GOOD HOUSEKEEPING PRACTICES PART OF THE

COUNTY OF YOLO

Improvement Standards

Updated

November 18, 2009

SECTION 11

STORMWATER QUALITY, EROSION AND SEDIMENT CONTROL

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SECTION 11
STORMWATER QUALITY, EROSION AND SEDIMENT CONTROL

11-1 ABBREVIATIONS / ACRONYMS

Administrator	Assistant Director of the County of Yolo Planning Public Works Department and his or her designee.
BMP	Best Management Practice
CWA	Clean Water Act
General Permit	State Water Resources Control Board Order No. 00-08 – DWQ National Pollutant Discharge Elimination System General Permit # CAS000002, or its successor permit
MCM	Minimum Control Measures
NOI	Notice of Intent
NOT	Notice of Termination
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
RWQCB	Regional Water Quality Control Board
SWMP	Stormwater Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
Wet Season	October 1st through April 30th
WPCP	Water Pollution Control Program

11-2 GOOD HOUSEKEEPING PRACTICES

All construction sites shall be required to follow these Good Housekeeping Practices regardless of the project size or number of square feet of soil disturbed.

A. Definition – The BMPs that prevent pollutants from entering stormwater drainage systems or watercourses by limiting or reducing the potential at their source. Good Housekeeping Practices involve the day-to-day operations of the construction site, which involve keeping the site clean and orderly.

B. Applicability – The deployment and implementation of Good Housekeeping Practices depends on the conditions and applicability described below:

11-2.1 All Construction Sites Regardless of Size

1. Identify all storm drains, drainage swales and creeks located near the construction site and make sure all subcontractors are aware of their locations to prevent pollutants from entering them.
2. Clean up and properly dispose of all leaks, drips, and other spills immediately.
3. Refuel vehicles and heavy equipment in one designated location or off-site if possible.

4. Wash vehicles at an appropriate off-site facility. If equipment must be washed on-site, do not use soaps, solvents, degreasers, or steam cleaning equipment, and prevent wash water from entering the storm drain or watercourse.
5. Never wash down pavement or surfaces where materials have spilled. Use dry cleanup methods whenever possible.
6. Avoid contaminating clean runoff from areas adjacent to your site by using berms and/or temporary or permanent drainage ditches to divert water flow around the site.
7. Keep materials out of the rain. Schedule clearing or heavy earth moving activities for periods of dry weather. Cover exposed piles of soil, construction materials and wastes with plastic sheeting or temporary roofs. Before it rains, sweep and remove materials from surfaces that drain to storm drains or watercourses.
8. Place trash cans around the site to reduce litter. Dispose of non-hazardous construction wastes in covered dumpsters or recycling receptacles. Recycle leftover materials whenever possible.
9. Dispose of all wastes properly. Materials that cannot be reused or recycled must be taken to an appropriate landfill or disposed of as hazardous waste.
10. Cover open dumpsters with plastic sheeting or a tarp during rainy weather if your dumpster does not have a cover. Secure the sheeting or tarp around the outside of the dumpster. If your dumpster has a cover, make sure it is closed and secured.
11. Train your employees and inform subcontractors about the stormwater requirements and their own responsibilities.
12. Locate portable toilets a minimum of 25 feet away from drain inlets, watercourses and traffic circulation. Portable toilets shall be secured to prevent overturning. Regular service and waste disposal shall be provided. Untreated raw wastewater should never be discharged or buried. Install a secondary containment around portable toilets adequate for handling spills during servicing.
13. Appropriate measures shall be provided to prevent dust nuisance. Water trucks shall be used to dampen the surface to control dust. Care shall be taken to not overwater causing sediment-laden runoff. All earthwork operations shall cease when wind speeds exceed 20 mph for one hour or more.

11-2.2 Construction Projects Involving Paint Work

1. Non-hazardous paint chips and dust from dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
2. Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyltin must be disposed of as a hazardous waste.
3. When stripping or cleaning building exteriors with high-pressure water, cover or berm storm drain inlets and prevent discharge into watercourses. If possible (and allowed by the local wastewater treatment plant), collect (mop or vacuum) building cleaning water and discharge to the sanitary sewer, where allowed.
4. Never clean brushes, paint containers or equipment or allow rinse water to enter the street, gutter, storm drain, or watercourses.
5. For water-based paints, paint out brushes, or other painting equipment, to the extent possible and rinse to a drain leading to the sanitary sewer (i.e., indoor plumbing).
6. For oil-based paints, paint out brushes, or other painting equipment, to the extent possible, and filter and reuse thinners and solvents. Dispose of unusable thinners and residue as hazardous waste.
7. Recycle, return to supplier or donate unwanted water-based (latex) paint.
8. Dried latex paint may be disposed of in the garbage.

