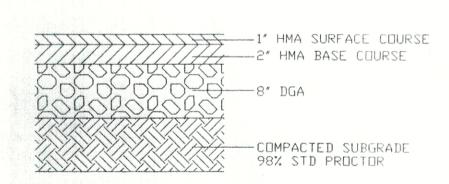


1/2" DEEP GROOVE - SURFACE TYXIVXIVX BASE 4" THK.CONCRETE--COMPACTED SUBBASE

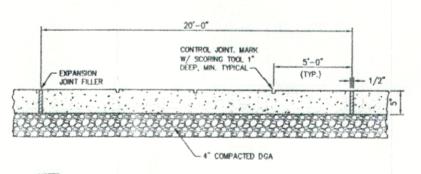
VARIES-SEE PLAN

TURN-DOWN SIDEWALK

## TEMPORARY CONSTRUCTION INGRESS/EGREES



ASPHALT PAVEMENT SECTION



NOTES:
1. CONCRETE SHALL BE 3500 PSI.
2. PROMDE "FORTA FERRO" FIBER REINFORCEMENT AT A RATE OF 1.5 LBS. PER CUBIC YARD OF CONCRETE.

3. PROVIDE 1/4" EXPANSION JOINT WITH PREMOULDED FILLER STRIP AT 20' MAX SPACING IN 4. PROMOE 1" DEEP, TOOLED CONTROL JOINTS AT 5' ON CENTER IN WALK. 5. PROVIDE EXPANSION JOINT CONTINUOUS WHERE WALK ABUTS CONCRETE STRUCTURES AND SIDEWALKS.

6. PROVIDE EDGE EXPANSION JOINT AT DOOR LOCATIONS AND EDGE OF BUILDING.

7. SIDEWALK CROSS SLOPE 1% MINIMUM AND 2% MAXIMUM FOR ALL SIDEWALKS.

8. DGA SHOULD BE COMPACTED A MINIMUM OF 98 PERCENT OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY AS PER ASTM D-698 OR A MINIMUM OF 85 PERCENT RELATIVE DENSITY AS PER ASTM D4253. AND D4254.

SIDEWALK DETAIL

PHASING AND SEQUENCING NOTES 1. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR MUST INSTALL THE CONSTRUCTION ENTRANCE.

MSD DETAILS

MSD\_DETAIL 

DETAIL DESCRIPTION

ER-01-03 STABILIZED CONSTRUCTION ENTRANCE

EF-01-02 STORM DRAIN INLET PROTECTION

GENERAL NOTES 1. WORK LIMIT AREA = 2500 sf. 2. HYDRÓLOGIC SOIL GROUP AT FINISH GRADE SHALL BE CONSISTENT WITH EXISTING SOIL TYPES. 2. ONCE THE CONSTRUCTION ENTRANCE HAVE BEEN INSTALLED, THE CONTRACTOR MAY START DEMOLITION, CRADING AND INSTALLATION OF THE PROPOSED Building 3. CONTOUR DATA ON THIS PLAN WAS DERIVED FROM Lojic Data. 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING EXISTING ROADWAYS ONCE CONSTRUCTION ACTIVITY BEGINS & IN CONFORMITY TO MSD EPSC IMEASURES.

5. LIMITS OF DISTURBANCE = 1500 sf.. 6. EPSC CONTROLS TO BE INSPECTED EVERY 7 CALANDER DAYS AND/OR AFTER EVERY RAIN FALL EVEN TOTALING 0.5" OR MORE. 7. RECEIVING STREAM IS South Fork Beargross Creek

 THE SITE CAN BE FOUND ON THE FLOOD INSURANCE RATE MAP: COMMUNITY OF Louisville, 21111C0042E, dated December 05, 2006. 9. SITE IS ENTIRELEY MADE OF CONCRETE WITH NO SOIL TO PRESERVE 10. THE EROSION PREVENTION AND SEDIMENT CONTROL DEVICES SHOWN ON THIS PLAN SET ARE INTENDED TO BE THE MINIMUM CONTROL MEASURES. ADDITIONAL EPSC DEVICES MAY NEED TO BE INSTALLED AS NECESSARY BY THE CONTRACTOR TO PREVENT EROSION AND SEDIMENTATION.

