This standard plan includes some, but not all techniques for limiting erosion and pollution during construction operations. Limit size of areas to be disrupted to reduce the quantity of erosion control devices to be installed and maintained. Adhere to Best Management Practices (BMP) and project erosion control plan. Refer to specifications for detailed information not shown herein.
CONTOUR DIVERSION DITCHES AND ROADBED RUN-OFF BERM

Typical Contour Diversion

- Place Excavation on downslope side and shape machine compact.
- Right-of-way
- Place Excavation on downslope side and shape machine compact.
- Parabolic Contour Diversion
- Place Excavation on downslope side and shape machine compact.
- Trapezoidal Contour Diversion

Typical and Required Project Specifications

Soil Retention Blanket on Berm

Intercepting

Types of Ditches

Temporary Erosion Control Measures

Wyoming Department of Transportation

Temporary Erosion Control Measures for Storm Water Pollution Prevention

Standard Plan

Note: Units shown in brackets ( ) are meters and are in millimeters (mm) unless other units are shown.
Level Spreader

Water may be diverted from a slope by one of the above ditches and then redistributed with a level spreader. The level spreader may be covered with geotextile fabric, erosion control blankets, or rock.

Burlap Tube Diversion Dike

Construct temporary run-off diversions with burlap tubes, low berms, or by excavating and lining a shallow channel.
**SILT FENCE APPLICATIONS**

- **Temporary Erosion Control Measures for Storm Water Pollution Prevention**

**Fill Slope Sheet**

**Flow Protection**

**Wyoming Department of Transportation**

**Standard Plan**

**SILT FENCE ROOFS SHALL BE MIN. 2" x 2" x 4"x4" (50 x 50 x 100 x 100) ON STEEL T POSTS 4'-0" [1200] LONG AND WASHED 1.50 IN. [38 mm]**

**SILT FENCING**

- **Erosion Control Fabric**
- **Flow Path**
- **Compacted Soil**

**Wire- Reinforced Silt Fence**

- **Trench Detail**
- **Steel T Post**
- **Erosion Control Fabric**
- **Flow**

**Wire-Reinforced Silt Fence**

- **Legend:** Place above WDEQ Lines where a flood or debris is expected.

**Silt Fence Usage:**

- **Place around ditches, across minor embankments, and on top of fill slopes adjacent to developed property.**
- **Area to be handled shall not exceed 1000 ft² [93 m²] per 10 ft [3 m] of fence.**
- **Use caution on slopes in excess of 1:1 when water flow exceeds 1 cu [0.08 m³] per 10 ft of fence.**

**Protection of Adjacent Property**

- **Runoff**
- **Cut Slope**
- **Overflow Transition**
- **Silt Fence**
- **Protection of Live Stream**
- **Check Dam**

**Protection of Adjacent Property**

- **Runoff**
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- **Protection of Live Stream**
- **Check Dam**
General Notes:
1. Place erosion bale check dams in a wide swale.
2. Where a high volume of run-off is expected, cover erosion bale with plastic 10 mil thick.
3. Place rock check dams in narrow ditches and gulies.
4. Concentrate the flow of water to the center of the channel.
5. Place ends of the check dams 5' [1.5m] above the center and curve upstream to prevent flow around the ends.
6. Reduce water velocity and trap sediment by placing check dams more frequently at slope and flow increases.

DITCH CHECKS - EXCELSIOR LOGS & EROSION BALE

Note: Units shown in brackets ( ) are metric and are in millimeters (mm) unless other units are shown.

ONE OR MORE CHANNEL BALE THICKLY BUTTED
OVERLAP BALE SEAMS

MOUNT TIGHT JOINTS

ELEVATION AT POINT "A" SHALL BE
8' [2.44m] MINIMUM
HIGHER THAN ELEVATION AT POINT "B"

ELEVATION AT POINT "A" SHALL BE
8' [2.44m] MINIMUM
HIGHER THAN ELEVATION AT POINT "B"

MOUNT TIGHT JOINTS

GENERAL DITCH CHECK SPACING DETAIL

WYOMING DEPARTMENT OF TRANSPORTATION

TEMPORARY EROSION CONTROL MEASURES FOR STORM WATER POLLUTION PREVENTION

STANDARD PLAN
Erosion Bale Culvert Inlet Trap for Flared End Inlets

Excelsior Log Culvert Inlet Trap for Flared End Inlets

Synthetic Triangular Inlet Trap for M1 Inlets

Notes:
1. Limit use of erosion bales to situations where expected storm water flow volumes are low.
2. Install bales tightly and compact soil all around. Install so that water is not allowed to flow around, beneath or under bales.
3. When no longer needed, spread seed and mulch with the erosion bale.
**CHEMICAL WATER TREATMENT, DIRTY WATER TREATMENT SYSTEM**

Chemical settling agents may be warranted where turbidity caused by fine silt particles (which pass through the other sediment control devices) cannot be tolerated.

Chemical settling agents form a nucleus which attracts small silt particles (floculation). This heavier conglomerate of particles then can be trapped.

Add the chemical at the top of the slope runoff or at the entrance of the sedimentation pond to assure even mixing. The chemical is effective in the still or slow waters of the pond.

Use only non-toxic settling agents. Injection methods, concentration, and effective maintenance shall be as directed and according to the manufacturer’s recommendation.
Notes:
Construct temporary diversion channels to convey flows around a work site to keep the area dry while permanent drainage structures are being constructed.

Construct the following sequence:
1. Excavate and shape the diversion channel with a plug at both ends.
2. Install channel linings as specified.
3. Remove plugs and divert flow into diversion channel.
4. Construct permanent drainage structures.
5. Divert flow through the permanent structure.
6. Salvage material and obliterate temporary diversion channel.

Line temporary diversion channel with erosion control blankets when specified and as approved by the engineer.

When using erosion control blankets or geotextile fabric or rock, cover the entire structure.

Entrench the lining and anchor with rocks or soil.

Overlap 2 ft. (600 mm) and pin edges to the ground.

Use silt fence or barriers as approved by the engineer parallel across the top of the channel to prevent sediment laden run-off from other construction from entering water sensitive areas.

Inspect temporary diversions, contour diversion ditches, berms and barrier tubes frequently to ensure that there are no breaches or underwashing of the structure.