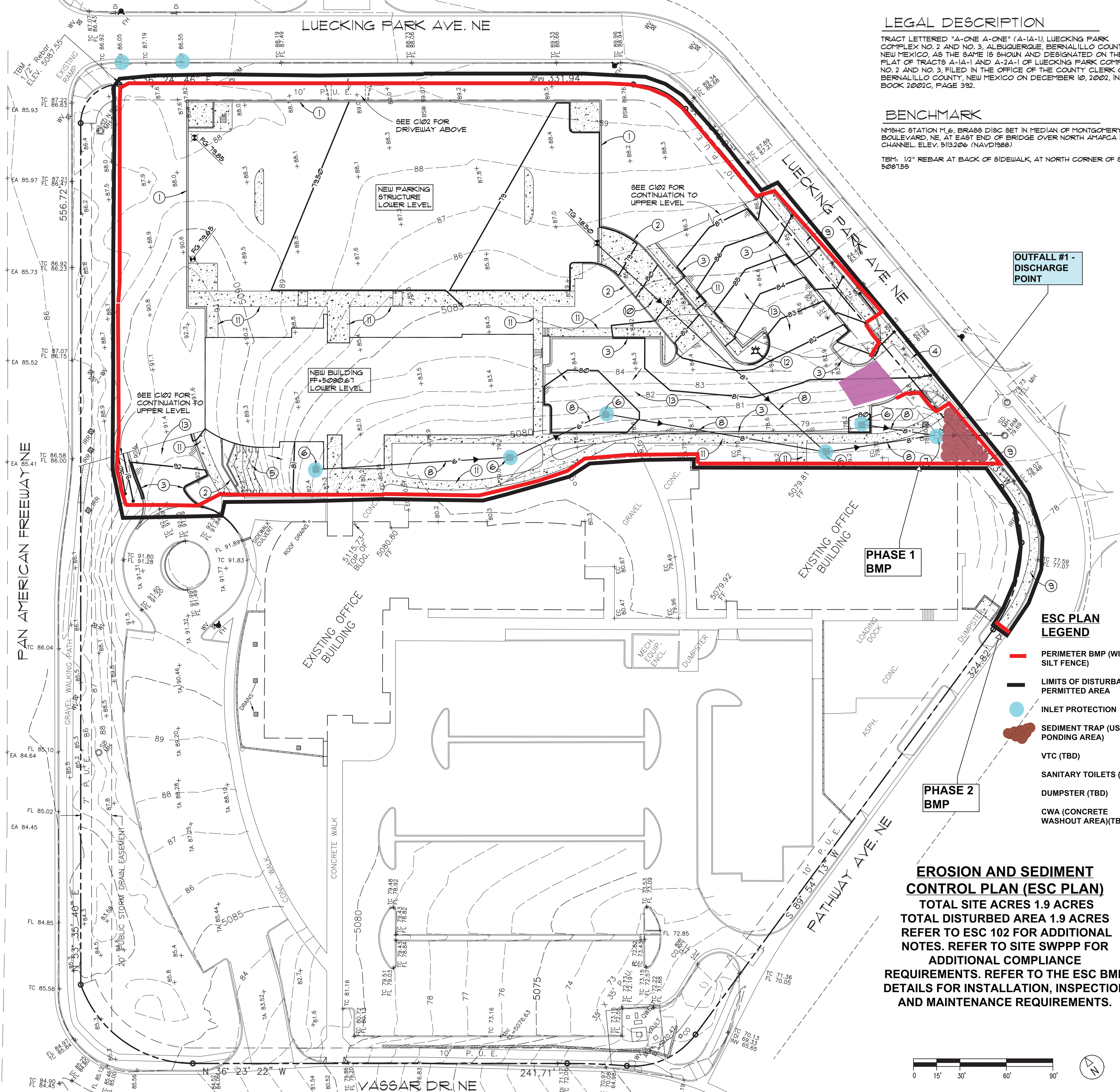




LEGAL DESCRIPTION

TRACT LETTERED "A-ONE A-ONE" (A-1A-1), LUECKING PARK COMPLEX NO. 2 AND NO. 3, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF TRACTS A-1A-1 AND A-2A-1 OF LUECKING PARK COMPLEX NO. 2 AND NO. 3, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON DECEMBER 10, 2002, IN BOOK 2002C, PAGE 392.

BENCHMARK

NMHC STATION M.6, BRASS DISC SET IN MEDIAN OF MONTGOMERY BOULEVARD NE, AT EAST END OF BRIDGE OVER NORTH AMFCA DIVERSION CHANNEL, ELEV. 5113.206 (NAV1988)

BM: 1/2" REBAR AT BACK OF SIDEWALK, AT NORTH CORNER OF SITE ELEV. 5081.55

NEW ADMIN BUILDING

FOR:

nUSENDA
CREDIT UNION

4100 PAN AM FWY, ABQ, NM

Walla Structural Engineering
Civil Engineering
6501 Americas Parkway, NE Suite 301
Albuquerque, New Mexico 87110
881-3008 • Facsimile 881-4025

joe slagle architect

413 2nd st sw
aba nm 87102
505 246 0870

revisions:



KEYED NOTES

- 1 CONCRETE WALL AT PARKING STRUCTURE - SEE STRUCTURAL
- 2 CONCRETE RETAINING WALL
- 3 CONCRETE CURB AND GUTTER
- 4 4000 PSI CONCRETE DRIVE PAD PER C.O.A. STANDARD DRAWING 2426
- 5 18" TALL CONCRETE STEPS
- 6 DROP INLET
- 7 OIL/WATER SEPARATOR CATCH BASIN
- 8 PVC STORM DRAIN - SEE PLAN FOR SIZE
- 9 4000 PSI CONCRETE SIDEWALK PER C.O.A. STANDARD DRAWING 2430
- 10 CONCRETE PAVING
- 11 4000 PSI CONCRETE SIDEWALK
- 12 NEW FIRE HYDRANT PER ABCWA STANDARD DRAWING 2340
- 13 ASPHALT PAVING

