

INSTALLATION

- MULCH OR TEMPORARY GRASSING SHALL BE APPLIED TO ALL EXPOSED AREAS WITHIN 14 DAYS OF DISTURBANCE.
- MULCH IS NOT SUITABLE FOR USE ON AREAS THAT WILL BE EXPOSED FOR SIX MONTHS OR LONGER. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION IS REQUIRED.
- MULCH CAN BE USED AS A SINGLE-EROSION CONTROL DEVICE FOR UP TO SIX MONTHS IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS ACHIEVED.
- MULCH MUST BE APPLIED AT THE APPROPRIATE DEPTH ANCHORED AS NEEDED, AND HAVE A CONTINUOUS 90% COVER OR GREATER OF THE SOIL SURFACE.
- IN CONCENTRATED FLOW AREAS, ENSURE MULCH IS PROPERLY ANCHORED OR AVOID LAYING MULCH ALL TOGETHER.
- GRADE SITE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING AND ANCHORING MULCH.
- INSTALL OTHER NEEDED/REQUIRED EROSION CONTROL MEASURES PRIOR TO PLACING MULCH ON AREA.
- LOOSEN COMPACTED SOIL TO A MINIMUM DEPTH OF THREE (3) INCHES.
- APPLY MULCH UNIFORM BY HAND OR BY MECHANICAL EQUIPMENT TO PROVIDE FULL COVERAGE OF THE EXPOSED AREA.
- CUTBACK ASPHALT SHALL BE APPLIED UNIFORM. CARE SHOULD BE TAKEN IN AREAS OF PEDESTRIAN TRAFFIC DUE TO PROBLEMS OF TRACING IN OR DAMAGE TO SHOES, CLOTHING, ETC.

MULCHING MATERIALS

- DRY STRAW OR HAY - EMBED STRAW OR HAY WITH THE ADVANTAGE OF EASY APPLICATION.
- WOOD WASTE - ORGANIC MATERIAL FROM THE CLEARING STAGE OF DEVELOPMENT SHOULD REMAIN ON SITE. BE CHIPPED AND APPLIED AS MULCH. THIS METHOD OF MULCHING CAN GREATLY REDUCE EROSION CONTROL COSTS.
- CUTBACK ASPHALT - SLOW CURING SHALL BE USED FOR EROSION CONTROL APPLICATIONS.
- POLYETHYLENE FILM - SHALL BE SECURED OVER BANKS OR STOCKPILED SOIL MATERIALS FOR TEMPORARY PROTECTION. THIS COVER MATERIAL CAN BE SALVAGED AND RE-USED.

MAINTENANCE

- ADD MULCH AS NEEDED TO MAINTAIN THE SUGGESTED DEPTH.
- ENSURE MINIMUM OF 90% COVERAGE OF ALL EXPOSED EARTH.
- IF ORGANIC MULCH IS TO BE LEFT AND INCORPORATED INTO THE SOIL, APPLY 20-30 POUNDS OF NITROGEN IN ADDITION TO THE FERTILIZER REQUIRED FOR VEGETATION.