11. AT THE END OF EACH WORK DAY, THE SITE SHALL BE CLEANED OF SEDIMENT AND DEBRIS. DISTURBED AREAS SHALL HAVE SET CONTROL INSTALLED OR WILL BE STABILIZED SO THAT SEDIMENT WILL NOT GET OFF SITE OR INTO THE STORM SYSTEM DURING A RAIN EVENT.

EROSION AND SEDIMENT CONTOL NOTES 1. THE APPROVED EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) PLAN SHALL BE IMPLEMENTED PRIOR TO AN LAND-DISTURBING ACTIVITY ON THE CONSTRUCTION SITE, ANY MODIFICATIONS TO THE APPROVED EPSC PLAN MUST BE REVIEWED AND APPROVED BY MSD'S PRIVATE DEVELOPMENT REVIEW OFFICE, EPSC BMP'S SHALL BE INSTALLED PER THE PLAN AND MSD STANDARDS 2. ACTIONS MUST BE TAKEN TO MINIMIZE THE TRACKING OF MUD AND SOIL FROM CONSTRUCTION AREAS ONTO PUBLIC ROADWAYS, SOIL TRACKED ONTO THE ROADWAY SHALL BE REMOVED DAILY. 3 SEDIMENT-LADEN GROUNDWATER ENCOUNTERED DURING TRENCHING, BORRING, OR OTHER EXCAVATION ACTIVITIES SHALL BE PUMPED TO A SEDIMENT TRAPPING DEVICE PRIOR TO BEIN DISCHARGED INTO A STREAM, POND, SWALE OR CATCH BASIN. 4. WHERE CONSTRUCTION OR LAND DISTURBING ACTIVITY WILL OR HAS TEMPORARILY CEASED ON ANY PORTION OF A SITE, TEMPORARY SITE STABLUZATION MEASURES SHALL FE REQUIRED AS SOON AS PRACTICABLE, BUT NO LATER THAN 14 CALENDAR DAYS AFTER THE ACTIVITY HAS CEASED.

1. THE CONTRACTORS ATTENTION IS DIRECTED TO THE GEOTECHNICAL ON THIS SHEET. 2. THE CONTRACTOR SHALL OBTAIN THE REQUIRED CONSTRUCTION AND ENCROACHMENT PERMITS FROM MSD AND METRO PUBLIC WORKS DEPARTMENT. 3. BLASTING IS NOT PERMITTED UNLESS AGREED TO BY OWNER, CONTRACTOR & GOVERNING AUTHORITIES. 8. PDBI DOES NOT CERTIFY TO THE ACCURACY OR COMPLETENESS OF THE UTILITIES SHOWN HEREON. 9. THE ENGINEER DOES NOT GUARANTEE THE ACCURACY OF AFRIAL MAPPING, CONTRACTOR SHALL VERIEY ACCURACY OF AFRIAL MAPPING AND VERIEY ALL QUANTITIES PRIOR TO BIDDING PROJECT. TO, CONTRACTOR SHALL PROVIDE ALL NEVESSARY CONTROL POINT, SURVEY, LAYOUT AND CONSTRUCTION STAKING FOR CONSTRUCTION PURPOSES.

2. THE DEVELOPER WILL UTILIZE A REGISTER GEO-TECHNICAL ENGINEER TO TEST, VERIFY A REPORT TO PROVED SATISFACTORY ASSURANCE EMBANKMENT AND PAVEMENT STABILITY. ALL EMBANKMENT SECTIONS IN EXCESS OF FOUR DEPTH. WILL DE TECTU DEPTH WILL BE TESTED AT ONE (1) FOOT LA 3. ANY UNSTABLE SOILS AND OTHER MATERIAL ENCOUNTERED DURING CONSTRUCTION OF THE FOUNDATION WILL BE REMOVED TO THE DEPTH BY THE GEO-TECHNICAL ENGINEER. THE FILL EMBANKMENT WILL BE SELECTED MATERIALS AS COMPACTED IN ACCORPANCE WITH GEO-TECHNIC ENGINEERS SPECIFICATIONS. 4. A GEO-TECHNICAL ENGINEER SHALL BE REOBSERVE THE PROOF ROLLING AND A GEO-TE ENGINEER SHALL BE CONSULTED PRIOR TO THE PLACEMENT OF ANY FILL MATERIAL ON SITE.