9. Unwanted oil-based paint (that is not recycled), thinners, and sludges must be disposed of as hazardous waste.

11-2.3 Construction Projects Involving Cement and Concrete Work

1. Avoid mixing excess amounts of fresh concrete or cement mortar on-site.
2. Store dry and wet materials under cover, protected from rainfall and runoff.
3. Wash out concrete transit mixers only in designated washout areas where the water will flow into settling ponds or onto dirt or stockpiles of aggregate base or sand. Pump water from settling ponds to the sanitary sewer, where allowed. Whenever possible, recycle washout by pumping back into mixers for reuse. Never allow washout to enter the street, storm drains, drainage ditches, or other watercourses.
4. Whenever possible, return contents of mixer barrel to the yard for recycling. Dispose of small amounts of dried excess concrete, grout, and mortar in the trash.

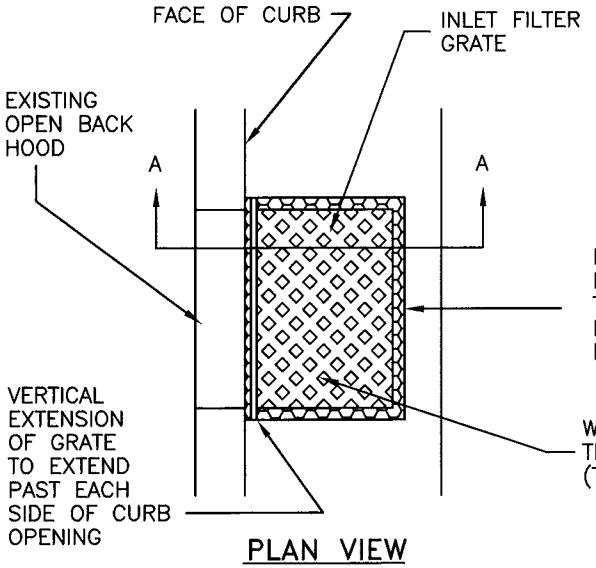
11-2.4 Construction Projects Involving Roadwork/Pavement Construction

1. Apply concrete, asphalt, and seal coats during dry weather to prevent contaminants from contacting stormwater runoff.
2. Cover storm drain inlets and manholes when paving or applying seal coats, slurry seal, fog seal, etc.
3. Always park paving machines over drip pans or absorbent materials, since they tend to drip continuously.
4. When making saw-cuts in pavement, use as little water as possible. Cover storm drain inlets completely with filter fabric during the sawing operation and contain the slurry by placing sandbags, gravel bags, gravel dams, or other approved BMP around the storm drain inlets. After the liquid drains or evaporates, shovel or vacuum the slurry residue from the pavement or gutter and dispose of it properly.
5. Wash down exposed aggregate concrete pavement only when the wash water can: (1) flow onto a dirt area; (2) drain onto a bermed surface from which it can be pumped and disposed of properly; or (3) be vacuumed from the area along the curb where sediment has accumulated by blocking a storm drain inlet.
6. Allow aggregate rinse water to settle, and pump the water to the sanitary sewer if allowed by the local wastewater authority.
7. Never wash sweepings from exposed aggregate concrete pavement into a street, storm drain, or watercourse. Collect and return to aggregate base stockpile, or dispose of it with the trash.
8. Recycle broken concrete and asphalt.

C. Design – Owners, contractors, and Developers shall be vigilant regarding the implementation of these BMPs, including making them a part of all prime and subcontract agreements.

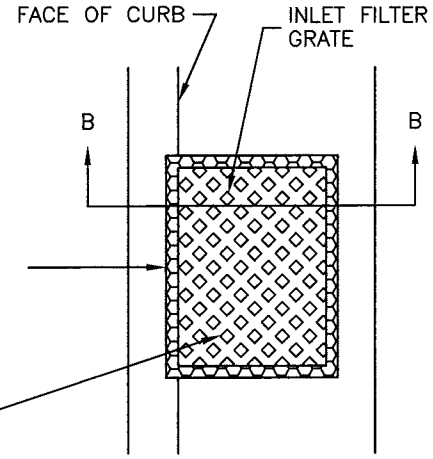
D. Maintenance – Being vigilant regarding Good Housekeeping Practices could prevent an inadvertent violation, the imposition of fines, and project delays. If procedures are not implemented properly or if the BMPs are compromised, the stormwater discharge will then be subject to the sampling and analysis requirements contained in the General Permit Section B, “Monitoring Program and Reporting Requirements”.