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ANCHORING MULCH

- STRAW OR HAY MULCH SHALL BE ANCHORED IMMEDIATELY AFTER APPLICATION.
- MULCH ON SLOPES GREATER THAN 3% SHOULD BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AS SOR 55-1) OR OTHER SUITABLE TACKLER.
- WOOD WASTE ON SLOPES FLATTER THAN 3:1 (33%) DO NOT NEED ANCHORING.
- STRAW OR HAY MULCH CAN BE PRESSED INTO THE SOIL WITH A DISK WITH A DISK HANK WITH THE DISK SET STRAIGHT OR WITH A SPECIAL "PACKER DISK" DISKS MAY BE SMOOTH OR SERRATED AND SHOULD BE 20 INCHES OR MORE IN DIAMETER AND 8 TO 12 INCHES APART. THE SPACING OF THE DISKS SHOULD BE FULL ENOUGH NOT TO CUT THE MULCH BUT TO PRESS IT INTO THE SOIL LEAVING MUCH OF IT IN AN INCL. POSITION.
- STRAW OR HAY MULCH SPREAD WITH SPECIAL LOWWER "TIE EQUIPMENT" MAY BE ANCHORED WITH EMULSIFIED ASPHALT (GRADE AS SOR 55-1). THE ASPHALT EMULSION SHALL BE SPRAYED ONTO THE MULCH AS IT IS LIFTED FROM THE MACHINE OR SPRAYED ON THE MULCH IMMEDIATELY FOLLOWING MULCH APPLICATION WHEN STRAW OR HAY IS SPREAD BY METHODS OTHER THAN SPECIAL BLOWER EQUIPMENT.
- EMULSIFIED ASPHALT SHALL BE APPLIED AS A MIXTURE OF 100 GALLONS OF EMULSIFIED ASPHALT AND 100 GALLONS OF WATER PER TON OF MULCH.
- TACKERS AND BINDERS CAN BE SUBSTITUTED FOR EMULSIFIED ASPHALT. SYNTHETIC TACKERS OR BINDERS APPROVED BY SOOT SHALL BE APPLIED IN CONJUNCTION WITH OR IMMEDIATELY AFTER THE MULCH IS SPREAD. SYNTHETIC TACKERS SHALL BE MIXED AND APPLIED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- PLASTIC MESH OR NETTING WITH MESH NO LARGER THAN ONE INCH BY ONE INCH MAY BE NEEDED TO ANCHOR STRAW OR HAY MULCH ON UNSTABLE SOILS AND CONCENTRATED FLOW AREAS. THESE MATERIALS SHALL BE INSTALLED AND ANCHORED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
- NETTING OF THE APPROPRIATE SIZE SHALL BE USED TO ANCHOR WOOD WASTE. OPENINGS OF THE NETTING SHALL NOT BE LARGER THAN THE AVERAGE SIZE FOR THE WOOD WASTE CHIPS.
- POLYETHYLENE FILM SHALL BE ANCHOR TRENCHED AT THE TOP AS WELL AS INCREMENTALLY AS NECESSARY.

MULCHING APPLICATION REQUIREMENTS

MATERIAL	RATE	DEPTH
STRAW OR HAY	2 1/2 TON/ACRE	2" TO 4"
WOOD WASTE, CHIPS, SAWDUST, BARK	6 TO 8 TON/ACRE	2" TO 3"
CUTBACK ASPHALT	1200 GAL/ACRE OR 1/4 INCHES TO 1/2 INCHES TO DEPTH OF MANUFACTURER'S RECOMMENDATIONS	---
POLYETHYLENE FILM	SECURE WITH SOIL ANCHORS, WEIGHTS	---
GEOTEXTILES, JUTE MATTING, NETTING, ETC.	PER MANUFACTURER'S RECOMMENDATIONS	---

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TABLE 2 - EROSION CONTROL PLANTS