TYPE, COMPACTION, AND PLACEMENT OF THESE MATERIALS AND MAKE RECOMMENDATIONS FOR UNISTABLE OR UNSUITABLE CONDITIONS ENCOUR RDBI ASSUMES NO RESPONSIBILITIES FOR BUILD WALL FAILURES, OR OTHER RELATED INCIDENT EROSION CONTROL BLANKET

reduce the discharge of pollutants that are associated with concrete washout waste

associated with concrete washout waste through consolidation of solids and retention of liquids.
Uncured concrete and associated liquids are highly alkaline which may leach into the soil and contaminate ground water or discharge to a waterbody or wetland which can elevate the pH and be harmful to aquatic life.

Performing concrete washout by designated

Site Management
1. Complete construction/Installation of the system and have washout locations

system. These systems are typically connected to a natural conveyance system.

Where necessary, provide stable ingress and egress (see Temporary Construction Ingress/Egress Pad on page 17).

It is recommended that washout systems be

Location
L Locate concrete washout systems at least 50 feet from any creeks, wetlands, ditches, karst features, or storm drains/manmade

4. Vashout will not impact future land uses (i.e. open spaces, landscaped areas, home sites

sites.
6. The design and size of the system can be adjusted to accommodate the expected

Designed and Installed Units

1. These units are designed and installed on site. They tend to be less reliable than prefabricated systems and are often prone to fallure. Concrete washout systems can be constructed above on below the systems.

below grade with an additional containment structure above grade.

2. Vashout systems shall utilize a pit or berned area designed and maintained at a capacity to contain all liquid and concrete waste generated by washout operations.

3. The volume of the system must also be designed to contain runoff that drains to the system and rainfall that enters the system for a two-vent frequency. 24-hour

Uning to control seepage.

5. The bottom of excavated pit should be above the seasonal high water table.

polyethylene lining.

4. Include a minimum four-inch freeboard as part of the design.

Remove as much mud as possible when washing out.
 Stop washing out in an area if you observe water running off the designated area or if the containment system is leaking or overflowing and ineffective.
 Do not back flush equipment at the project site. Back flushing should be restricted to the plant as it generates large volumes of waste that nore than likely will exceed the capacity of most washout systems. If an emergency arises, back flush should only be performed with the permission of an on-site manager for the project.
 Bo not use additives with wash water. Do not use solvents or acids that may be used at the target plant.

Concrete washout systems are implemented to

Performing concrete washout in designated areas and into specifically designed systems reduces the impact concrete washout will have on the environment.

operational prior to concrete delivery.

Do not wash out concrete trucks or equipment into storm drains, wetlands, streams, rivers, creeks, ditches, or streets.

Never wash out into a storm sewer drainage system These systems are trulcally.

5. It is recommended that washout systems be restricted to washing concrete from mixer and pump trucks and not used to dispose of excess concrete or residual loads due to potential to exceed the design capacity of the washout system. Small amounts of excess or residual concrete (not washout water) may be disposed of in areas that will not result in flow to an area that is to be protected.
6. Install systems at strategic locations that are convenient and in close proximity to work areas and in sufficient number to

areas and in sufficient number to accommodate the demand for disposal.

Install signage identifying the location of concrete washout systems.

conveyance systems.

To the extent practical, locate concrete washout systems in relatively flat areas that have established vegetative cover and do not receive runoff from adjacent land areas.

Locate in areas that provide easy access for concrete tracks and other construction.

or concrete trucks and other construction equipment.
4. Locate away from other construction traffic to reduce the potential for damage to the

General Design Considerations

1. The structure or system shall be designed to contain the anticipated washout water associated with construction activities.