PLACEMENT AT TYPE B AND E DROP INLETS

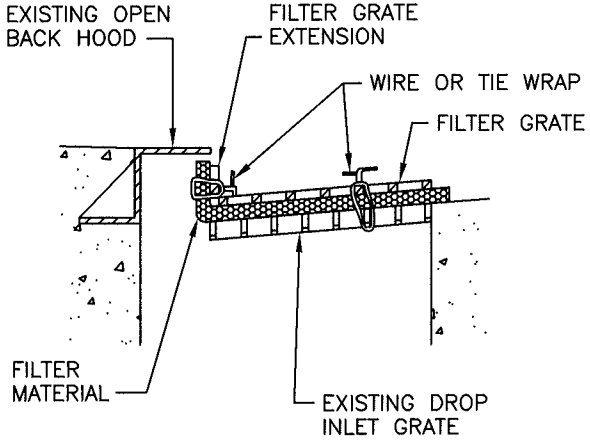


PLAN VIEW

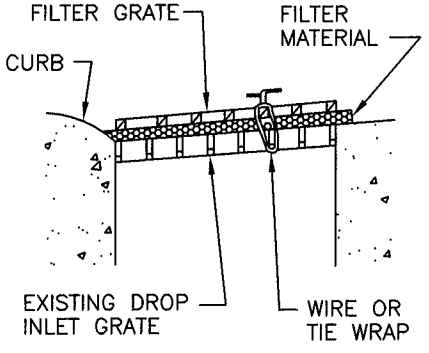
PLACEMENT AT TYPE A, C, D AND F DROP INLETS AND PARKING LOTS



PLAN VIEW



SECTION A–A



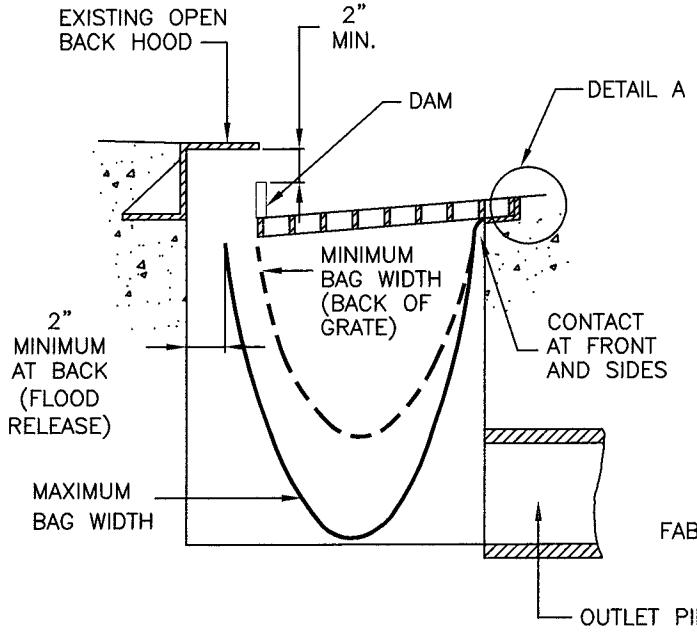
SECTION B–B

NOTES:

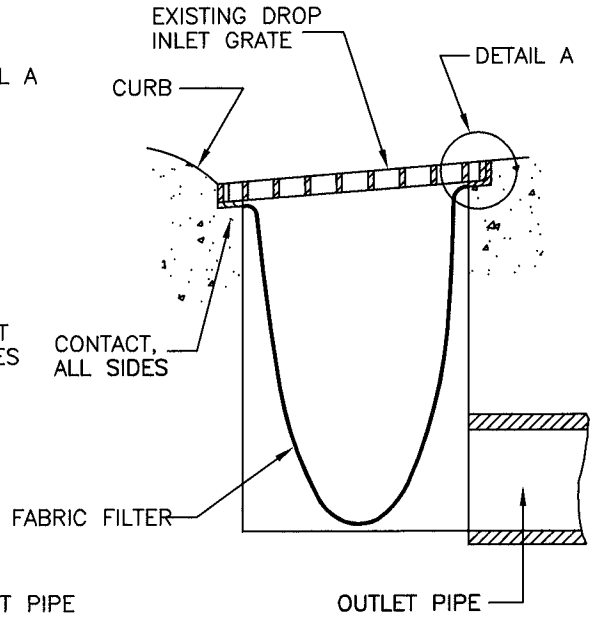
1. THE MAXIMUM DRAINAGE AREA PER FILTER SHALL BE NO MORE THAN 2 ACRES.
2. THE FILTER PAD SHALL BE 1" THICK CLEANABLE POLYESTER FIBER AND ACRYLIC LATEX RESIN OR APPROVED EQUIVALENT. THE FILTER PAD SHALL OVERLAP DROP INLET ON ALL SIDES BY A MINIMUM OF 1".
3. THE FILTER GRATE SHALL BE MADE OF EXPANDED METAL OR REBAR AND BE OF SUFFICIENT STRENGTH TO PREVENT BENDING WHEN DRIVEN OVER. GRATE MATERIAL SHALL NOT EXCEED 0.5" THICK. THE GRATE SHALL HAVE A MINIMUM 60% OPEN AREA. GRATES USED AT TYPE B AND E INLETS SHALL HAVE A VERTICAL EXTENSION TO COVER THE CURB OPENING. THE FILTER GRATE SHALL BE THE SAME SIZE AS THE DROP INLET GRATE.
4. THE FILTER PAD AND GRATE SHALL BE SECURELY ATTACHED TO THE DROP INLET BY WIRE OR TIE–WRAPS.
5. INLET FILTERS SHALL BE INSPECTED WEEKLY, BEFORE AND AFTER EACH RAINFALL EVENT. REPAIRS SHALL BE MADE AS NEEDED. SEDIMENT AND DEBRIS SHALL BE REMOVED AND DISPOSED OF PROPERLY.