LEGEND

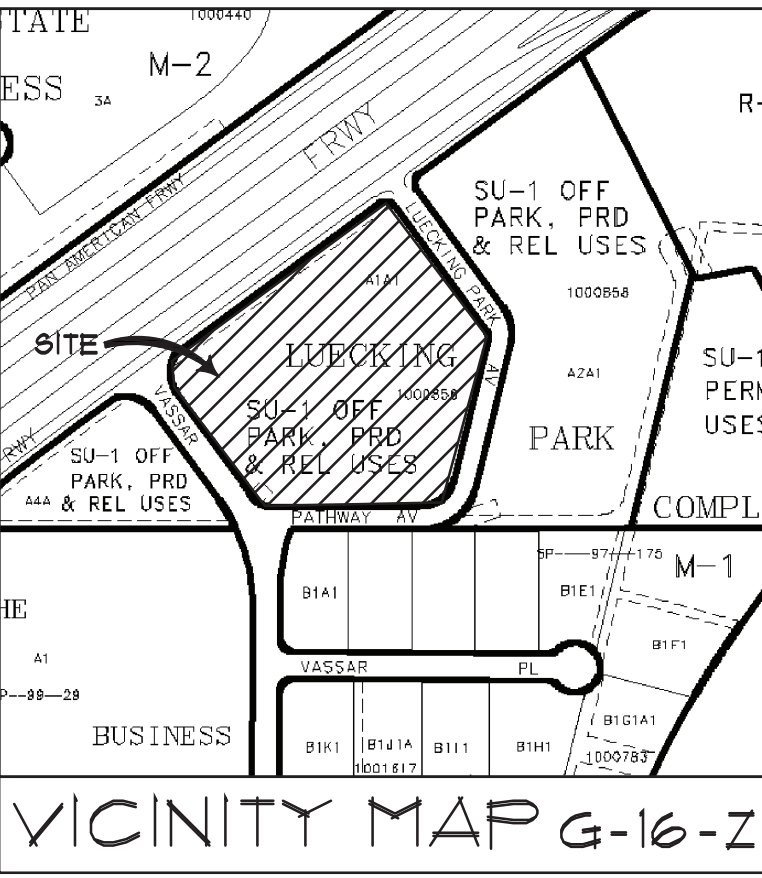
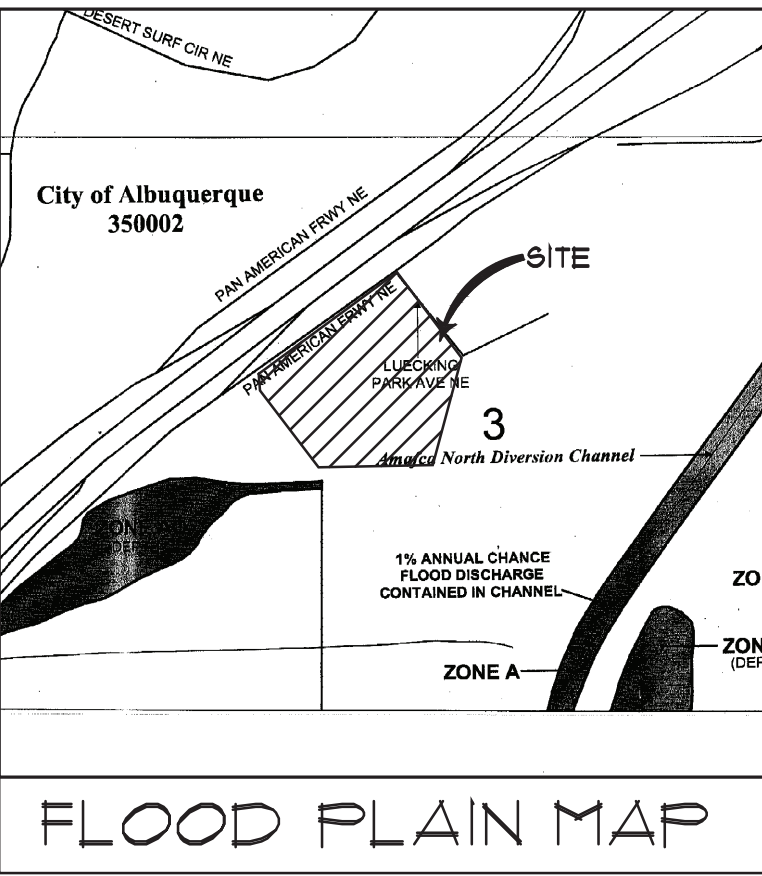
- PROPERTY LINE
- NEW BUILDING LINE
- 5090 --- EXISTING CONTOUR
- PROPOSED CONTOUR
- 85.00' PROPOSED SPOT ELEVATION
- x 84.3 EXISTING SPOT ELEVATION
- FLOW DIRECTION ARROW
- FF FINISH FLOOR
- TC TOP OF CONCRETE
- FG FINISHED GRADE
- TG TOP OF GRATE
- TA TOP OF ASPHALT
- FL FLOWLINE
- ASPHALT PAVING-REMOVE & REPLACE
- NEW ASPHALT PAVING
- NEW CONCRETE PAVING/SIDEWALK
- NEW GRAVEL WALKING PATH

ESC PLAN LEGEND

- PERIMETER BMP (WIND / SILT FENCE)
- LIMITS OF DISTURBANCE / PERMITTED AREA
- INLET PROTECTION
- SEDIMENT TRAP (USE PONDING AREA)
- VTC (TBD)
- SANITARY TOILETS (TBD)
- DUMPSTER (TBD)
- CWA (CONCRETE WASHOUT AREA)(TBD)

EROSION AND SEDIMENT CONTROL PLAN (ESC PLAN)

TOTAL SITE ACRES 1.9 ACRES
TOTAL DISTURBED AREA 1.9 ACRES
REFER TO ESC 102 FOR ADDITIONAL NOTES. REFER TO SITE SWPPP FOR ADDITIONAL COMPLIANCE REQUIREMENTS. REFER TO THE ESC BMP DETAILS FOR INSTALLATION, INSPECTION AND MAINTENANCE REQUIREMENTS.



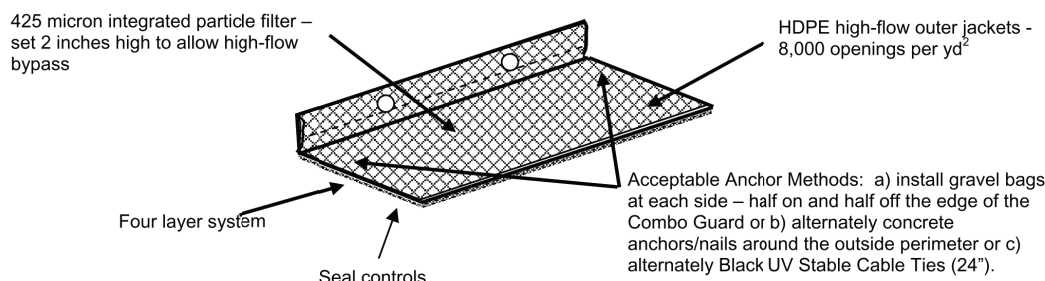
DESIGN NARRATIVE

THE PROJECT IS THE CONSTRUCTION OF A NEW OFFICE BUILDING AND PARKING DECK ON THE VACANT NORTH END OF A 12 ACRE SITE. THE NEW CONSTRUCTION AREA IS APPROXIMATELY 3.6 ACRES AND WILL INCLUDE A PARKING LOT AND RAMP ACCESS TO THE LOWER AND UPPER PARKING DECK LEVELS WITH A NEW DRIVE ACCESS FROM LUECKING PARK AVE. ON THE NORTH END OF THE SITE. SITE RUNOFF CURRENTLY FLOWS FROM EAST TO WEST ACROSS THE UNIMPROVED PORTION OF THE SITE AND THE PROPOSED IMPROVEMENTS ARE DESIGNED TO MAINTAIN THIS DRAINAGE SCHEME. UNDERGROUND STORM DRAIN LINES WILL COLLECT SURFACE FLOWS THROUGH A SERIES OF DROP INLETS AND DIRECT RUNOFF TO PUBLIC DOWNSTEAM FACILITIES ON THE WEST EDGE OF THE SITE. THE UPPER PARKING DECK IS SLOPED TOWARD THE NORTH AN DEVELOPED FLOWS FROM THIS STRUCTURE WILL BE DEPOSITED INTO LUECKING PARK AVE. VIA SIDEWALK CULVERTS WHERE A PORTION OF THE SITE DRAINAGE WILL SURFACE FLOW TOWARD STORM DRAIN FACILITIES ON THE EAST PERIMETER OF THE SITE