TYPE OF SPECIES	APPLICATION TYPE	APPLICATION RATES PER ACRE	PER 1000 SQ.FT.	RESOURCE AREA	PLANTING DATE BY RESOURCE AREA	OPTIMUM PLANTING DATES	REMARKS
BARLEY (Hordeum Vulgare)	ALONE	144 lbs. (8 bu.)	3.3 lbs. (0.6 bu.)	M-L	9/1 - 12/31	9/1 - 12/31	14,000 SEED PER POUND. WINTERHARDY. USE ON PRODUCTIVE SOILS.
LEPIDEZA ANNUAL (Lespedeza Sp.)	ALONE	40 lbs.	0.9 lbs.	M-L	3/1 - 9/31	3/1 - 9/31	200,000 SEED PER POUND. WARM WINTERHARDY FOR SEVERAL YEARS. USE INCLIMATE CL.
LEVEGRASS WEEPING (Lygodesmia Curvata)	ALONE	4 lbs.	0.1 lbs.	M-L	4/1 - 9/31	4/1 - 9/31	1,500,000 SEED PER POUND. MAY LAST FOR SEVERAL YEARS.
MILLET BROWNTOP (Panicum trichostachyoides)	ALONE	40 lbs.	0.9 lbs.	M-L	4/1 - 9/31	4/1 - 9/31	12,000 SEED PER POUND. WARM WINTERHARDY FOR SEVERAL YEARS. WILL PROVIDE 100 MACH COMPETITION IN WETTER SOILS OR HIGH RAINFALL.
MILLET PEARL (Pennisetum Glaberrimum)	ALONE	50 lbs.	1.1 lbs.	M-L	5/15 - 7/15	5/15 - 7/15	80,000 SEED PER POUND. QUICK GROWER COVER. MAY BE A BIT TALL IN HEIGHT. NOT RECOMMENDED FOR MIXTURES.
OATS (Avena Sativa)	ALONE	128 lbs. (8 bu.)	2.9 lbs. (0.7 bu.)	M-L	9/15 - 11/15	9/15 - 11/15	11,000 SEED PER POUND. USE ON PRODUCTIVE SOILS. NOT AS WINTERHARDY AS RYE OR BARLEY.
RYE (Secale Cereale)	ALONE	168 lbs. (10 bu.)	3.9 lbs. (0.8 bu.)	M-L	9/15 - 11/15	9/15 - 11/15	18,000 SEED PER POUND. QUICK GROWER COVER. ENOUGH TOURNANT AND WINTERHARDY.
KYBERGRASS ANNUAL (Lolium Temulentum)	ALONE	40 lbs.	0.9 lbs.	M-L	8/15 - 11/15	8/15 - 11/15	22,000 SEED PER POUND. VERY COMPETITIVE AND BOLD. TO BE USED IN MIXTURES.
SUDANGRASS (Sorghum Sudanicum)	ALONE	60 lbs.	1.4 lbs.	M-L	5/1 - 7/31	5/1 - 7/31	10,000 SEED PER POUND. GOOD ON UNPRODUCTIVE SOILS. NOT RECOMMENDED FOR MIXTURES.
TRIFOLIUM (X-Trifolium)	ALONE	144 lbs. (9 bu.)	3.3 lbs. (0.6 bu.)	M-L	10/15 - 11/30	10/15 - 11/30	USE ON LOWER PART OF SOUTH-WESTERN COASTAL PLAIN AND IN ATLANTIC COASTAL PLAINWOODS ONLY.
WHEAT (Triticum Aestivum)	ALONE	180 lbs. (11 bu.)	4.1 lbs. (0.7 bu.)	M-L	9/15 - 11/30	9/15 - 11/30	11,000 SEED PER POUND. WINTERHARDY.