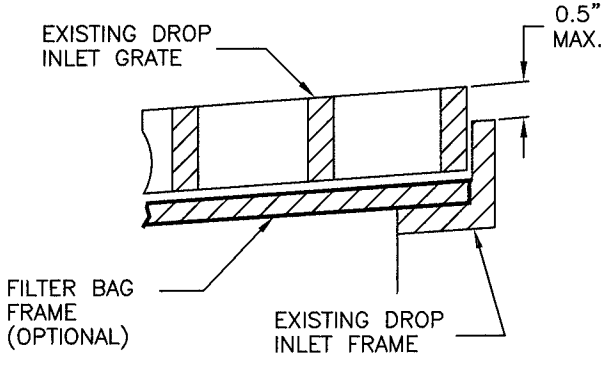
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
STORM DRAIN INLET FILTER	SHEET # 1 OF 3
Panos Kokkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 11–7 NOT TO SCALE

PLACEMENT AT TYPE B AND E DROP INLETS



PLACEMENT AT TYPE A, C, D AND F DROP INLETS AND PARKING LOTS



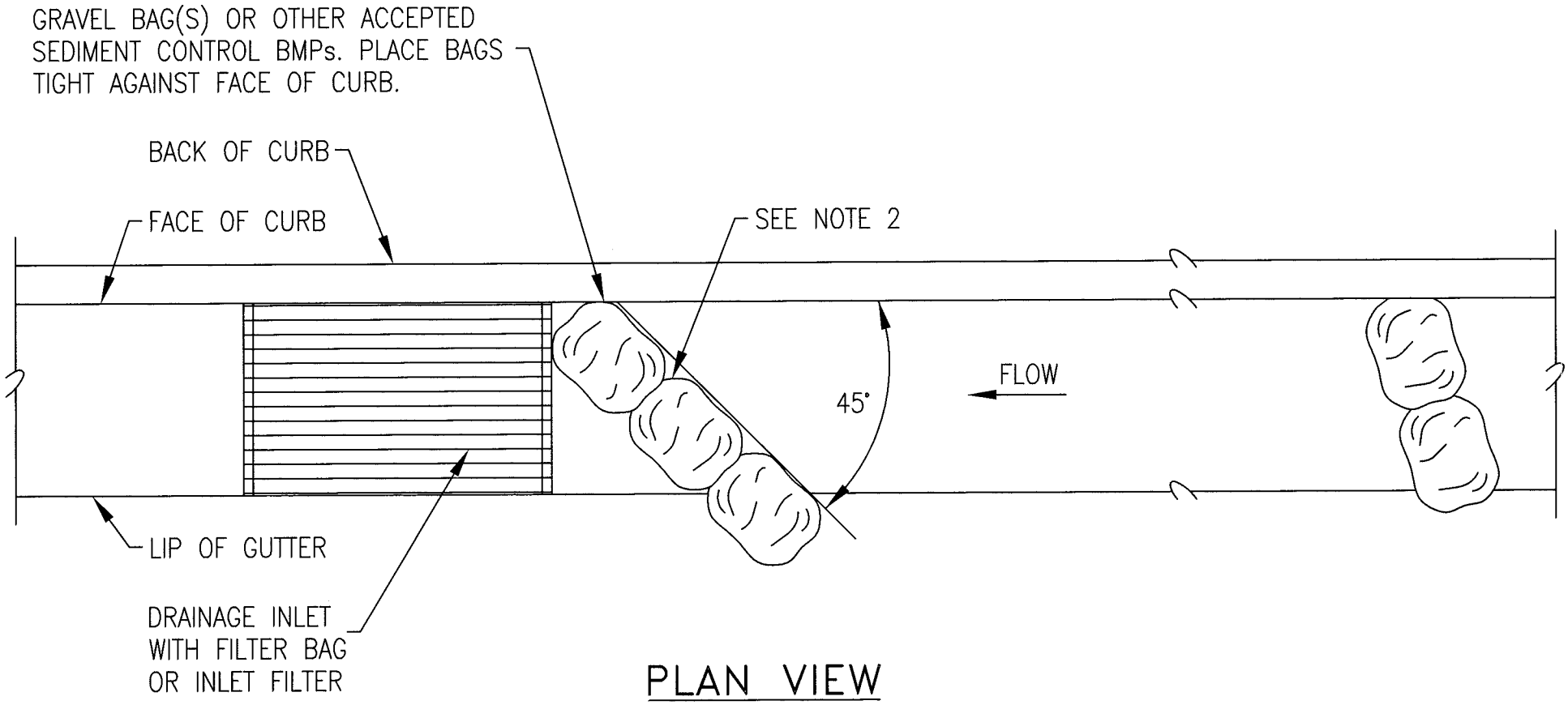


DETAIL A

NOTES:

1. THE MAXIMUM DRAINAGE AREA PER FILTER SHALL BE NO MORE THAN 2 ACRES.
2. THE FILTER BAG SHALL BE MANUFACTURED FROM UV RESISTANT POLYPROPYLENE, NYLON, POLYESTER, OR ETHYLENE FABRIC WITH A MINIMUM TENSILE STRENGTH OF 50 LBS PER LINEAL FOOT, AN EQUIVALENT OPENING SIZE NOT GREATER THAN A 20 SIEVE AND WITH A MINIMUM FLOW RATE OF 40 GALLONS / MINUTE / SQ FT.
3. THE FILTER BAG MAY BE SUSPENDED FROM OR HELD IN PLACE BY THE EXISTING INLET GRATE (OR OTHER APPROVED METHOD), PROVIDING NO MODIFICATION OR DAMAGE SHALL BE DONE TO THE INLET GRATE OR FRAME. THE INLET GRATE SHALL NOT BE CAUSED TO REST MORE THAN 0.5" ABOVE THE INLET FRAME (SEE DETAIL A).
4. THE FILTER BAG MAY EXTEND TO THE BOTTOM OF THE INLET BOX PROVIDED THE OUTLET PIPE IS UNOBSTRUCTED.
5. FLOWS SHALL NOT BE ALLOWED TO BYPASS THE BAG. THE BAG OR ITS FRAME SHALL CATCH FLOWS AT ALL SIDES OF THE INLET, EXCEPT AS SHOWN FOR FLOOD RELEASE.
6. INLET FILTER BAGS SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL DURING THE WET SEASON AND MONTHLY DURING THE DRY SEASON. SEDIMENT AND DEBRIS SHALL BE REMOVED BEFORE ACCUMULATIONS HAVE REACHED ONE THIRD THE DEPTH OF THE BAG. BAGS SHALL BE REPAIRED OR REPLACED AS SOON AS DAMAGE OCCURS.
7. AN APPROVED ALTERNATIVE ARE THE "GRATE MATES". THESE ARE PROVIDED WITH SLOTS THAT POLES CAN BE INSERTED FOR LIFTING OUT THE FILTER BAGS.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
STORM DRAIN INLET FILTER BAG	SHEET # 2 OF 3
Panos Kokkas — COUNTY ENGINEER No. C42401 28AUG.08 — APPROVAL DATE	DRAWING #: 11-7 NOT TO SCALE

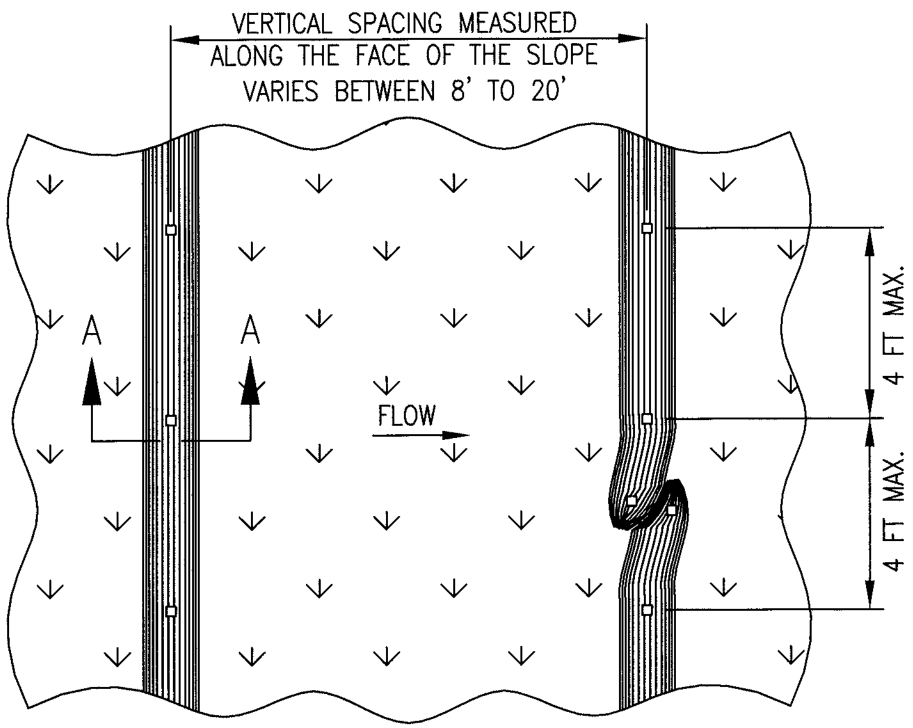


PLAN VIEW

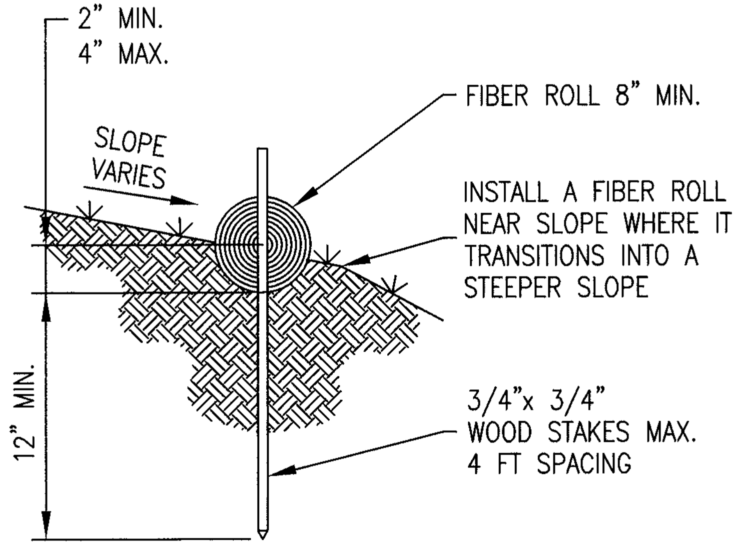
NOTES:

1. SEDIMENT TRAPPED UPSTREAM OF SEDIMENT CONTROL BMPs SHALL BE REMOVED WEEKLY, PRIOR TO AND AFTER A RAINFALL EVENT.
2. PLACE BMPs TIGHTLY TOGETHER AT JOINTS TO PREVENT OR MINIMIZE SEEPAGE AT JOINTS.
3. REPAIR WASHOUTS AND OTHER DAMAGE AS NEEDED.
4. REMOVE BARRIER WHEN NO LONGER NEEDED.

