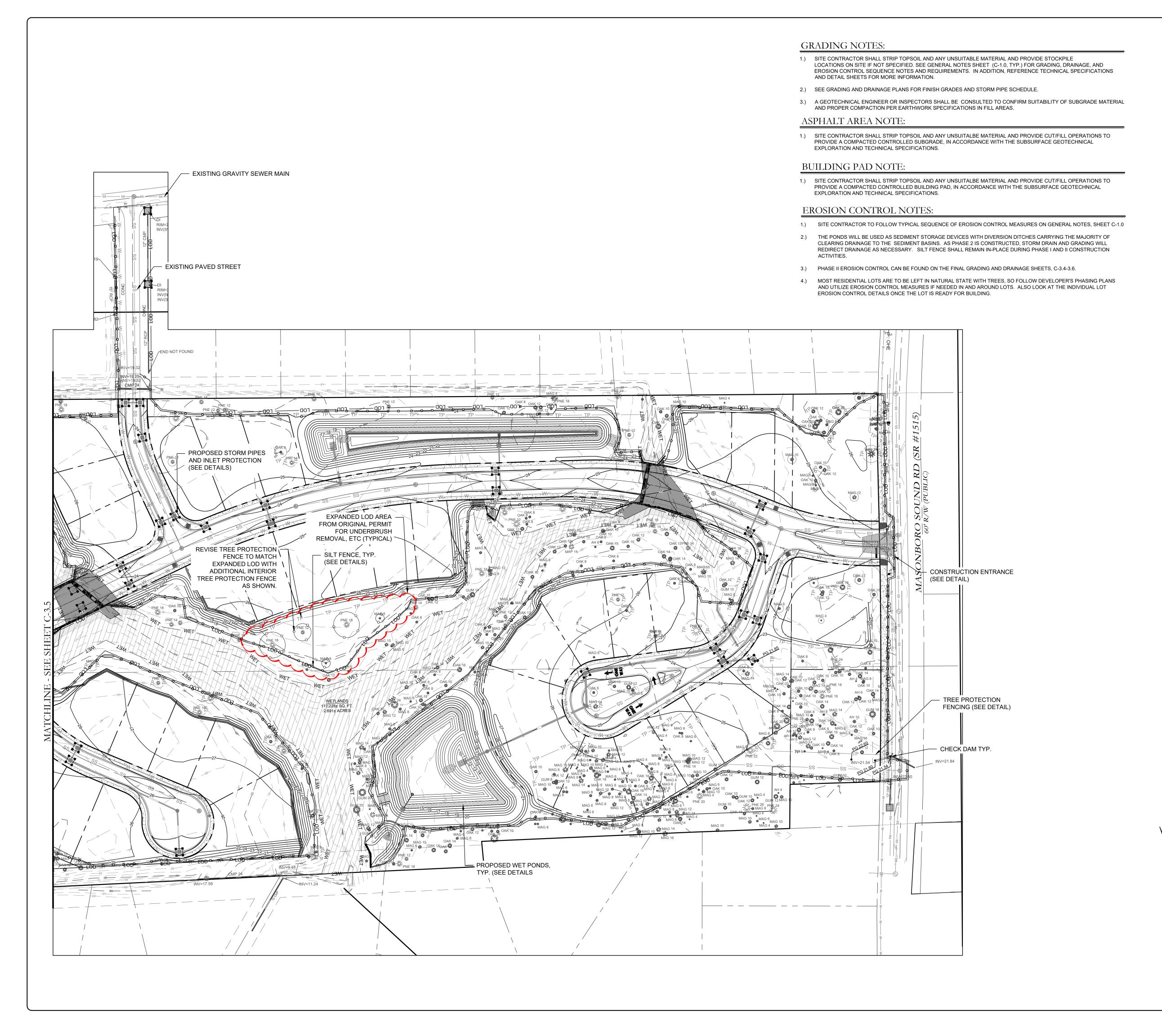
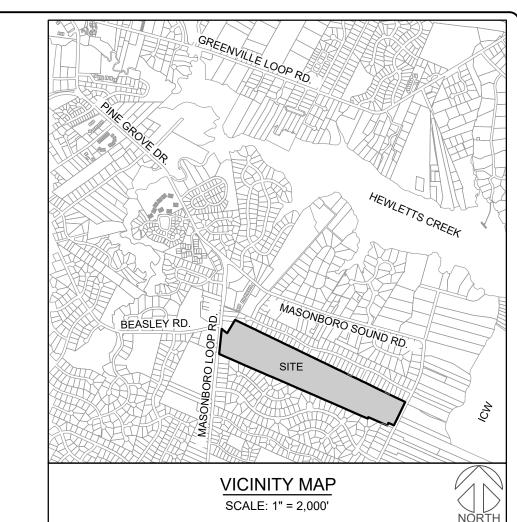