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- TEMPORARY GRASSING IS NOT SUITABLE FOR USE ON AREAS THAT WILL BE EXPOSED FOR SIX MONTHS OR LONGER. IF AN AREA IS EXPECTED TO BE UNDISTURBED FOR LONGER THAN SIX MONTHS, PERMANENT PERENNIAL VEGETATION IS REQUIRED.
- MULCH CAN BE USED AS A SINGLE-EROSION CONTROL DEVICE FOR UP TO SIX MONTHS IF OPTIMUM PLANTING CONDITIONS FOR TEMPORARY GRASSING IS ACHIEVED.
- GRADE SITE TO PERMIT THE USE OF EQUIPMENT FOR APPLYING TEMPORARY SEEDING.
- GRADING OR SHAPING ARE NOT REQUIRED IF SLOPES CAN BE PLANTED WITH A HYDROSEEDER OR BY HAND SEEDING.
- SEEDING PREPARATION IS NOT REQUIRED IF SOIL IS LOOSE AND NOT SEALED BY RAIN.
- INSTALL OTHER NEEDED/REQUIRED EROSION CONTROL MEASURES PRIOR TO APPLYING SEED TO AREA.
- COORDINATE TEMPORARY VEGETATIVE MEASURES WITH PERMANENT MEASURES TO ASSURE ECONOMIC AND EFFECTIVE STABILIZATION.
- SOME SPECIES OF TEMPORARY VEGETATION ARE NOT APPROPRIATE FOR COMPANION CROP PLANTING BECAUSE OF THEIR POTENTIAL TO OUTCOMPETE THE DESIRED PERMANENT SPECIES (E.G. ANNUAL RYEGRASS). CONTACT NCS OR THE LOCAL SWCD FOR MORE INFORMATION.
- UNDER SEEDING REDUCES THE STAND, WHILE OVER SEEDING CREATES EXCESSIVE DEMAND FOR MOISTURE, NUTRIENTS, LIGHT, AND SPACE. BOTH PRACTICES WILL RESULT IN LESS THAN 90% COVERAGE AS REQUIRED.
- IT IS IMPERATIVE THAT YOU CHECK THE BAG ON THE BAG OF SEED TO VERIFY THE TYPE, PURE SEED AND GERMINATION PERCENT OF THE SEED TO BE PLANT. CALCULATE PURE LIVE SEED (PLS) TO COMPENSATE FOR PERCENT OF BAG THAT WILL NOT PRODUCE GRASS BY THE APPLICATION RATE. APPLICATION RATES DO NOT REQUIRE ANY INCREASE FOR PLS REDUCTION.
- SEEDING RATES BY 50% WHEN DRILLED.
- TEMPORARY COVER CROPS ARE VERY COMPETITIVE AND WILL CROWN OUT PERENNIALS IF SEEDED TOO HEAVILY.

GRADING AND SHAPING

- EXCESSIVE WATER RUN-OFF SHALL BE REDUCED BY PROPERLY DESIGNED AND INSTALLED EROSION CONTROL PRACTICES SUCH AS CLOSED DRAINS, DITCHES, DIKES, DIVERSIONS, SEDIMENT BARRIERS AND OTHERS.
- NO SHAPING OR GRADING IS REQUIRED IF SLOPES CAN BE STABILIZED BY HAND SEEDING VEGETATION OR A HYDRAULIC SEEDING EQUIPMENT IS TO BE USED.
- SOIL SHOULD BE "RAKED" LIGHTLY TO COVER SEED WITH SOIL IF SEED BY HAND.

SEEDING PREPARATION

- WHEN A HYDRAULIC SEEDER IS USED, SEEDING PREPARATION IS NOT REQUIRED.
- WHEN USING CONVENTIONAL OR HAND SEEDING, SEEDING PREPARATION IS NOT REQUIRED IF THE SOIL MATERIAL IS LOOSE AND NOT SEALED BY RAINFALL.
- WHEN SOIL HAS BEEN SEALED BY RAINFALL OR CONSISTS OF SMOOTH CUT SLOPES, THE SOIL SHALL BE FITTED, TRENCHED OR OTHERWISE SCARIFIED TO PROVIDE A PLACE FOR SEED TO LODGE AND GERMINATE.

LIME AND FERTILIZER

- AGRICULTURAL LIME IS REQUIRED UNLESS SOIL TESTS INDICATE OTHERWISE.
- APPLY AGRICULTURAL LIME AT A RATE OF ONE TON PER ACRE.
- GRADED AREAS REQUIRE LIME APPLICATION.
- SOILS CAN BE TESTED TO DETERMINE IF FERTILIZER IS NEEDED.
- ON REASONABLY FERTILE SOILS OR SOIL MATERIAL, FERTILIZER IS NOT REQUIRED.
- FOR SOILS WITH VERY LOW FERTILITY, 500 TO 700 POUNDS OF 10-10-10 FERTILIZER OR THE EQUIVALENT PER ACRE (2-36 LBS./1,000 SQ. FT.) SHALL BE APPLIED.
- FERTILIZER SHOULD BE APPLIED BEFORE LAND PREPARATION AND INCORPORATED WITH DISK, RIPPERS OR CHISEL.

