

EROSION CONTROL NOTES:

1. RECEIVING WATERSHED: BUFFALO CREEK
2. TOTAL LIMITS OF CONSTRUCTION/LIMITS OF DISTURBANCE = 73 ACRES.
3. ALL LAND DISTURBING ACTIVITIES SHALL BE CONDUCTED IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL STANDARDS AND PRACTICES PRESCRIBED BY THE STATE OF NORTH CAROLINA AND WAKE COUNTY. WHERE STANDARDS AND PRACTICES CONFLICT, THE MORE STRINGENT SHALL APPLY.
4. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM THE TOWN OF ROLESVILLE, NCDWR, USACE, AND/OR FEMA FOR ANY RIPARIAN BUFFER, WETLANDS, AND/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
5. NCDOT ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK OR GRADING (INCLUDING EXTENSIONS) WITHIN STATE RIGHT-OF-WAY PRIOR TO CONSTRUCTION.
6. THIS PROJECT SHALL BE SUBJECT TO MONITORING REQUIREMENTS IN ACCORDANCE WITH SECTION II.B(3) OF THE MOST RECENT NCDENR-DEMUR GENERAL PERMIT NCG 01000.
7. THE CONTRACTOR SHALL FAITHFULLY MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO ENSURE THAT NO SILT LEAVES THE PROJECT SITE AND ENTERS ANY NATURAL STREAM OR WATERWAY AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
8. THE CONTRACTOR IS TO CONDUCT A WEEKLY SITE INSPECTION, AFTER EACH RAINFALL EVENT IN EXCESS OF 1-INCH AND PERFORM ANY NECESSARY MAINTENANCE.
9. ANY AREA DISTURBANCES BY THE CONTRACTOR NOT SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO BE PERMITTED THROUGH THE APPROPRIATE PERMITTING AGENCY.
10. PURSUANT TO G.S. 113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICE OR STRUCTURE.
11. ALL SLOPES 3:1 OR GREATER SHALL BE LINED WITH EROSION CONTROL MATTING.
12. NPDES GROUND COVER REQUIREMENTS SHALL BE FOLLOWED IN ADDITION TO STANDARD NCDENR EROSION CONTROL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING A PERMANENT STAND OF VEGETATION ON ALL DISTURBED AREAS AND MEETING ALL NPDES FINAL STABILIZATION REQUIREMENTS.
13. PROVIDE A ROLLED EROSION CONTROL PRODUCT (RECP) TO STABILIZE DISTURBED DITCHES IF ANY SIGNS OF SCOURING OR EROSION ARE OBSERVED.
14. NO STOCK OR WASTE PILES ARE ALLOWED WITHIN 50' OF STREAMS OR DRAINAGE STRUCTURES.
15. WHERE DEWATERING OF TRENCHES, PITS, AND OTHER EXCAVATIONS BECOMES NECESSARY THE DISCHARGE MUST BE DIVERSED TO A SEDIMENT FILTER BAG BEFORE BEING DISCHARGED TO THE GROUND.
16. ADEQUATE EROSION CONTROL MEASURES MUST BE INSTALLED, MAINTAINED, AND ADJUSTED AS NEEDED DURING THE DEEPCLEARING AND GRUBBING PHASES AS WELL AS THROUGHOUT THE LIFE OF THE PROJECT AND UNTIL PERMANENT VEGETATION IS ESTABLISHED.
17. IN INSTANCES WHERE THE DIFFERENCE IN HEIGHT OF EMERGENCY SPILLWAY AND BOTTOM ELEVATION OF A POND IS GREATER THAN 5 FEET, DOUBLE-HEIGHT BARRIERS ARE REQUIRED.
18. CONCRETE WASHOUTS SHOWN FOR CURBS, GUTTERS, AND SIDEWALK USE ONLY.
19. EXISTING TEMPORARY SEDIMENT BASIN SHALL BE REPAIRED/MAINTAINED AS NECESSARY TO MEET REQUIREMENTS OF THIS PROJECT.
20. SCM FOREBAYS SHALL NOT BE REQUIRED WHILE SCM IS ACTING AS AN EROSION CONTROL DEVICE.
21. VELOCITY DISSIPATORS SHALL BE INSTALLED AT THE END OF EACH FES AND SHALL HAVE A FILTER FABRIC UNDERLINER.
22. THE CONTRACTOR SHALL INSTALL TEMPORARY SEDIMENT BARRIERS AND SEDIMENT TRAP DEVICES TO PROTECT ALL EXISTING SLOPES DURING/ AFTER SLOPE FORMATION TO PREVENT SLOPE EROSION.

CONSTRUCTION SEQUENCE (STAGE 1):

1. SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH WAKE COUNTY ENVIRONMENTAL SERVICES. OBTAIN A LAND DISTURBING PERMIT.
  2. INSTALL GRAVEL CONSTRUCTION PAD, SILT FENCE, AND OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
  4. CALL WAKE COUNTY ENVIRONMENTAL SERVICES TO SCHEDULE AN ONSITE INSPECTION TO OBTAIN A CERTIFICATE OF COMPLIANCE. PERMITTED LAND DISTURBING ACTIVITIES MAY NOT BEGIN UNTIL ALL MEASURES ARE IN PLACE AND A CERTIFICATE OF COMPLIANCE HAS BEEN RECEIVED.
  5. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED.
  6. MOVE TO STAGE 2 EROSION CONTROL.
- CONSTRUCTION SEQUENCE (STAGE 2):
1. MAINTAIN STAGE 1 EROSION CONTROL DEVICES.
  2. INSTALL STORM SEWER AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
  - 2.1. EXCAVATE TRENCH, INSTALL SECTIONS OF PIPE, BACKFILL AND STABILIZE GROUND DISTURBANCE WITHIN A WORKING DAY.
  3. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS PER GROUND STABILIZATION TIME FRAMES.
  4. ADDITIONAL SILT FENCE SHALL BE PROVIDED ALONG THE CURBLINE ONCE INSTALLED, AS REQUIRED BY WAKE COUNTY.
  5. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WAKE COUNTY ENVIRONMENTAL SERVICES FOR AN INSPECTION.
  6. IF SITE IS APPROVED, REMOVE SILT FENCE, INLET PROTECTION, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS.
  7. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WAKE COUNTY ENVIRONMENTAL SERVICES. OBTAIN A CERTIFICATE OF COMPLETION.

MAINTENANCE PLAN:

1. ALL EROSION AND SEDIMENTATION CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL, BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
2. SEDIMENT WILL BE REMOVED FROM SEDIMENT TRAP DEVICES WHEN STORAGE CAPACITY HAS BEEN APPROXIMATELY 50% FILLED. GRAVEL WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS PROPERLY.
3. SEDIMENT WILL BE REMOVED FROM BEHIND THE SILT FENCE WHEN IT BECOMES APPROXIMATELY 6-INCHES DEEP AT THE FENCE. THE SILT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER.
4. INLET PROTECTION DEVICES SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT. DAMAGED SILT FENCE SHALL BE REPLACED AND GRAVEL SHALL BE CLEANED OR REPLACED WHEN INLET NO LONGER DRAINS PROPERLY.
5. ALL SEEDED AREAS WILL BE FERTILIZED, RE-SEEDED AS NECESSARY, AND MULCHED ACCORDING TO THE SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.

TOPSOIL WASTE NOTE:

1. EXCESS TOPSOIL/MATERIAL SHALL BE HAULED OFFSITE UNLESS OTHERWISE DIRECTED BY THE OWNER'S REPRESENTATIVE. IF OWNER DECIDES TO KEEP EXCESS TOPSOIL/MATERIAL ON SITE, COORDINATION WITH OWNER'S REPRESENTATIVE AND TOWN OF WAKE COUNTY EROSION CONTROL STAFF WILL TAKE PLACE BEFORE EXCESS TOPSOIL/MATERIAL IS PLACED.

WAKE COUNTY STOCKPILE MAINTENANCE REQUIREMENTS:

1. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
2. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
3. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
4. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF SLOPE (WHERE PRACTICAL).
5. STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.

SEED BED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS, WITH STOCKPILED TOPSOIL. CONTRACTOR SHALL RESERVE SUFFICIENT TOPSOIL FOR SEEDBED PREPARATION.
2. RIP THE ENTIRE AREA TO 6 INCH DEPTH.
3. REMOVE ALL LOOSE ROCK, ROOTS, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPER-PHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE BELOW\*).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED 4 TO 6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND IS LESS THAN 60% ESTABLISHED, THE ENTIRE AREA SHALL BE RESEEDING ACCORDING TO SPECIFICATIONS USING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT A CONSERVATION INSPECTOR ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

\*APPLY:

AGRICULTURAL LIMESTONE	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER	1,000 LB/ACRE - 10-10-10
SUPER-PHOSPHATE	500 LB/ACRE - 20% ANALYSIS
MULCH	2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR	ASPHALT EMULSION @ 300 GALS/ACRE

SEEDING AND MULCHING:

SEEDING AND MULCHING SHALL BE CARRIED OUT IMMEDIATELY BEHIND CONSTRUCTION IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS:

SHOULDERS, SIDE DITCHES, SLOPES (3:1 MAX.)			
DATE	TYPE	PLANTING/ACRE	
AUG 15 - NOV 1	TALL FESCUE	300 LBS.	
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS.	
MAR 1 - APR 15	TALL FESCUE	300 LBS.	
APR 15 - JUNE 30	HULLED COMMON BERMUDA GRASS	25 LBS.	
JULY 15 - AUG 15	TALL FESCUE AND *** BROWN TOP MILLET OR *** SORGHUM-SUDAN HYBRIDS	35 LBS.	

  

SLOPES (3:1 TO 2:1)			
DATE	TYPE	PLANTING/ACRE	
MAR 1 - APR 15	ADD TALL FESCUE AND	120 LBS.	
MAR 1 - JUNE 30	ADD WEEPING LOVE GRASS OR	10 LBS.	
MAR 1 - JUNE 30	ADD HULLED COMMON BERMUDA GRASS	25 LBS.	
JUNE 1 - SEP 1	*** TALL FESCUE AND *** BROWN TOP MILLET OR *** SORGHUM-SUDAN HYBRIDS	120 LBS. 35 LBS. 30 LBS.	
SEP 1 - MAR 1	TALL FESCUE	120 LBS.	
NOV 1 - MAR 1	ADD ABRUZZI RYE	25 LBS.	

\*\*\*TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12 INCHES IN HEIGHT BEFORE MOWING. OTHERWISE FESCUE MAY BE SHADED OUT.

A CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE SHALL BE CONSULTED FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE. ANY VARIATION FROM THIS LIST SHALL BE PRE-APPROVED BY THE TOWN.

GROUND STABILIZATION CHART		
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
DIKES, SWALES, DITCHES, AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