ESC PLAN
DATE: 3-14-18
D TULL

sheet:
ESC 101

SWPPP Binder Insert - Curb & Grate Inlet Protection ERTEC Combo Guard™



Product Designation	Grate Size
CG 28x22	Fits 23" by 19" Grate
CG 58x22	Fits 36" x 18" and 36" x 20" and 40" x 17" Grates
CG 48x27	Fits 40" x 24" Grate
CG 58x30	Fits 42" x 28" Grate
Custom sizes available upon request	

Definition - ERTEC Combo Guard
A temporary sediment filter made of high density polyethylene with an integrated filter. During construction, place device over the grate and curb opening of the drain inlet near disturbed soil. Anchor with 2 Gravel Bags, or alternately 2 ERTEC GR-8 Hooks™ or alternately concrete anchor/nails or alternately black UV stable cable ties (24 to 36").

Purpose
Storm drain inlet protection is used to intercept sediment laden water at the curb and grate opening and prevent the sediment, associated pollutants and debris from entering the storm water underground pipe systems. The system reduces water velocity which causes heavier soil particles to be deposited above ground. While allowing flow through the module, the barrier filters certain smaller sized particles from suspension and prevents them from flowing through the device and into the pipes. Heavy flows are passed over the top of the filter. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

Conditions Where the Practice Applies
It is recommended for use over curb & grate openings with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

Design Criteria

- Geo-textile Filter: Apparent Opening Size (AOS) = 425 micron integrated particle filter. Flow rate (ASTM D-4491) = 145 gpm/ft². Provide a bypass over the top.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3 to 5 lbs. Module height = 6.0". Module length/opening size protected varies as per the chart above - according to grate size. Service temperature (deg F) = -30 to 160.
- Install system with the vertical section covering the curb inlet and the horizontal section covering the grate. Alternate anchor methods listed above. If using Gravel Bags - place small gravel bags containing clean, pea-sized graded gravel on each end of the cover and butt the bags tightly against the curb to keep water in the gutter from flowing behind the filter (do not use sandbags). The porosity of the gravel bag should allow for design flow rate through the bag. The bag should be durable enough to last the period of intended use. If the storm inlet opening exceeds 5.0' in length, overlap one module by 6" over side of adjoining module for a continuous run until the desired length is achieved. Anchor thru the overlap as necessary.

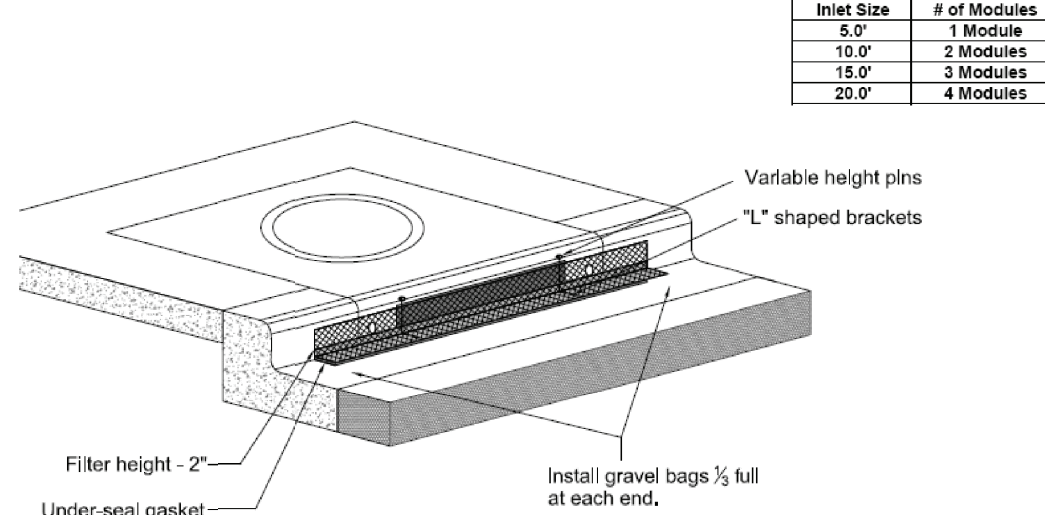
Maintenance
Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Debris shall be removed daily and sediment shall be removed when the sediment accumulation reaches 2 inches. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Remove the device after final stabilization has been achieved.



H400032 Updated: 8/11

A2-40

SWPPP Binder Insert - Curb Inlet Protection ERTEC Curb Inlet Guard™



Inlet Size	# of Modules
6.0"	1 Module
10.0"	2 Modules
16.0"	3 Modules
20.0"	4 Modules

Definition - ERTEC Curb Inlet Guard
A temporary sediment barrier, "L" shaped, made of high density polyethylene (HDPE) with an integrated filter (woven geo-textile). During construction, place device over the opening of the curb storm inlet near where soil is disturbed (See drawings).

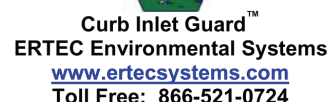
Purpose
Storm drain inlet protection is used to intercept sediment laden water at the curb gutter opening and prevent sediment, debris and associated pollutants from entering the storm water underground pipe systems. The barrier reduces water velocity which in turn causes heavier soil particles to be deposited in front. While allowing flow through the module, the barrier filters certain smaller sized particles from suspension and prevents them from flowing through the device and into the pipes. Excessive flows are passed over the top of the filter. Advantages are that it is effective, durable, re-usable, easily installed and cleaned.

Conditions Where the Practice Applies
It is recommended for use in curb openings in front of areas with small drainage areas. Generally, the drainage areas should be less than 1/3 acre and the total for inlets in series should be 1 acre or less with slopes flatter than 5 percent in the contributing drainage area.