SEEDING

- SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.

GA-Ds2

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SEEDING

- SELECT A GRASS OR GRASS-LEGUME MIXTURE SUITABLE TO THE AREA AND SEASON OF THE YEAR.

MULCHING

- TEMPORARY VEGETATION CAN, IN MOST CASES, BE ESTABLISHED WITHOUT THE USE OF MULCH, BUT IT IS RECOMMENDED TO UTILIZE MULCH ON TOP OF TEMPORARY VEGETATION WHENVER POSSIBLE.
- MULCH WITHOUT SEEDING SHOULD BE CONSIDERED FOR SHORT TERM PROTECTION ONLY.

IRRIGATION

- DURING TIMES OF DROUGHT, WATER SHALL BE APPLIED AT A RATE NOT CAUSING RUNOFF AND EROSION.
- THE SOIL SHALL BE THOROUGHLY WETTED TO A DEPTH THAT WILL INSURE GERMINATION OF THE SEED. SUBSEQUENT APPLICATIONS SHOULD BE MADE WHEN NEEDED.

MAINTENANCE

- RE-SEED AREAS WHERE AN ADEQUATE STAND OF TEMPORARY VEGETATION FAILS TO EMERGE OR WHERE A POOR STAND EXISTS.
- ENSURE MINIMUM OF 90% COVERAGE OF ALL EXPOSED EARTH.

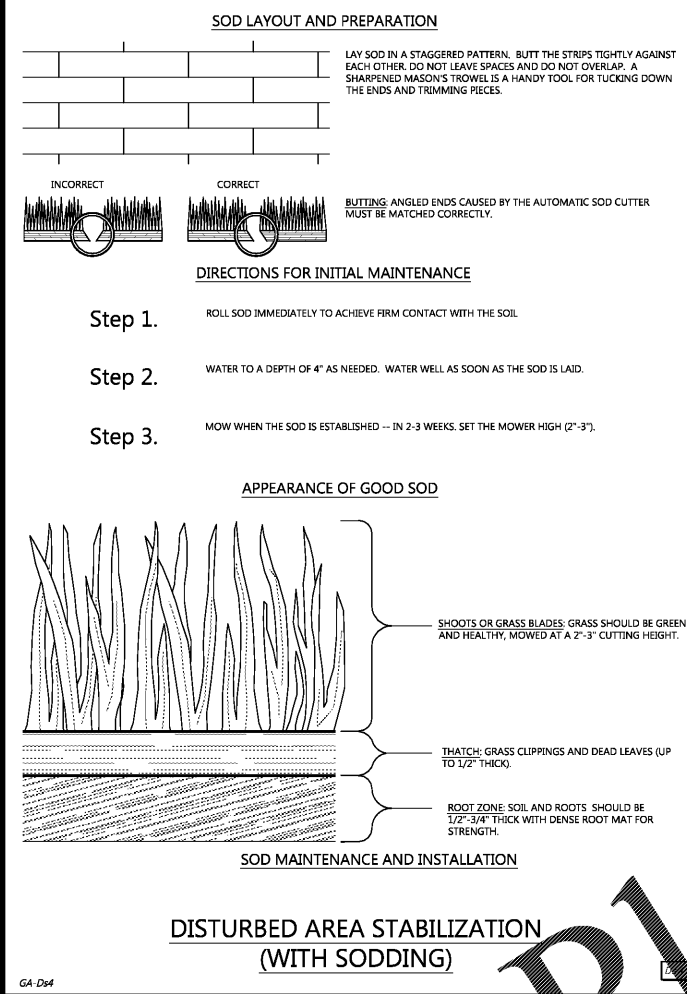
NOTICE

THE LOCATION OF EXISTING UNDERGROUND UTILITIES AND STRUCTURES IS NOT KNOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR STRUCTURES THAT MAY OCCUR DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO UTILITIES OR STRUCTURES THAT MAY OCCUR DURING THE COURSE OF THE WORK.