2. The system shall be designed, to the extent practical, to eliminate runoff from entering the washout system.

3. Runoff from a rainstorm or snownelt should not carry wastes away from the washout location.

Prefabricated Washout Systems/Containers

1. Self-contained sturdy containment systems that are delivered to a site and located at strategic locations for concrete disposal.

2. These systems are manufactured to resist damage from construction equipment and protect against leaks or spills.

3. Manufacturer or supplier provides the containers. The project site manager naintains the system or the supplier provides complete service that includes maintenance and disposal.

and disposal.

Units are often available with or without ramps. Units with ramps lend themselves t accommodate pump trucks.

5. Maintain according to the manufacturers

constructed above or below grade. It is not uncommon to have a system that is partly below grade with an additional containment

system for a two-year frequency, 24-hour

Below Grade System

1. A washout system installed below grade should
be a ninimum of ten feet wide by ten feet
long, but sized to contain all liquid and waste
that is expected to be generated between
scheduled cleanant resinder

that is expected to be generated between scheduled cleanout periods.

2. The size of the pit may be limited by the size of polyethylene available. The polyethylene liming should be of adequate size to extend over the entire excavation.

3. Include a minimum 12-inch freeboard to reasonably ensure that the structure will not overtop during a rain event.

4. Line the pit with ten millimeter polyethylene liming to control seepage.

Above Grade System

1. A system designed and built above grade should be a minimum of ten feet wide by ten feet long, but sized to contain all liquid and waste that is expected to be generated between scheduled cleanout periods.

2. The size of the containment system may be limited by the size of polyethylene available. The polyethylene lining should be of adequate size to extend over the berm or containment system.

system.

3. The system design may utilize an earthen bern, straw bales, sandbags, or other acceptable barriers that will maintain its shape and integrity and support the acceptable linking.

Washout Procedures

1. Bo not leave excess mud in the chutes or hopper after the pour. Every effort should be made to empty the chutes and hopper at the pour. The less material left in the chutes and hopper, the quicker and easier the cleanout. Small amounts of excess concrete (not washout water) may be disposed of in areas that will not result in flow to an area that is to be protected.

2. At the washout location, scrape as much material fron the chutes as possible before washing them. Use non-water cleaning methods to minimize the chance for waste to flow off site.

site.

3. Remove as much mud as possible when washing

1. Minimum of ten millmeter polyethylene sheeting that is free of holes, tears, and other defects. The sheeting selected should be of an appropriate size to fit the washout system without seams or overlap of the lining descend and betalled contents.

inches in length, sandbags, or alternative fastener to secure polyethylene lining to the

containment system.

6. Non-collapsing and non-water holding cover for use during rain events (optional).

Installation
Prefabricated Washout Systems/Containers
1. Install and locate according to the
manufacturers recommendations.

Designed and Installed Systems

1. Utilize and follow the design in the storm

A base shall be constructed and prepared that is free of rocks and other debris that

that is free of rocks and other debris that may cause tears or punctures in the polyethylene lining.

Install the polyethylene lining for excavated systems, the lining should extend over the entire excavation. The lining for berned systems should be installed over the pooling area with enough material to extend the lining over the bern or containment system. The lining should be secured with pins, staples, or other fasteners.

other fasteners.
5. Place flags, safety fencing, or equivalent to

Place flags, safety fencing, or equivalent to provide a barrier to construction equipment and other traffic.
 Place a non-collapsing, non-water holding cover over the washout facility prior to a predicted rainfall event to prevent accumulation of water and possible overflow of the system (optional).
 Install signage that identifies concrete washout areas.
 Post signs directing contractors and suppliers to designated locations.

suppliers to designated locations.

Where necessary, provide stable ingress and egress (see Temporary Construction Ingress/Egress Pad on page 17) or alternative approach pad for concrete washout systems.

