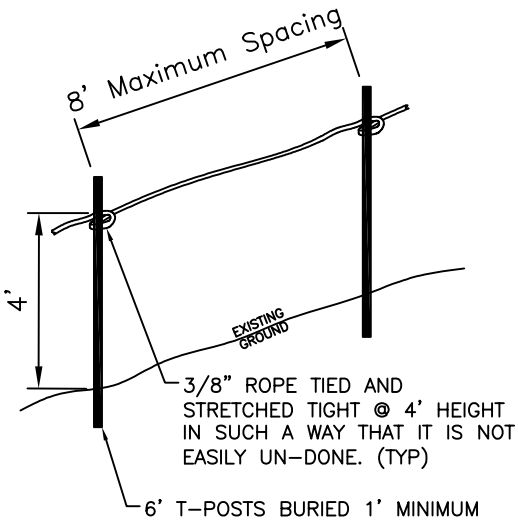
Initials_____



INLET PROTECTION DETAIL SCALE: N. T. S.



CONSTRUCTION FENCE OPTION 1 DETAIL SCALE: N. T. S.

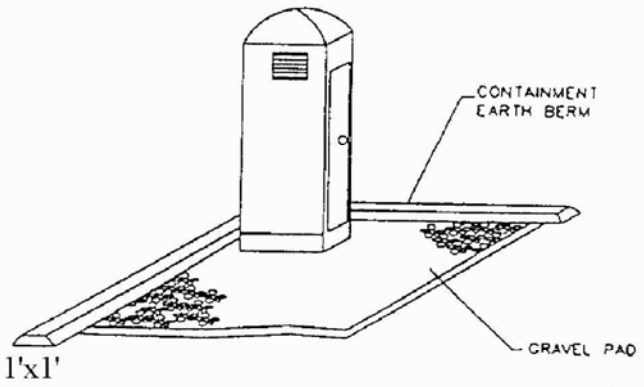


CONSTRUCTION FENCE OPTION 2 DETAIL SCALE: N. T. S.

Initials_____

BMP: Portable Toilets

PT



Description:
Temporary on-site sanitary facilities for construction personnel.

Application:
All sites with no permanent sanitary facilities or where permanent facility is too far from activities.

Installation/Application Criteria:
- Locate portable toilets in convenient locations throughout the site.
- Prepare level, gravel surface and provide clear access to the toilets for servicing and for on-site personnel.
- Construct earth berm perimeter (See Earth Berm Barrier Information Sheet), control for spill/protection leak.

Limitations:
No limitations.

Maintenance:
- Portable toilets should be maintained in good working order by licensed service with daily observation for leak detection.
- Regular waste collection should be arranged with licensed service.
- All waste should be deposited in sanitary sewer system for treatment with appropriate agency approval.

Objectives

- ☒ Housekeeping Practices
- ☒ Contain Waste
- ☐ Minimize Disturbed Areas
- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

ALPINE CITY
ESTABLISHED 1850

Adapted from Salt Lake County BMP Fact Sheet

Targeted Pollutants

- ☐ Sediment
- ☐ Nutrients
- ☐ Toxic Materials
- ☐ Oil & Grease
- ☐ Floatable Materials
- ■ Other Waste

- ■ High Impact
- ☒ Medium Impact
- ☐ Low or Unknown Impact

Implementation Requirements

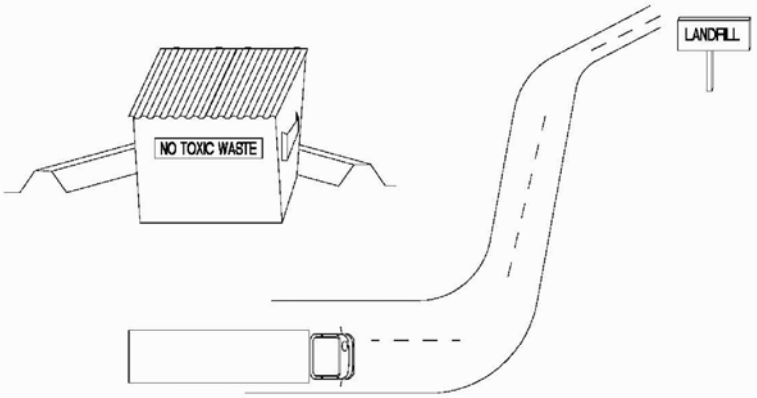
- ☒ Capital Costs
- ☒ O&M Costs
- ☒ Maintenance
- ☐ Training

■ High ☒ Medium ☐ Low

Initials _____

BMP: Waste Disposal

WD



Objectives

- ☒ Housekeeping Practices
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- ☐ Stabilize Disturbed Areas
- ☐ Protect Slopes/Channels
- ☐ Control Site Perimeter
- ☐ Control Internal Erosion

Description:

Controlled storage and disposal of solid waste generated by construction activities.