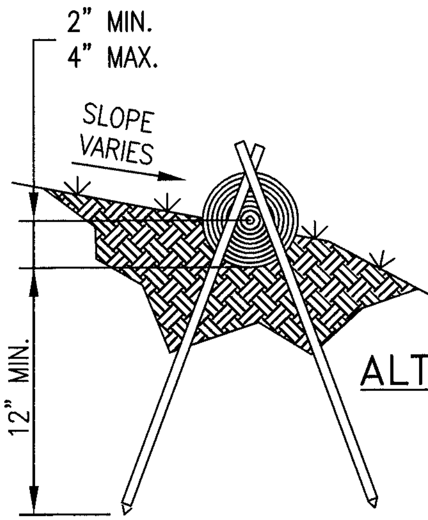
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
INLET SEDIMENT CONTROL	SHEET # 3 OF 3
Panos Kokkas 28 JUL 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 11-7 NOT TO SCALE



TYPICAL FIBER ROLL INSTALLATION



SECTION A – A

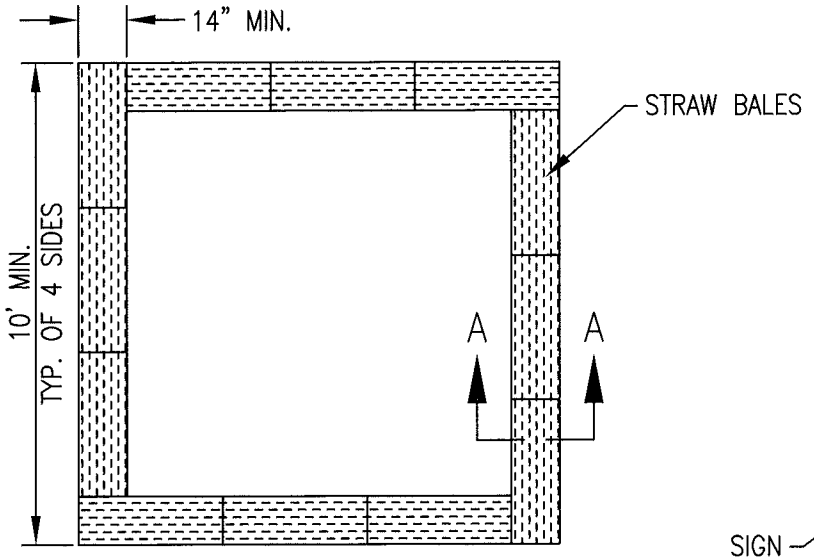


ALTERNATE STAKING DETAIL

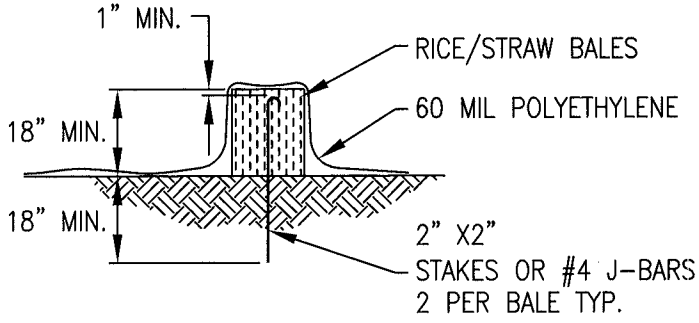
NOTES:

1. INSTALL FIBER ROLLS IN A ROW ALONG A LEVEL CONTOUR.
2. AT ENDS OF A ROW TURN THE LAST TWO FEET UP SLOPE SLIGHTLY.
3. FIBER ROLLS SHALL BE OVERLAPPED TIGHTLY AND STAKED AT THE JOINTS.
4. FIBER ROLLS WORK BEST IN CONJUNCTION WITH GOOD EROSION CONTROL BMPs.
5. INSPECT FIBER ROLLS WEEKLY, BEFORE AND AFTER A RAINFALL EVENT. REPAIR AND REPLACE AS NEEDED.