Maintenance
1. Inspect daily and after each storm event.
2. Inspect the integrity of the overall structure including, where applicable, the containment system.
3. Inspect the system for leaks, spills, and tracking of soil by equipment.
4. Inspect the polyethylene lining for failure, including tears and punctures.
5. Dince concrete wastes harden, remove and dispose of the material.
6. Excess concrete should be removed when the washout system reaches 50 percent of the design capacity. Use of the system should be discontinued until appropriate measures can be initiated to clean the structure. Prefabricated systems should also utilize this criterion, unless the nanufacturer has alternate specifications.
7. Upon removal of the soilds, inspect the structure. Repair the structure as needed or construct a new system.

structure. Repair the structure as needed or construct a new system.

B. Dispose of all concrete in a legal manner. Reuse the material on site, recycle, or haul the material to an approved construction/denolition landfill site. Recycling of material is encouraged. The waste material can be used for multiple applications including but not limited to roadbeds and building. The availability for recycling should be checked locally.

availability for recycling should be checked locally.

9. The plastic liner should be replaced after every cleaning; the removal of material will usually danage the lining.

10. The concrete washout system should be repaired or enlarged as necessary to maintain capacity for concrete waste.

11. Concrete washout systems are designed to promote evaporation. However, if the limids

promote evaporation. However, if the liquids do not evaporate and the system is near

do not evaporate and the system is near capacity it may be necessary to vacuum or remove the liquids and dispose of them in an acceptable method. Disposal may be allowed at the local sanitary sever authority provided their Notional Poliutant Discharge Elimination System permits allow for acceptance of this material. Another option would be to utilize a secondary containment system or basin for further devatering.

12. Prefabricated units are often pumped and the company supplying the unit provides this service.

the company supplying the unit provides this service.

13. Inspect construction activities on a regular basis to ensure suppliers, contractors, and others are utilizing designated washout areas. If concrete waste is being disposed of improperly, identify the violators and take appropriate action.

14. When concrete washout systems are no longer required, the concrete washout systems shall be closed. Dispose of all hardened concrete and other naterials used to construct the system.

15. Holes, depressions and other land disturbances associated with the system should be backfilled, graded, and stabilized.

water pollution prevention plan to install the system.

2. Dependent upon the type of system, either excavate the pit or install the containment

 Width=20 feet minimum or full width of entrance/exit roadway, whichever is greater.
 Length=150 feet minimum (length can be shorter for small sites).
 Thickness=eight inches minimum.
 Washing Facility (optional)
 Level area with three inch, or larger, washed aggregate or install a commercial wash rack, Divert waste water to a sediment trap or basin. (designed and installed systems).

2. Signage.

3. Drange safety fencing or equivalent.

4. Straw bales, sandbags (bags should be ultraviolet-stabilized geotextile fabric), soil material, or other appropriate materials that can be used to construct a containment system (above grade systems).

5. Metal pins or staples at a minimum of six inches in length, sandbags, or alternative designed and installed systems).

Materials

1. One to two and one-half inch diameter washed aggregate (Indiana Department of Transportation Course Aggregate No. 2 (see Transportation Course Aggregate No. 2 (see Appendix DD).

Cline-half to one and one-half inch diameter washed aggregate CINDDT CA No. 53 (see Appendix DD).

Geotextile fabric underlayment (see Appendix CD) (used as a separation layer to prevent intermixing of aggregate and the underlying soil material and to provide greater bearing strength when encountering wet conditions or soils with a seasonal high water table linitation).

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

Dimensions 1. Vidth=20 feet minimum or full width of

Installation

1. Renove all vegetation and other objectionable material from the foundation area.

2. Grade foundation and crown for positive drainage. If the slope of the construction entrance is toward a public road and exceeds two percent, construct an eight inch high diversion ridge with a ratio of 3-to-1 side slopes across the foundation area about 15 feet from the entrance to divert runoff away from the road (see Temporary Construction Ingress/Egress Pad CrossSection View Worksheet).

3. Install a culvert observable to be percent

Worksheet).

3. Install a culvert pipe under the pad if needed to maintain proper public roaddrainage.

4. If wet conditions are anticipated, place geotextile fabric on the graded foundation to improve stability.

5. Place aggregate (INDUT CA No. 2) to the dimensions and grade shown in the construction plans, leaving the surface smooth and sloped for drainage.