Design Criteria

- Geo-textile Filter: See drawing for dimensions. Apparent Opening Size (AOS) = 425 micron integrated particle filter. Flow rate (ASTM D-4491) = 145 gpm/ft². Provide a bypass over the top.
- Outer Jacket Material: HDPE. For detailed characteristics contact ERTEC. Module weight = 3.5 lbs. Module height = 7.5". Module length/opening size protected = 6.2"x5.0". Service temperature (deg F) = -30 to 160.
- Install barrier with the anchor flap facing upstream toward the street. Place small gravel bags containing clean, pea-sized graded gravel on each end of the flap and butt the bags tightly against the curb to keep water in the gutter from flowing behind the filter. Additional bags can be placed on the flap as necessary; however, bags should be kept off the street for safety reasons. The porosity of the gravel bag should allow for design flow rate through the bag. The bag should be durable enough to last the period of intended use. If the storm inlet opening exceeds 5.0' in length, overlap one module by 6" over end of adjoining module for a continuous run until the desired length is achieved. When overlapping, note the gasket material under the flap is cut-out where the flap of top module sits on flap of bottom module.

Maintenance
Perform maintenance as required. Inspect following rainfall events and at least daily during prolonged rainfall. Maintain to provide an adequate sediment holding capacity. Trash shall be removed daily and sediment shall be removed when the sediment accumulation reaches 1 inch. Removed sediment shall be incorporated in the project at designated locations or disposed-of outside the project or in conformance with requirements. Remove the device after final stabilization has been achieved.



H999222 Updated: 02/10

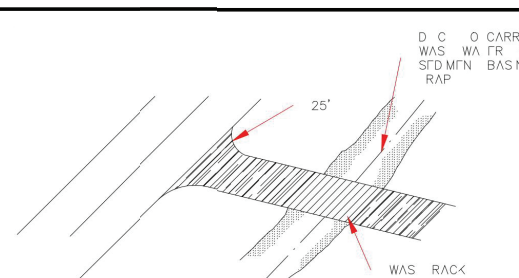
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National Pollutant Discharge Elimination System Manual
Appendix A5 - Good Housekeeping/Materials Management

Revision 2
August 2012

Stabilized Construction Entrance/Exit



DESCRIPTION
A stabilized construction entrance consists of a pad of crushed stone, recycled concrete, or other rock-like material on top of a geotextile filter cloth, which is used to facilitate the washdown and removal of sediment and other debris from construction equipment prior to exiting the site. During the construction phase of a project, regular street sweeping should be performed to remove debris carried from the site.

PRIMARY USE
Stabilized construction entrances are used to reduce offsite sediment tracking from trucks and construction equipment, and for sites where considerable truck traffic occurs each day. They also reduce the need to clean adjacent pavement as often, and help route site traffic through a single point.

APPLICATIONS
As a part to the erosion-control plan required for sites larger than five acres, and recommended for all construction sites.

LIMITATIONS
Selection of the construction entrance location is critical. To be effective, it must be used exclusively.

Stabilized entrances are rather expensive, considering that they must be installed in combination with one or more other sediment control techniques. It may be more cost effective, however, than labor-intensive street cleaning.

MAINTENANCE REQUIREMENTS
Inspections should be made on a regular basis and after large storm events in order to ascertain whether or not sediment and pollution are being effectively detained on site.

When sediment has substantially clogged the void area between the rocks, the aggregate mat must be washed down or replaced. Periodic re-grading and top dressing with additional stone must be done to keep the efficiency of the entrance from diminishing.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- Construction Wastes

Impact

- Significant
- Medium
- Low
- Unknown or Questionable

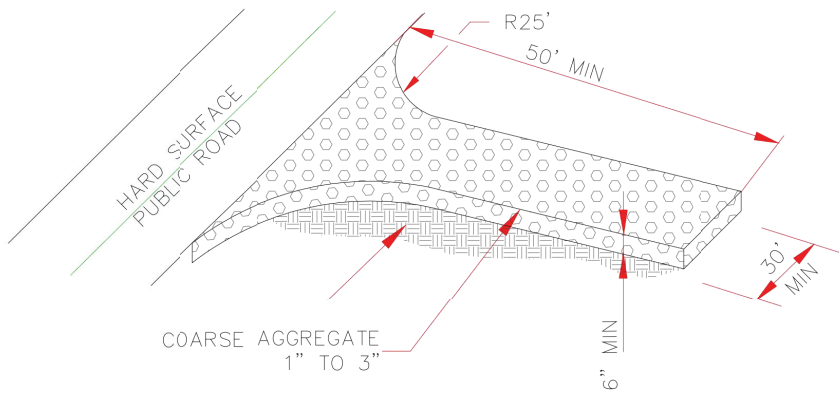
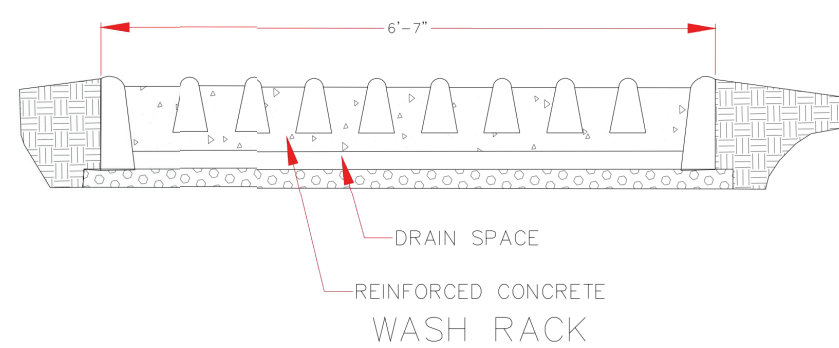
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A5-19

National Pollutant Discharge Elimination System Manual
Appendix A3 - Housekeeping Practices

Revision 0
November 2002

Stabilized Construction Entrance/Exit (continued)



ROCK / AGGREGATE VEHICLE
TRACKING CONTROL

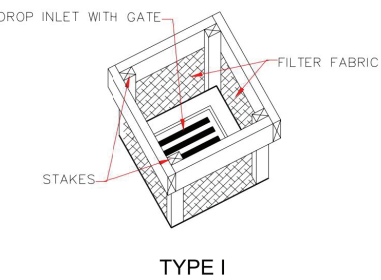
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A3-22

National Pollutant Discharge Elimination System Manual
Appendix A2 - Structural Controls

Revision 0
November 2002

Drop Inlet Protection



DESCRIPTION
A variety of drop inlet protection methods are used to intercept sediments at inlets through the use of stone, filter fabric, or other materials.

PRIMARY USE
Drop inlet protection is normally used as a second defense in site erosion control. A backup to onsite systems that have limited effectiveness.

APPLICATIONS

- Filter barrier when site is less than one acre and slope is less than 5%.
- Block and gravel are used when flows exceed 0.5 cfs.
- Wire mesh and gravel are used where traffic crosses inlet.