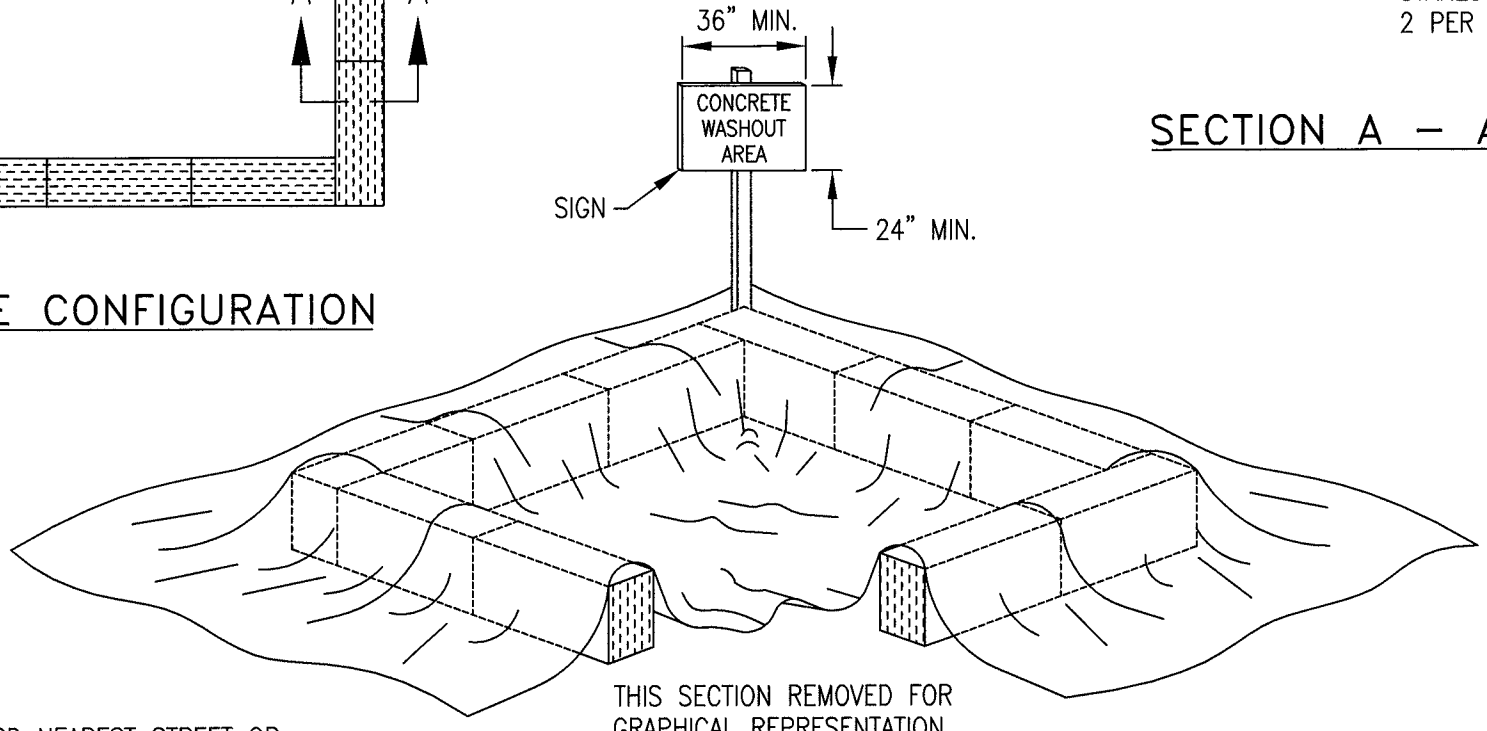
COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
FIBER ROLLS	SHEET # 1 OF 1
Panos Kokkas (signature) — 28 AUG. 08 COUNTY ENGINEER No. C42401 — APPROVAL DATE	DRAWING #: 11–8 NOT TO SCALE



BALE CONFIGURATION



SECTION A – A

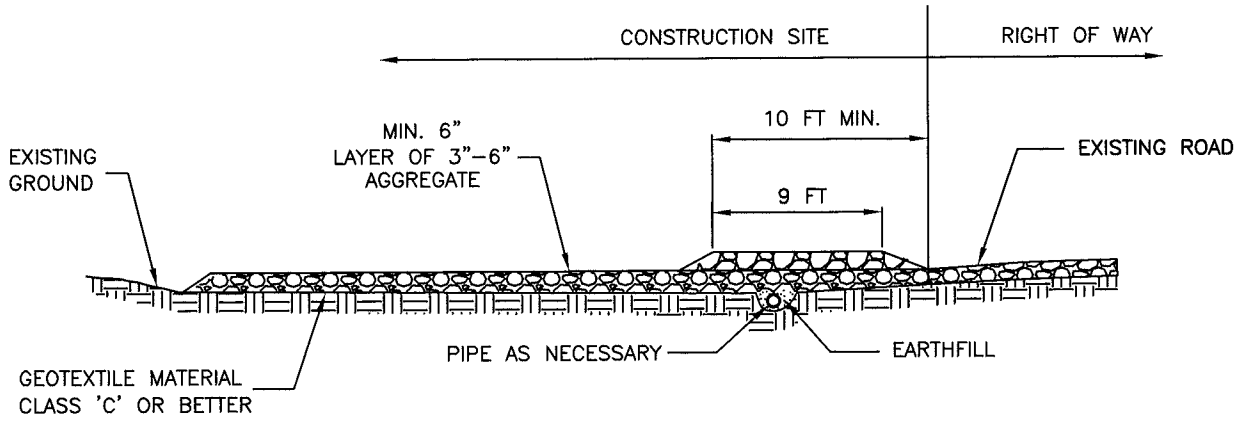


THIS SECTION REMOVED FOR GRAPHICAL REPRESENTATION ONLY. STRAW BALE PERIMETER SHALL BE CONTINUOUS.