6. Top-dress the first 50 feet adjacent to the public roadway with two to three inches of

b. Top-dress the first 50 feet adjacent to the public roadway with two to three inches of washed aggregate (INDDT CA No. 53) (optional, used primarily where the purpose of the pad is to keep soil from adhering to vehicle tires!
c. Where possible, divert all storm water runoff and drainage from the ingress/egress pad to a sediment trap or basin.

Maintenance
1. Inspect daily,
2. Reshape pad as needed for drainage and
runoff control.
3. Top dress with clean aggregate as needed.
4. Innediately remove mud and sediment tracked
or washed onto public roads, Flushing should
only be used if the water can be conveyed
into a sediment trap or basin.

EROSION CONTROL BLANKET

Effective Life
The functional life of an erosion control blanket
is dependent on the materials used. Anchoring
Staples, pins or stakes used to prevent
movement or displacement of blanket. (Follow
manufacturers recommendations for specific

Materials

Organic (straw, excelsior, woven paper, coconut fiber, etc.) or synthetic nulch incorporated with a polypropylene, natural fiber or similar netting material. (The netting may be blodegradable, photodegradable or permanent.) Note: Some erosion control blanket nettings may pose a threat to certain species of wildlife if they become entangled in the netting matrix. Six to 12-inch staples, pins, or stakes.

Installation

1. Select the type and weight of erosion control blanket to fit the site conditions (e.g., slope, channel, flow velocity) per the manufacturers specifications.

2. Prepare the seedbed, add soil amendments, and permanently seed (see Permanent Seeding on page 35) the area immediately following seedbed

page 33) the area immediately following seedbed preparation.

3. Lay erosion control blankets on the seeded area so that they are in continuous contact with the soil with each up-slope or up-strean blanket overlapping the down-slope or down-strean blanket by at least eight inches, or follow manufacturers recommendations.

4. Tuck the uppermost edge of the upper blankets into a check slot (slit trench), backfill with soil and tamp down. In certain applications, the manufacturer may require additional check slots at specific locations down slope from the uppermost edge of the upper blankets.

upper blankets.

5. Anchor the blankets in place by driving staples, pins, or stakes through the blanket and into the underlying soil. Follow an anchoring pattern appropriate for the site conditions and as recommended by the manufacturer.

Maintenance
1. Inspect within 24 hours of each rain event and at least once every seven calendar days.
2. Check for erosion or displacement of the blanket.

3. If any area shows erosion, pull back that portion of the blanket covering the eroded area, add soll and tanp, reseed the area, replace and staple the blanket.

SILI FENCE

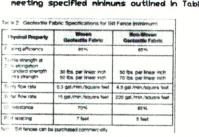
Location
1. Avoid locating on steep slopes or at curves in Drainage Area

1. Limited to one-quarter acre per 100 linear feet of fence.

2. Further restricted by slope steepness (see

Accessible for maintenance (removal of sediment and sitt fence repair).

Spacing Tuble 1. Slope Steepness Restrictions Percent Stope 



nesh fencing. Sbx feet maximum for extra-strength fabric without wire backing.

3)

1. Lay out the location of the fence so that it is parallel to the contour of the slope and at least 10 feet beyond the toe of the slope to provide a sediment storage area. Turn the ends of the fence up slope such that the point of contact between the ground and the botton of the fence end terminates at a higher elevation than the top of the fence at its lowest point (see Exhibit 1).

Excavate an eight-inch deep by four-inch wide trench along the entire length of the fence line (see Exhibit 2). Installation by plowing is

line (see Exhibit 2). Installation by plowing is also acceptable.

3. Install the sit fence with the filter fabric located on the up-slope side of the excavated trench and the support posts on the down-slope side of the trench.

4. Drive the support posts at least 18 Inches into the ground, tightly stretching the fabric between the posts as each is driven into the soil. A minimum of 12 inches of the filter fabric should extend into the trench. (If it is necessary to join the ends of two fences, use the wrap joint method shown in Exhibit 3.)