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EROSION CONTROL LEGEND: —— LOD—— LOD—— LIMITS OF DISTURBANCE — o o o o SILT FENCE

TPF TPF TPF TREE PROTECTION FENCING PROPOSED CONTOURS EXISTING CONTOURS

SILT FENCE STONE OUTLET WATTLE OR RIP-RAP CHECK DAM

TREE REMOVAL INLET PROTECTION

GRAVEL ENTRANCE RIP-RAP

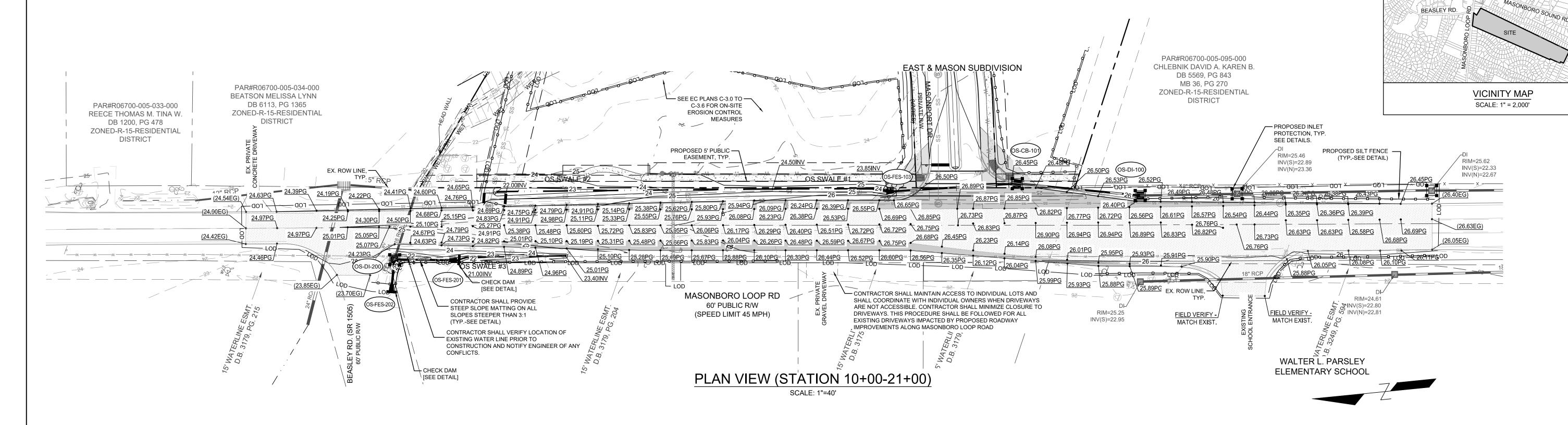
SCALE: 1"=60'

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STORM SEWER SCHEDULE:

Upstream	Downstream	Diameter	Upstream	Downstream	Pipe Length		Upstream	Downstream	Pipe
Node	Node	(In)	Invert	Invert	(ft)	Slope (%)	Rim Elev	Rim Elev	Material
OS-CB 101	OS-DI 100	15	23.52	23.20	99	0.32	26.42	26.00	RCP IV
OS-FES 103	OS-CB 101	15	23.85	23.52	99	0.33	-	26.42	RCP IV
OS-FES-201	OS-DI 200	15	21.00	17.48	44	8.02	-	21.50	RCP III
OS-FES-202	OS-DI 200	18	20.00	18.50	20	7.49	-	21.50	RCP III

NOTE: ALL DRAINAGE STRUCTURES LOCATED UNDER PAVEMENT SHALL MEET LATEST NDCOT STANDARDS FOR TRAFFIC LOADING.



EROSION CONTROL AND SEQUENCE OF CONSTRUCTION NOTES:

NOTE: THESE EROSION CONTROL AND SEQUENCE OF CONSTRUCTION NOTES ARE INTENDED FOR EACH "PHASE" OF CONSTRUCTION. THE ORDER AND STEPS TAKEN MUST BE IMPLEMENTED AS EACH PART OF THE PROJECT IS DEVELOPED; WHETHER AS A WHOLE OR IN PHASES. ANY EROSION CONTROL DEVICES/MEASURES MUST REMAIN IN PLACE UNTIL ALL DISTURBED AREAS ARE STABILIZED AND ALL IMPROVEMENTS ARE COMPLETE.