LIMITATIONS
Ponding will occur at the inlet, with possible flooding as a result. Inlet protection is only viable at low-point inlets. Inlets that are on a slope cannot be effectively protected because storm water will bypass the inlet and continue downstream, causing an overload condition at inlets beyond.

MAINTENANCE REQUIREMENTS
Inspections should be made on a weekly basis, especially after large (>0.5 inches) storm events. When silt fence is used and the fabric becomes clogged, it should be cleaned or, if necessary, replaced. Also, sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when the volume of the basin is reduced by 50%.

For systems using stone filters, when the stone filter becomes clogged with sediment, the stones must be pulled away from the inlet and cleaned or replaced. Since cleaning of gravel at a construction site may be difficult, an alternative approach would be to use the clogged stone as fill material and put new stone around the inlet.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- Construction Wastes

Impact

- Significant
- Medium
- Low
- Unknown or Questionable



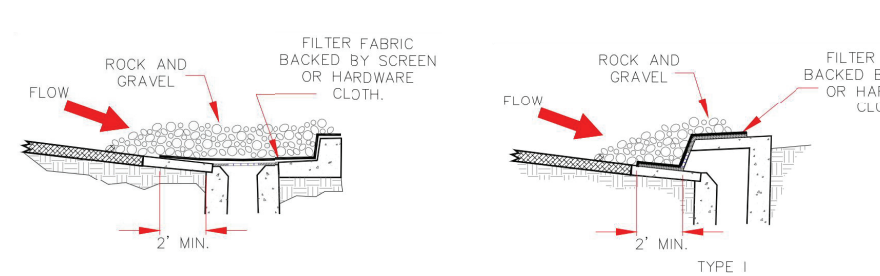
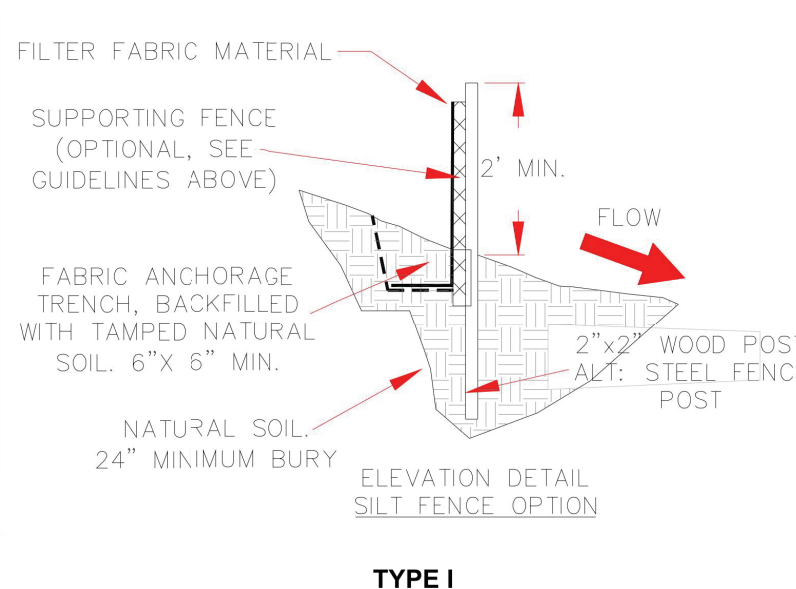
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National Pollutant Discharge Elimination System Manual
Appendix A2 - Structural Controls

Revision 0
November 2002

Drop Inlet Protection (continued)



TYPE II

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A2-18

EROSION CONTROL/ENVIRONMENTAL PROTECTION/STORM WATER POLLUTION PREVENTION PLAN WATER AND WASTEWATER GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULFILLING ALL NECESSARY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, OBTAINING AN NPDES PERMIT PRIOR TO CONSTRUCTION, FILLING OUT THE NOTICE OF INTENT (NOI) APPLICATION, AND FILLING OUT THE NOTICE OF TERMINATION (NOT) APPLICATION. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE IMPLEMENTATION OF AND INSPECTION REPORTS FOR THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THE CONTRACTOR SHALL SUBMIT THE SWPPP WITH THE PROPOSED CONSTRUCTION STAGING AREA AND TEMPORARY SANITARY FACILITIES CLEARLY SHOWN. ANY CHECK DAMS, SILT FENCES, OR OTHER BEST MANAGEMENT PRACTICES (BMPs) THAT ARE REQUIRED IN THE APPROVED SWPPP SHALL BE INCLUDED IN AND ARE INCIDENTAL TO THE SWPPP BID AMOUNT.
2. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED SWPPP ON-SITE AT ALL TIMES, AND SHALL COMPLY WITH THE REQUIREMENTS INDICATED ON THAT PLAN.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST AND EROSION CONTROL REGULATIONS. THE CONTRACTOR SHALL PREPARE AND OBTAIN ANY NECESSARY DUST OR EROSION CONTROL PERMITS FROM THE REGULATORY AGENCIES.
4. THE CONTRACTOR SHALL EITHER PROMPTLY REMOVE ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY OR INSTALL BMPs IDENTIFIED IN THE APPROVED SWPPP TO PREVENT DISCHARGE OF EXCAVATED MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY DURING A RAIN OR WIND EVENT.
5. THE CONTRACTOR SHALL IMPLEMENT THE APPROVED SWPPP AND ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY.
6. THE CONTRACTOR SHALL MITIGATE EROSION OF TEMPORARY OR PERMANENT DIRT SWALES BY INSTALLING BMPs IDENTIFIED IN THE APPROVED SWPPP IN THE SWALES PERPENDICULAR TO THE DIRECTION OF FLOW, AND AT INTERVALS AS SPECIFIED IN THE SWPPP.
7. CONSTRUCTION AREAS SHALL BE WATERED FOR DUST CONTROL IN COMPLIANCE WITH GOVERNMENT ORDINANCES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SUPPLYING WATER AS REQUIRED. WATERING, AS REQUIRED FOR CONSTRUCTION AND DUST CONTROL, SHALL BE CONSIDERED INCIDENTAL TO CONSTRUCTION AND NO MEASUREMENT OR PAYMENT SHALL BE MADE THEREFOR.
8. ANY AREAS DISTURBED BY CONSTRUCTION AND NOT COVERED BY LANDSCAPING OR AN IMPERVIOUS SURFACE SHALL BE REVEGETATED WITH NATIVE GRASS SEEDING. WHEN CONSTRUCTION ACTIVITIES CEASE AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME WITHIN 14 DAYS, STABILIZATION MEASURES MUST BE INITIATED. UNLESS INDICATED OTHERWISE ON THESE PLANS OR ON THE LANDSCAPING PLAN, NATIVE GRASS SEEDING SHALL BE SEEDING PER SECTION 1012 OF THE NEW MEXICO STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, APWA NM CHARTER, LATEST EDITION.
9. ALL WASTE PRODUCTS FROM THE CONSTRUCTION SITE, INCLUDING ITEMS DESIGNATED FOR REMOVAL, CONSTRUCTION WASTE, CONSTRUCTION EQUIPMENT WASTE PRODUCTS (OIL, GAS, TIRES, ETC.) GARBAGE, GRUBBING, EXCESS CUT MATERIAL, VEGETATIVE DEBRIS, ETC. SHALL BE APPROPRIATELY DISPOSED OF OFF-SITE AT NO ADDITIONAL COST TO THE OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN PERMITS REQUIRED TO HAUL OR DISPOSE OF WASTE PRODUCTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE WASTE DISPOSAL SITE COMPLIES WITH GOVERNMENT REGULATIONS REGARDING THE ENVIRONMENT, ENDANGERED SPECIES, AND ARCHAEOLOGICAL RESOURCES.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANUP AND REPORTING OF SPILLS OF HAZARDOUS MATERIALS ASSOCIATED WITH THE CONSTRUCTION SITE. HAZARDOUS MATERIALS INCLUDE GASOLINE, DIESEL FUEL, MOTOR OIL, SOLVENTS, CHEMICALS, PAINTS, ETC. WHICH MAY BE A THREAT TO THE ENVIRONMENT. THE CONTRACTOR SHALL REPORT THE DISCOVERY OF PAST OR PRESENT SPILLS TO THE NEW MEXICO ENVIRONMENT DEPARTMENT EMERGENCY RESPONSE TEAM AT 505-827-9329.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING SURFACE AND UNDERGROUND WATER. CONTACT WITH SURFACE WATER BY CONSTRUCTION EQUIPMENT AND PERSONNEL SHALL BE MINIMIZED. EQUIPMENT MAINTENANCE AND REFUELING OPERATIONS SHALL BE PERFORMED IN AN ENVIRONMENTALLY SAFE MANNER IN COMPLIANCE WITH GOVERNMENT REGULATIONS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE REGULATIONS CONCERNING CONSTRUCTION NOISE AND HOURS OF OPERATION.
13. WHERE STORM INLETS ARE SUSCEPTIBLE TO INFLOW OF SILT OR DEBRIS FROM CONSTRUCTION ACTIVITIES, PROTECTION SHALL BE PROVIDED ON THEIR UPSTREAM SIDE UTILIZING BMPs IDENTIFIED IN THE APPROVED SWPPP.