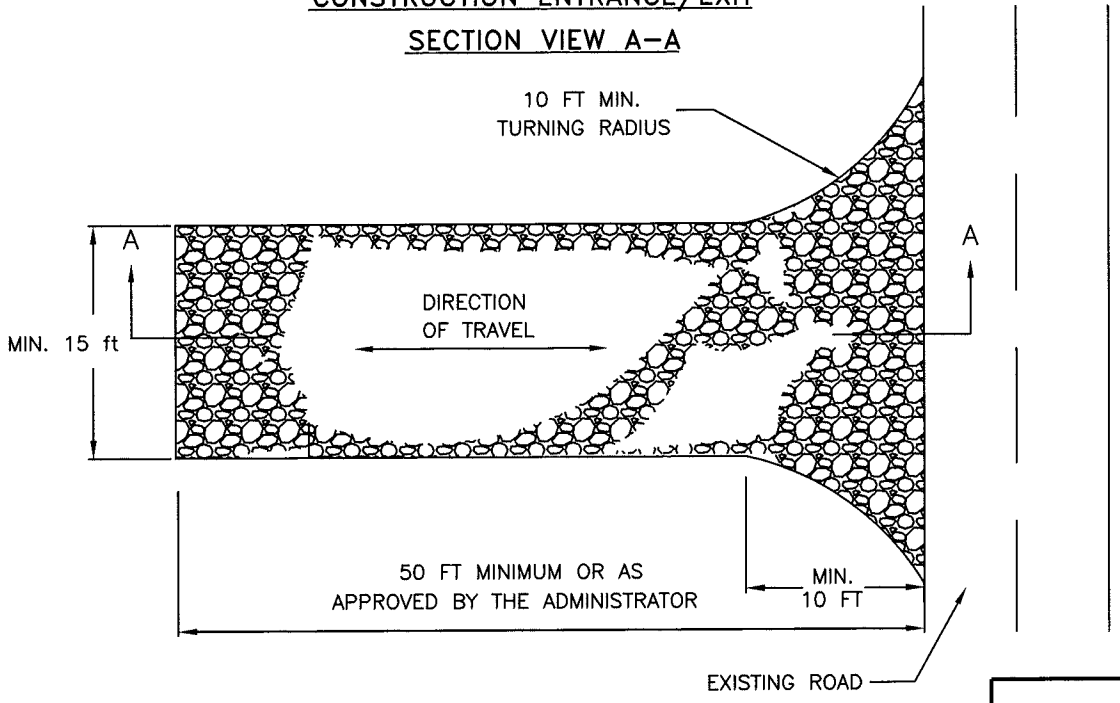
NOTES:

1. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FEET MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.
3. CONCRETE WASHOUT SHALL BE INSPECTED AND MAINTAINED TO PREVENT LEAKS OR OVERFLOWS.
4. WASHOUT MUST BE CLEANED, OR NEW ONE BUILT ONCE IT REACHES 75% CAPACITY.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
CONCRETE WASHOUT	SHEET # 1 OF 1
Panos Kokkas 28 AUG. 08 COUNTY ENGINEER No. C42401 APPROVAL DATE	DRAWING #: 11–9 NOT TO SCALE



CONSTRUCTION ENTRANCE/EXIT
SECTION VIEW A–A



CONSTRUCTION ENTRANCE/EXIT
PLAN VIEW

NOTES:

1. STABILIZED CONSTRUCTION SITE ACCESS SHALL BE CONSTRUCTED OF 3 TO 6 INCH WASHED, WELL GRADED GRAVEL OR CRUSHED ROCK. MATERIAL SHALL BE PLACED TO A MINIMUM THICKNESS OF 6 INCHES.
2. LENGTH OF ENTRANCE SHALL BE A MINIMUM OF 50 FEET. WIDTH SHALL BE A MINIMUM OF 15 FEET OR GREATER IF NECESSARY TO COVER ALL VEHICULAR INGRESS AND EGRESS. PROVIDE AMPLE TURNING RADII.
3. THE ENTRANCE SHALL BE KEPT IN GOOD CONDITION BY OCCASIONAL TOP DRESSING WITH MATERIAL AS SPECIFIED IN NOTE 1.
4. ACCESSES SHALL BE INSPECTED WEEKLY DURING PERIODS OF HEAVY USAGE, MONTHLY DURING NORMAL USAGE, AND AFTER EACH RAINFALL, WITH MAINTENANCE PROVIDED AS NECESSARY. PERIODIC TOP DRESSING SHALL BE DONE AS NEEDED.

COUNTY OF YOLO PLANNING AND PUBLIC WORKS DEPARTMENT	DATE: 08/05/08
STABILIZED CONSTRUCTION SITE ACCESS	SHEET # 1 OF 1
Panos Kokkas — COUNTY ENGINEER No. C42401 28 AUG. 08 — APPROVAL DATE	DRAWING #: 11–1 NOT TO SCALE