- 1. CONSTRUCT TEMPORARY GRAVEL CONSTRUCTION ENTRANCE(S), ESTABLISH THE LIMITS OF DISTURBANCE, AND TEMPORARY SILT FENCE.
- 2. CLEAR AND REMOVE FROM SITE ALL TREES (ONLY ONES TO BE REMOVED), ROOTS, ROOT MAT, ETC. FROM THE AREA WITHIN THE DESIGNATED CLEARING LIMITS.
- INSTALL REMAINING EROSION CONTROL MEASURES AS SHOWN ON THE PLANS WITHIN THE AREA DISTURBED. ALL EROSION CONTROL MEASURES MUST BE INSTALLED BEFORE COMMENCING CONSTRUCTION.
- 4. PLANT GRASS OVER ALL GRADED AREAS WITHIN 14 WORKING DAYS OF CEASE OF ANY GRADING ACTIVITY.
- IMMEDIATELY UPON THE INSTALLATION OF ANY STORM DRAINAGE CATCH BASIN, DROP INLET, ETC., THE CONTRACTOR SHALL INSTALL INLET PROTECTION TO STOP ANY SEDIMENT FROM ENTERING THE DRAINAGE SYSTEM.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING AND RESTORING TO PRE-CONSTRUTION CONDITIONS ANY AREAS OUTSIDE THE PROJECT LIMITS THAT MAY INADVERTENTLY BE DAMAGED DUE TO THE FAILURE OF THE EROSION CONTROL MEASURES.
- DURING GRADING AND AFTER GRADING HAS BEEN COMPLETED, THE CONTRACTOR SHALL CONTINUE TO MAINTAIN PERMANENT AND TEMPORARY EROSION

9. THE CONTRACTOR SHALL CONTINUE TO WATER, FERTILIZE, MOW AND MAINTAIN SPRIGGED, SODDED, AND PLANTED AREAS UNTIL ALL CONSTRUCTION IS

- CONTROL MEASURES UNTIL FINAL APPROVAL.
- 8. UPON RECEIVING FINAL APPROVAL, THE CONTRACTOR CAN REMOVE TEMPORARY EROSION CONTROL MEASURES.
- GENERAL EROSION AND SEDIMENT CONTROL NOTES:

COMPLETE.

- THE EROSION CONTROL PLAN SHALL INCLUDE PROVISIONS FOR GROUNDCOVER ON ALL EXPOSED PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1 WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. GROUND COVER SHALL BE PROVIDED ON ALL OTHER DISTURBED AREAS WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY.
- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL HANDBOOK. (NO
- 3. THE CONTRACTOR SHALL NOTIFY PLAN APPROVING AUTHORITY ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO FINAL INSPECTION.
- 4. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO CLEARING AND/OR LAND DISTURBANCE.
- 5. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN AND PERMIT SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- 6. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS STAGING OR STORAGE AREAS), THE CONTRACTOR SHALL PREPARE AND SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND TO THE STATE FOR APPROVAL. CONTRACTOR SHALL PAY ALL FEES REQUIRED AND SHALL INSTALL NECESSARY MEASURES AT NO SEPARATE PAYMENT. THE CONTRACTOR SHALL PROVIDE THE OWNER AND THE ENGINEER A COPY OF THE AMENDED PERMIT.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY EITHER THE REVIEWING AGENCY OR THE ENGINEER. (NO SEPARATE PAYMENT).
- 8. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- 9. ALL AREAS DISTURBED BY CONSTRUCTION UNLESS OTHERWISE IMPROVED SHALL BE SODDED OR SEEDED AS INDICATED AND STABILIZED.
- 10. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED INTO AN APPROVED FILTERING DEVICE PRIOR TO DISCHARGE TO RECEIVING OUTLET.

GENERAL EROSION AND SEDIMENT CONTROL NOTES (CONT.):

- 11. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- 12. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED BY CONTRACTOR ONCE STABILIZATION OR A SUFFICIENT GROUND COVER HAS BEEN
- ESTABLISHED OR AS DIRECTED BY THE ENGINEER. (NO SEPARATE PAYMENT). NCDENR'S FINAL APPROVAL IS REQUIRED.
- 13. TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE REQUIRED AT ALL CONSTRUCTION STAGING AREA ENTRANCES AND ALL CONSTRUCTION ACCESS LOCATIONS INTO NON-PAVED AREA. (NO SEPARATE PAYMENT).
- 14. WHEN CROSSING CREEK OR DRAINAGE-WAY, THE DIVISION OF WATER QUALITY SHALL BE CONTACTED PRIOR TO DISTURBING A CREEK. THE CONTRACTOR SHALL INSTALL RIP-RAP WITH FABRIC ALONG DISTURBED BANKS AND CHANNEL AND RESTORE SLOPES TO ORIGINAL CONTOURS, BUT NOT STEEPER THAN 2:1 MAXIMUM. DISTURBED CREEK AREA SHALL BE STABILIZED IMMEDIATELY.