ARCHITECT

ENGINEER



PROJECT

NUESENDA BUILDING A
4100 PAN AMERICAN FREEWAY
ALBUQUERQUE, NM

REVISIONS

△
△
△
△
△

DRAWN BY: SLK

REVIEWED BY: MDT

DATE: 11-14-17

PROJECT NO.

DRAWING NAME

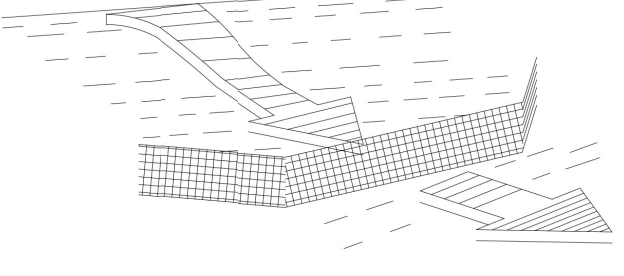
EROSION AND
SEDIMENT CONTROL
DETAILS AND NOTES

SHEET NO.

ESC 102

PO BOX 400 LOS LUNAS NM 87031 888-712-5120

Silt Fence



Applications

- ✓ Perimeter Control
- ✓ Slope Protection
- ✓ Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- Waste Management
- Housekeeping Practices

DESCRIPTION

A silt fence consists of geotextile fabric supported by backing stretched between posts, with the lower edge securely embedded in soil downstream of disturbed areas. Intercepts runoff in the form of sheet flow and provides filtration, sedimentation, and velocity reduction.

PRIMARY USE

Silt fences are used as perimeter control downstream of disturbed areas, and for non-concentrated sheet-flow conditions.

APPLICATIONS

Silt fences provide an economical way to mitigate overflow, non-concentrated flows, and as a perimeter control device. Best with coarse to silty soil types and to control wind erosion on sandy soils.

LIMITATIONS

Minor ponding will likely occur at the upstream side of the silt fence, resulting in minor localized flooding.

Fences that are constructed in swales or low areas subject to concentrated flow may be overtopped, resulting in failure of the filter fence. Silt fences subject to areas of concentrated flow (waterways with flows >1 cfs) are not acceptable.

Silt fence can interfere with construction operations; therefore, planning of access routes onto the site is critical.

Silt fence can fail structurally under heavy storm flows, creating maintenance problems and reducing the effectiveness of the system.

MAINTENANCE REQUIREMENTS

Inspections should be made on a weekly basis, especially after large storm events. If the fabric becomes clogged, it should be cleaned or, if necessary, replaced.

Sediment should be removed when it reaches approximately one-half the height of the fence.

Targeted Constituents

- ✓ Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- ✓ Floatable Materials
- Construction Wastes

Impact

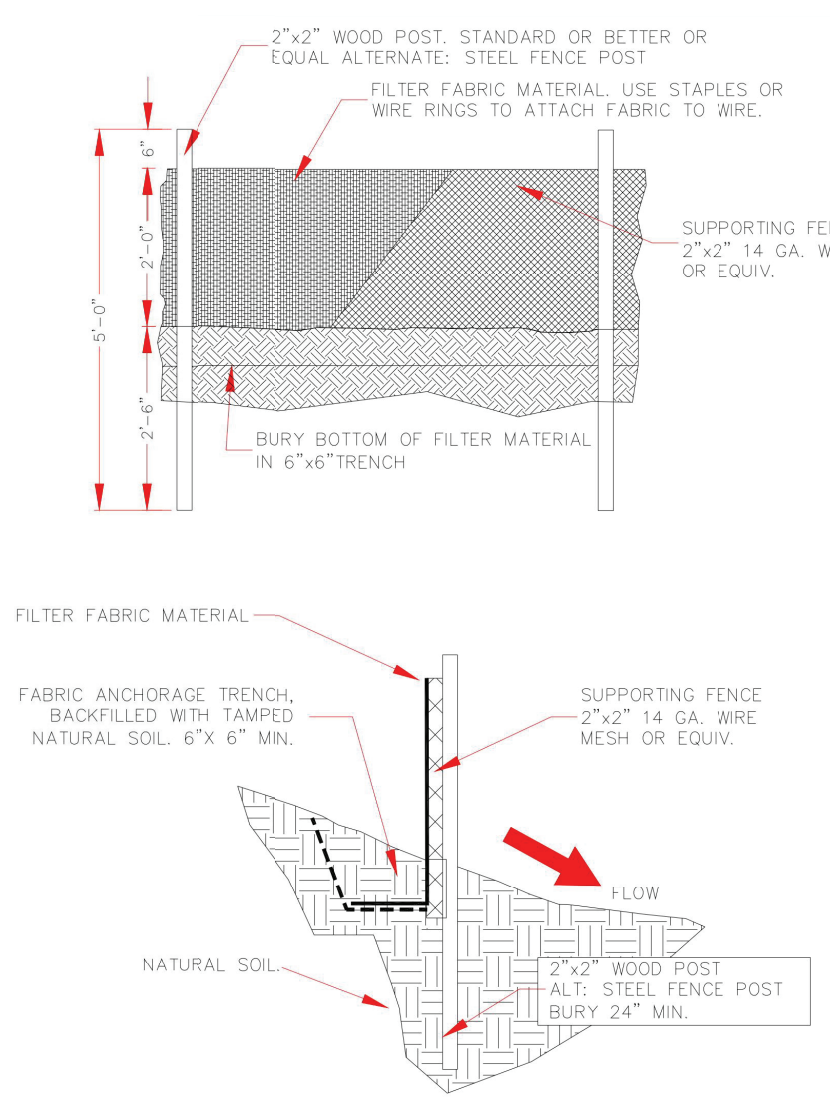
- ✓ Significant
- ✓ Medium
- Low
- Unknown or Questionable