Application:

All construction sites.

Installation:

- Designate one or several waste collection areas with easy access for construction vehicles and personnel. Ensure no waterways or storm drainage inlets are located near the waste collection areas.
- Construct compacted earthen berm (See Earth Berm Barrier BMP Fact Sheet), or similar perimeter containment around collection area for impoundment in the case of spills and to trap any windblown trash.
- Use water tight containers with covers to remain closed when not in use. Provide separate containers for different waste types where appropriate and label clearly.
- Ensure all on site personnel are aware of and utilize designated waste collection area properly and for intended use only (e.g. all toxic, hazardous, or recyclable materials shall be properly disposed of separately from general construction waste).
- Arrange for periodic pickup, transfer and disposal of collected waste at an authorized disposal location. Include regular Porto-potty service in waste management activities.

Limitations:

- On-site personnel are responsible for correct disposal of waste.

Maintenance:

- Discuss waste management procedures at progress meetings.
- Collect site trash daily and deposit in covered containers at designated collection areas.
- Check containers for leakage or inadequate covers and replace as needed.
- Randomly check disposed materials for any unauthorized waste (e.g. toxic materials).
- During daily site inspections check that waste is not being incorrectly disposed of on-site (e.g. burial, burning, surface discharge, discharge to storm drain).

ALPINE CITY
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Targeted Pollutants

- ☐ Sediment
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- ☐ Low or Unknown Impact

Implementation Requirements

- ■ Capital Costs
- ■ O&M Costs
- ☒ Maintenance
- ■ Training

■ High ☒ Medium ☐ Low

Initials _____

EPA United States Environmental Protection Agency

Stormwater Best Management Practice

Concrete Washout

Minimum Measure

Construction Site Stormwater Runoff Control

Subcategory

Good Housekeeping/Materials Management

Description of Concrete Washout at Construction Sites

Concrete and its ingredients

Concrete is a mixture of cement, water, and aggregate material. Portland cement is made by heating a mixture of limestone and clay containing oxides of calcium, aluminum, silicon and other metals in a kiln and then pulverizing the resulting clinker. The fine aggregate particles are usually sand. Coarse aggregate is generally gravel or crushed stone. When cement is mixed with water, a chemical reaction called hydration occurs, which produces glue that binds the aggregates together to make concrete.

Concrete washout

After concrete is poured at a construction site, the chutes of ready mixed concrete trucks and hoppers of concrete pump trucks must be washed out to remove the remaining concrete before it hardens. Equipment such as wheelbarrows and hand tools also need to be washed down. At the end of each work day, the drums of concrete trucks must be washed out. This is customarily done at the ready mixed batch plants, which are usually off-site facilities, however large or rural construction projects may have on-site batch plants. Cementitious (having the properties of cement) washwater and solids also come from using such construction materials as mortar, plaster, stucco, and grout.

Environmental and Human Health Impacts

Concrete washout water (or washwater) is a slurry containing toxic metals. It's also caustic and corrosive, having a pH near 12. In comparison, Drano liquid drain cleaner has a pH of 13.5. Caustic washwater can harm fish gills and eyes and interfere with reproduction. The safe pH ranges for aquatic life habitats are 6.5 – 9 for freshwater and 6.5 – 8.5 for saltwater.

Construction workers should handle wet concrete and washout water with care because it may cause skin irritation and eye damage. If the washwater is dumped on the ground (Fig. 1), it can run off the construction site to adjoining roads and enter roadside storm drains, which discharge to surface waters such as rivers, lakes, or estuaries. The red arrow in Figure 2 points to a ready mixed truck chute that's being washed out into a roll-off bin, which isn't watertight. Leaking washwater, shown in the foreground, will likely follow similar

Figure 1. *Chute washwater being dumped on the ground*

Figure 2. *Chute washwater leaking from a roll-off bin being used as a washout container*

paths to nearby surface waters. Rainfall may cause concrete washout containers that are uncovered to overflow and also transport the washwater to surface waters. Rainwater polluted with concrete washwater can percolate down through the soil and alter the soil chemistry, inhibit plant growth, and contaminate the groundwater. Its high pH can increase the toxicity of other substances in the surface waters and soils. Figures 1 and 2 illustrate the need for better washout management practices.

Best Management Practice Objectives

The best management practice objectives for concrete washout are to (a) collect and retain all the concrete washout water and solids in leak proof containers, so that this caustic material does not reach the soil surface and then migrate to surface waters or into the ground water, and (b) recycle 100 percent of the collected concrete washout water and solids. Another

Office of Water, 4203M
www.epa.gov/npdes/pubs/concretewashout.pdf
www.epa.gov/npdes/stormwater/menuofbmps

EPA 833-F-11-006
February 2012