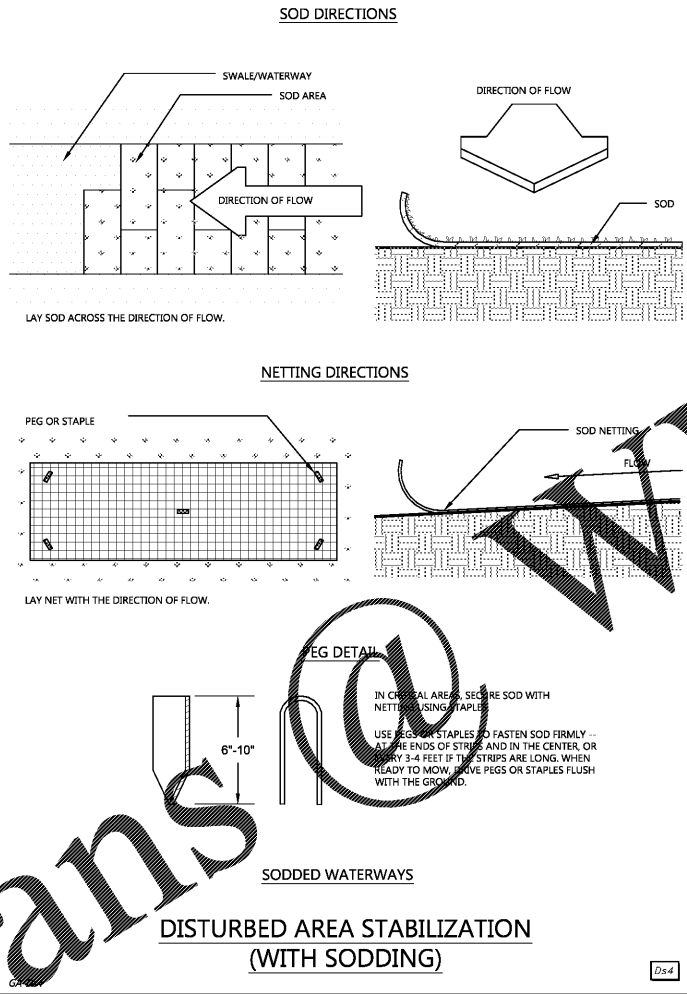
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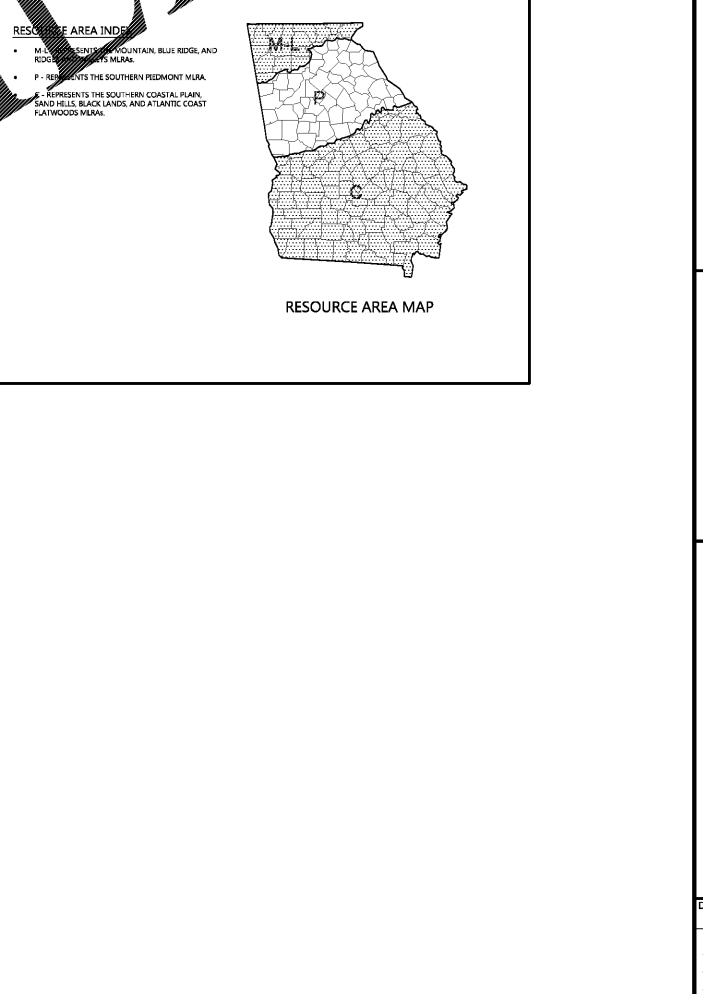
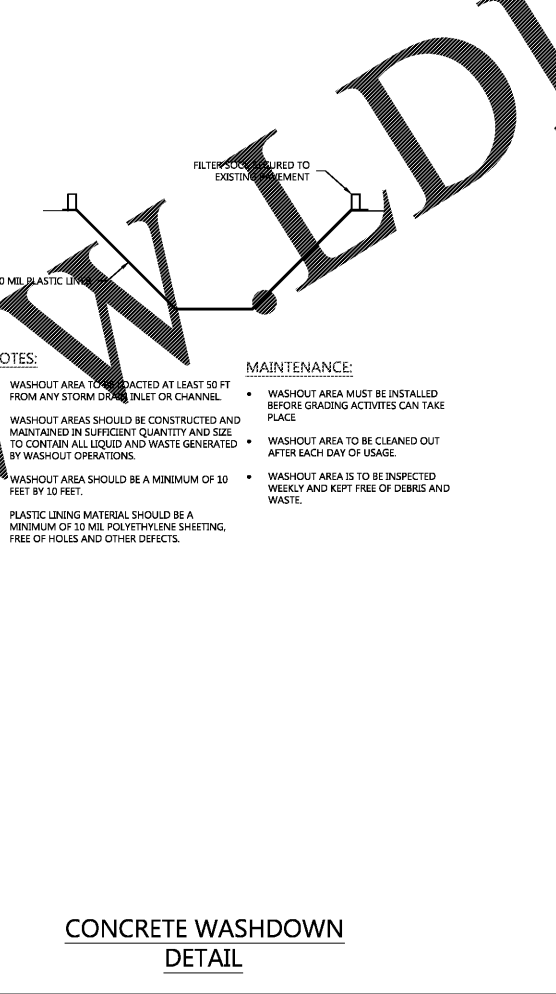
DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)



DISTURBED AREA STABILIZATION (WITH SODDING)



DISTURBED AREA STABILIZATION (WITH SODDING)



Order Plans

FILE NAME: K:\17003568\EROSION CONTROL\CP\17003568-0340 EROSION DETAILS.dwg LAST SAVED BY: JTR 3/23/2018 2:29 PM PLOTTED BY: JTR 3/23/2018 2:29 PM PLOTTER: HP DesignJet 2550-600 (HP) PAPER: ARCH D (11x17) INCHES (295x420) MM SCALE: 1:1

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LAND LOT 298, 16TH DISTRICT
THE KRYSAL COMPANY
KRYSAL RESTAURANT - ATL034
SITE DEVELOPMENT PLANS
EROSION CONTROL DETAILS

DATE: 03-23-2018

REVISIONS

DRAWN BY: JTR
CHECKED BY: MDR
PROJECT MANAGER: MDR
JOB #: 17003568
FILE CODE: CP
SHEET NO. C801

GEORGIA PROFESSIONAL ENGINEER
MICHAEL D. RITCH