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A4-5

Silt Fence (continued)



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A2-4

Section 1: Erosion & Sediment Control - Construction Activities

SWPPP Cut Sheet:

Filtrex® Sediment Control

Sediment & Perimeter Control Technology

PURPOSE & DESCRIPTION

Filtrex® Sediment control is a three-dimensional tubular sediment control and storm water runoff filtration device typically used for **perimeter control** of sediment and other soluble pollutants (such as phosphorus and petroleum hydrocarbons), on and around construction activities.

APPLICATION

Filtrex® Sediment control is to be installed down slope of any disturbed area requiring erosion and sediment control and filtration of soluble pollutants from runoff. Sediment control is effective when installed perpendicular to sheet or low concentrated flow. Acceptable applications include:

- Site perimeters
- Above and below disturbed areas subject to sheet runoff, interrill & rill erosion
- Above and below exposed and erodible slopes
- Around area drains or inlets located in a 'sump'
- On compacted soils where trenching of silt fence is difficult or impossible
- Around sensitive trees where trenching of silt fence is not beneficial for tree survival or may unnecessarily disturb established vegetation.
- On frozen ground where trenching of silt fence is impossible.
- On paved surfaces where trenching of silt fence is impossible.

INSTALLATION

1. Sediment control used for perimeter control of sediment and soluble pollutants in storm runoff shall meet Filtrex® Sox® Material Specifications and use Certified Filtrex® FilterMedia™.
2. Contractor is required to be Filtrex® Certified™ as determined by Filtrex® International, LLC

(440-926-2607 or visit website at www.filtrex.com). Certification shall be considered current if appropriate identification is shown during time of bid or at time of application (current listing can be found at www.filtrex.com). Look for the Filtrex® Certified™ Seal.

3. Sediment control will be placed at locations indicated on plans as directed by the Engineer.
4. Sediment control should be installed parallel to the base of the slope or other disturbed area. In extreme conditions (i.e., 2:1 slopes), a second Sediment control shall be constructed at the top of the slope.
5. Effective Sox™ height in the field should be as follows: 8" Diameter Sediment control = 6.5" high, 12" Diameter Sediment control = 9.5" high, 18" Diameter SiltSox™ = 14.5" high, 24" Diameter Sediment control = 19" high.
6. Stakes shall be installed through the middle of the Sediment control on 10 ft (3m) centers, using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) hard wood stakes. In the event staking is not possible, i.e., when Sediment control is used on pavement, heavy concrete blocks shall be used behind the Sediment control to help stabilize during rainfall/runoff events.
7. Staking depth for sand and silt loam soils shall be 12 in (300mm), and 8 in (200mm) for clay soils.
8. Loose compost may be backfilled along the upslope side of the Sediment control, filling the seam between the soil surface and the device, improving filtration and sediment retention.
9. If the Sediment control is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.

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10. Filtrex® Sediment control is not to be used in perennial, ephemeral, or intermittent streams.
- See design drawing schematic for correct Filtrex® Sediment control installation (Figure 1-1).
11. **INSPECTION AND MAINTENANCE**
Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. Sediment control should be regularly inspected to make sure they maintain their shape and are producing adequate hydraulic flow-through. If ponding becomes excessive, additional Sediment control may be required to reduce effective slope length or sediment removal may be necessary. Sediment control shall be inspected until area above has been permanently stabilized and construction activity has ceased.
 1. The Contractor shall maintain the Sediment control in a functional condition at all times and it shall be routinely inspected.
 2. If the Sediment control has been damaged, it shall be repaired, or replaced if beyond repair.
 3. The Contractor shall remove sediment at the base of the upslope side of the Sediment control when accumulation has reached 1/2 of the effective height of the Sediment control, or as directed by the Engineer. Alternatively, a new Sediment control can be placed on top of and slightly behind the original one creating more sediment storage capacity without soil disturbance.
 4. Sediment control shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.
 5. The FilterMedia™ will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.
 6. For long-term sediment and pollution control applications, Sediment control can be seeded at the time of installation to create a vegetative filtering system for prolonged and increased filtration of sediment and soluble pollutants (contained vegetative filter strip). The appropriate seed mix shall be determined by the Engineer.