5. Lay the lower four inches of filter fabric on the botton of the trench and extend it toward the up-slope side of the trench.

6. Backfill the trench with soil material and compact it in place.

Note: If the sit fence is being constructed on-site, attach the filter fabric to the support posts (refer to Tables 1 and 2 for spacing and geotextle specifications) and attach wooden lathe to secure the fabric to the posts. Allow for at least 12 inches of fabric below ground level. Complete the silt fence installation, following steps 1 through 6 above.

Maintenance

Inspect within 24 hours of a rain event and at least once every seven calendar days.

If fence fabric tears, starts to decompose, or in any way becomes ineffective, replace the affected portion immediately. Note: All repairs should meet specifications as outlined within this neasure.

Remove deposited sediment when it is causing the filter fabric to bulge or when it reaches one-half the height of the fence at its lowest point. When contributing drainage area has been stabilized, remove the fence and sediment deposits, grade the site to blend with the surrounding area, and stabilize.

PERMANENT SEEDING

Site Preparation

Seedbed Preparation Grade and apply soll amendments.

Seeding Frequency Seed final graded areas daily while soil is still loose and noist.

Materials

1. Soil Amendments=Select materials and rates as determined by a soil test (contact your county soil and water conservation district or cooperative extension office for assistance and soil information, including available soil testing services) or 400 to 600 pounds of 12-12-12 analysis fertilizer on explaints. Consideration

services) or 400 to 600 pounds of 12-12-12 analysis fertilizer, or equivalent. Consider the use of reduced phosphorus application where soil tests indicate adequate phosphorous levels in the soil profile.

2. Seed=Select an appropriate plant species seed or seed mixture on the basis of soil type, soil ph, region of the state, time of year, and intended land use of the area to be seeded (see Table 1).

3. Mulch

Mulch Straw, hay, wood fiber, etc. (to protect

growth).

5. Anchored to prevent removal by wind or water or covered with premanufactured erosion control blankets.

Site Preparation

1. Grade the site to achieve positive drainage.

2. Add topsoil (see Topsoil Salvage and Utilization on page 25) or compost mulch (see Compost Mulching on page 59) to achieve needed depth for establishment of vegetation. (Compost material may be added to improve soil moisture holding capacity, soil friability, and nutrient availability.)

levels.

2. Apply soil amendments as recommended by the soil test and work into the upper two to four inches of soil. If testing is not done, apply 400 to 600 pounds per acre of 12-12-12 analysis familiary on arrivalent.

fertilizer, or equivalent.

3. Till the soil to obtain a uniform seedbed. Use

a disk or rake, operated across the slope, to work the soil amendments into the upper two to four inches of the soil.

Seeding
Optimum seeding dates are March 1 to May 10 and August 10 to September 30. Permanent seeding done between May 10 and August 10 may need to be irrigated. Seeding outside or beyond optimum seeding dates is still possible with the understanding that reseeding or overseeding may be required if adequate surface cover is not achieved. Reseeding or overseeding can be easily accomplished if the soil surface remains well protected with mulch.

1. Select a seeding mixture and rate from Toble 1. Select seed mixture based on site conditions, soil pH, intended land use, and expected level of maintenance.

2. Apply seed uniformly with a drill or cultipacker seeder (see Figure 2). Plant or cover the seed to a depth of one-fourth to one-half inch. If drilling or broadcasting the seed, ensure good seed-to-soil contact by firming the seedined with a roller or cultipacker after completing seeding operations. (If seeding is done with a hydroseeder (see Figure 3), fertilizer and mulch can be applied with the seed in a sturry mixture.)

3. Mulch all seeded areas (see Mulching on page 55 and Compost Mulching on page 59) and use appropriate methods to anchor the mulch in place. Consider using erosion control blankets on sloping areas and conveyance channels (see Erosion Control Blanket on page 63).