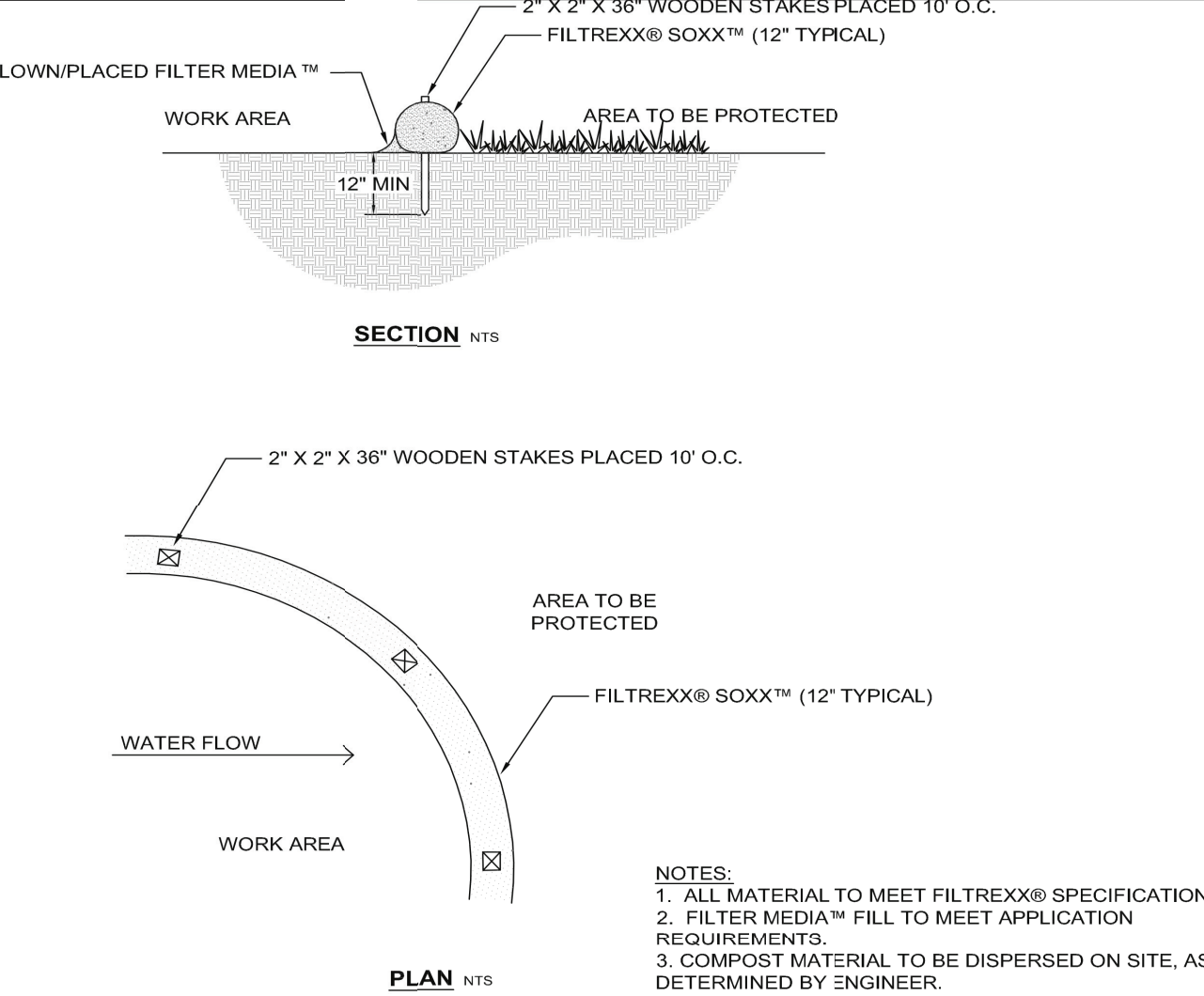
Slope Percent	Maximum Slope Length Above Sediment Control in Feet (meters)*				
	6 in (150 mm) Sediment control	12 in (300 mm) Sediment control	18 in (450 mm) Sediment control	24 in (600mm) Sediment control	32 in (800mm) Sediment control
	6.5 in (160 mm)**	9.5 in (240 mm)**	14.5 in (360 mm)**	19 in (480 mm)**	26 in (650 mm)**
2 (or less)	900 (160)	750 (225)	1000 (300)	1300 (400)	1650 (500)
5	400 (120)	500 (150)	550 (165)	650 (200)	750 (225)
10	200 (60)	250 (75)	300 (90)	400 (120)	500 (150)
15	140 (40)	170 (50)	200 (60)	325 (100)	450 (140)
20	100 (30)	125 (38)	140 (42)	260 (80)	400 (120)
25	80 (24)	100 (30)	110 (33)	200 (60)	275 (85)
30	60 (18)	75 (23)	90 (27)	130 (40)	200 (60)
35	60 (18)	75 (23)	80 (24)	115 (35)	150 (45)
40	60 (18)	75 (23)	80 (24)	100 (30)	125 (38)
45	40 (12)	50 (15)	60 (18)	80 (24)	100 (30)
50	40 (12)	50 (15)	55 (17)	65 (20)	75 (23)

* Based on a failure point of 36 in (0.9 m) super silt fence (wire reinforced) at 1000 ft (300 m) of slope, watershed width equivalent to receiving length of sediment control device, 1 in (25 mm) (24 in (610 mm)) rain event.
** Effective height of Sediment control after installation and with constant head from runoff as determined by Ohio State University.

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SWPPP Cut Sheet - 1.1: Filtrex® Sediment Control



SECTION NTS

2" X 2" X 36" WOODEN STAKES PLACED 10' O.C.
FILTREXX® SOXX™ (12" TYPICAL)

BLOWN/PLACED FILTER MEDIA™

WORK AREA

12" MIN

AREA TO BE PROTECTED

PLAN NTS

2" X 2" X 36" WOODEN STAKES PLACED 10' O.C.

WATER FLOW

WORK AREA

AREA TO BE PROTECTED

FILTREXX® SOXX™ (12" TYPICAL)

NOTES:

1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

FILTREXX® SEDIMENT CONTROL

NTS

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Concrete Waste Management

DESCRIPTION

Concrete waste management prevents or reduces the discharge of pollutants to storm water by conducting washout onsite, performing onsite washout in a designated area, and training employees and subcontractors.

APPLICATIONS

The following low-cost measures will help reduce storm water pollution from concrete wastes:

- Store dry and wet materials under cover, away from drainage areas.
- Avoid mixing excess amounts of fresh concrete or cement onsite.
- Perform washout of concrete trucks offsite or in designated areas only.
- Do not wash out concrete trucks into storm drains, open ditches, streets, or streams.
- Do not allow excess concrete to be dumped onsite except in designated areas.
- For onsite washout:
 - ✎ Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Prevent runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
 - ✎ Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed of properly.
- When washing concrete to remove fine particles and expose the aggregate, avoid creating runoff by draining the water to a bermed or level area.
- Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stock pile, or dispose in the trash.
- Train employees and subcontractors in proper concrete waste management.

LIMITATIONS

Offsite washout of concrete wastes may not always be possible.

MAINTENANCE REQUIREMENTS

Inspect subcontractors to ensure that concrete wastes are being properly managed.

If using a temporary pit, dispose of hardened concrete on a regular basis.

Applications

- Perimeter Control
- Slope Protection
- Sediment Trapping
- Channel Protection
- Temporary Stabilization
- Permanent Stabilization
- ✓ Waste Management
- ✓ Housekeeping Practices

Targeted Constituents

- Sediment
- Nutrients
- Toxic Materials
- Oil and Grease
- Floatable Materials
- ✓ Construction Wastes

Impact

- Significant
- ✓ Medium
- Low
- Unknown or Questionable

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PO BOX 400 LOS LUNAS NM 87031 888-712-5120

ARCHITECT

ENGINEER



PROJECT

NUESENDA BUILDING A
4100 PAN AMERICAN FREEWAY
ALBUQUERQUE, NM

REVISIONS

△
△
△
△
△

DRAWN BY: SLK

REVIEWED BY: MDT

DATE: 11-14-17

PROJECT NO.

DRAWING NAME

EROSION AND
SEDIMENT CONTROL
DETAILS AND NOTES

SHEET NO.

ESC 103

OF