Maintenance

Inspect within 24 hours of each rain event

Seedbed Preparation
1. Test soil to determine pH and nutrient

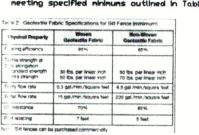
Density of Vegetative Cover Ninety percent or greater over the sol

Effective Life

1. Six months (maximum). 1. Installed parallel to the slope contour.
2. Minimum of 10 feet beyond the toe of the slope to provide a broad, shallow sediment

Materials and Sit Fence Specifications

1. Fabric=woven or non-woven geotextile fabric
meeting specified minimums outlined in Table 2.



Height=a minimum of 18 inches above ground level (30 inches maximum).
 Reinforcement fabric securely fastened to posts with wood lathe.
 Support Posts
 × 2 inch hardwood posts. Steel fence posts may be substituted for hardwood posts (steel posts should have projections for fastering fabric).
 Spacing

-Spacing Eight feet maximum if fence is supported by wire

Installation
Prefabricated slit fence (see Exhibits 1, 2, and

Maintenance

1. Inspect within 24 hours of each rain event and at least once every seven calendar days until the vegetation is successfully established.

2. Characteristics of a successful stand include vigorous dark green or bluishgreen seedlings with a uniform vegetative cover density of 90 percent or more.

3. Check for erosion or novement of mulch.

4. Repair damaged, bare, guilled, or sparsely vegetated areas and then fertilize, reseed, and apply and anchor mulch.

5. If plant cover is sparse or patchy, evaluate the plant materials chosen, soil fertility, moisture condition, and mulch application; repair affected areas either by overseeding or preparing a new seedled and reseeding. Apply and anchor mulch on the newly seeded areas.

6. If vegetation falls to grow, consider soil testing to determine soil ph or nutrient deficiency problems. (Contact your soil and water conservation district or cooperative extension office for assistance.)

7. If additional fertilization is needed to get a satisfactory stand, do so according to soil test recommendations.

8. Add fertilizer the following growing season. Fertilize according to soil test recommendations.

9. Fertilize turf areas annually. Apply fertilizer in a split application. For cool-season grasses, apply one-half in early fall. For warm-season grasses, apply one-third in late spring, one-third in late spring one-third in late spring.

10.

Table 1. Permanent Seeding Recommendations
This table provides several seed mixture options.
Additional seed mixtures are available
commercially. When selecting a mixture, consider
intended land use and site conditions, including
soil properties (e.g., soil pH and drainage), slope
aspect, and the tolerance of each species to
shade and drought.

Open List Maintenance Areas
premishing the more than one monthly

Seed Ministres

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Pure Dire Bood

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Seed Minteres Ball plan Seed Optimizes Ball pl 

1. Tell feacur

white clover 7 2 Bis.

1. Tell feacur

100 Bis.

5.5 to 7.5

Cornsoly bisepress 50 Bis.

5.5 to 7.5 For best results: (a) logures seed should be incontested; (b) seading instance consisting fregues should preferably be spring-seeded, although the great year betall exceled and the legume final seeded and the legume final seeded and the legume final seeding and Front Seeding on page 41), and (c) if legumes are fell-seeded, do so in early fell. <sup>7</sup> Tall feature provides title cover for, and may be train to some species of white. The Indiana Department of Natural Resources recognises the need for additional research on alternatives such as buffalograss, ortherdigues, whoolth bromagnas, and exictograss. The research, in 5.8 to 7.0 Bend Mintures

Rate gas Aure Pure
Cystesum Ball pill
the above permanent seeding nickures, at the following nete: (s) apring oats - one-fourth to three-fourthe bushel per acre
(b) wheet - no more than one-half bushel per sore A high potential for fertilizer, seed, and mulch to week exists on storp banks, cuts, and in channels and sress of concentrated flow.

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DESIGN SERVICES

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STREET 40204 BUILDING CHESTNUT S KENTUCKY DARD DSI F EAST ( 1032 Louisy S

DATE: 4-12-2017 DRAWN BY: SMS CHECKED BY: N. GRIMES APPROVED BY: N. GRIMES **REVISIONS:** 

SCALE: JOB NO.: 2017-066

7-17-17

HEET NUMBER:

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