MAINTENANCE PLAN:

- 1. ALL EROSION AND SEDIMENT 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. ALL CONSTRUCTION ENTRANCES WILL BE PERIODICALLY TOP DRESSED WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. ANY SEDIMENT THAT IS TRACKED INTO THE STREET WILL BE IMMEDIATELY REMOVED.
- SEDIMENT WILL BE REMOVED BEHIND THE SEDIMENT FENCE WHEN IT BECOMES 0.5 FEET DEEP AT THE FENCE. THE SEDIMENT FENCE WILL BE BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. SILT FENCE STAKES WILL BE SPACED 6 FEET APART UNLESS A WIRE BACKING IS USED WITH 8 FOOT STAKE SPACING.
- 4. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY, AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER.
- 5. INLET PROTECTION INSPECT WIRE AND ROCK INLET PROTECTION AT LEAST ONCE A WEEK AND AFTER EACH SIGNIFICANT (INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE SEDIMENT STORAGE AREA TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH OF THE TRAP. PLACE THE SEDIMENT THAT IS REMOVED IN THE DESIGNATED DISPOSAL AREA AND REPLACE

THE CONTAMINATED PART OF THE GRAVEL FACING.

SPECIES	RATE (LB/ACRE)
CENTIPEDE GRASS	10-20
Seeding Dates	
MARCH - JUNE	
Soil Amendments	

APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS, OR APPLY 300 LB/ACRE 10-10-10 FERTILIZER.

DO NOT MULCH.

Seeding Mixture

FERTILIZE VERY SPARINGLY--20 LB/ACRE NITROGEN IN SPRING WITH NO PHOSPHORUS. CENTIPEDE GRASS CANNOT TOLERATE HIGH PH OR EXCESS FERTILIZER.

TEMPORARY SEEDING-LATE WINTER/EARLY SPRING Seeding Mixture

WINTER AND EARLY SPRING

RYE (GRAIN) ANNUAL LESPEDEZA (KOBE IN PIEDMONT AND COASTAL PLAIN, KOREAN IN MOUNTAINS)

OMIT ANNUAL LESPEDEZA WHEN DURATION OF TEMPORARY COVER IS NOT TO EXTEND BEYOND JUNE.

	SUMMER	
SPECIES		RATE (LB/ACRE)
GERMAN MILLET		40
	<u>FALL</u>	
SPECIES		RATE (LB/ACRE)
RYE (GRAIN)		120

COASTAL PLAIN - DEC.1-APR. 15 - LATE WINTER AND EARLY SPRING

APRIL 15 - AUG. 15 - SUMMER AUG. 15 - DEC. 30 - FALL

<u>SPECIES</u>

FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 LB/ACRE GROUND AGRICULTURAL LIMESTONE AND 750 LB/ACRE 10-10-10

APPLY 4,000 LB/ACRE STRAW. ANCHOR STRAW BY TACKING WITH ASPHALT, NETTING OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

Maintenance

LEGEND:

REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER

PROPOSED SPOT ELEVATION PROPOSED LIMITS OF DISTURBANCE PROPOSED SILT FENCE PROPOSED INLET PROTECTION PROPOSED DRAINAGE INLET ASPHALT OVERLAY

NEW ASPHALT AREA

REMOVE / REPLACE

RIGHT OF WAY

NOTATION: DI = DROP INLET CO = CLEANOUT MH = STORM DRAIN MANHOLE EG = EXISTING GRADE PG = PROPOSED GRADE

EP = EDGE OF PAVEMENT

SCALE: 1"=40'

NPDES WATER QUALITY STABILIZATION TIME FRAMES

STABILIZATION

7 DAYS

7 DAYS

7 DAYS

14 DAYS

14 DAYS

TIMEFRAME EXCEPTIONS

IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED

7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH

NONE, EXCEPT FOR PERIMETERS AND HQW ZONES

SITE AREA DESCRIPTION

PERIMETER DIKES, SWALES, DITCHES AND SLOPES

ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1

HIGH QUALITY WATER (HQW) ZONES

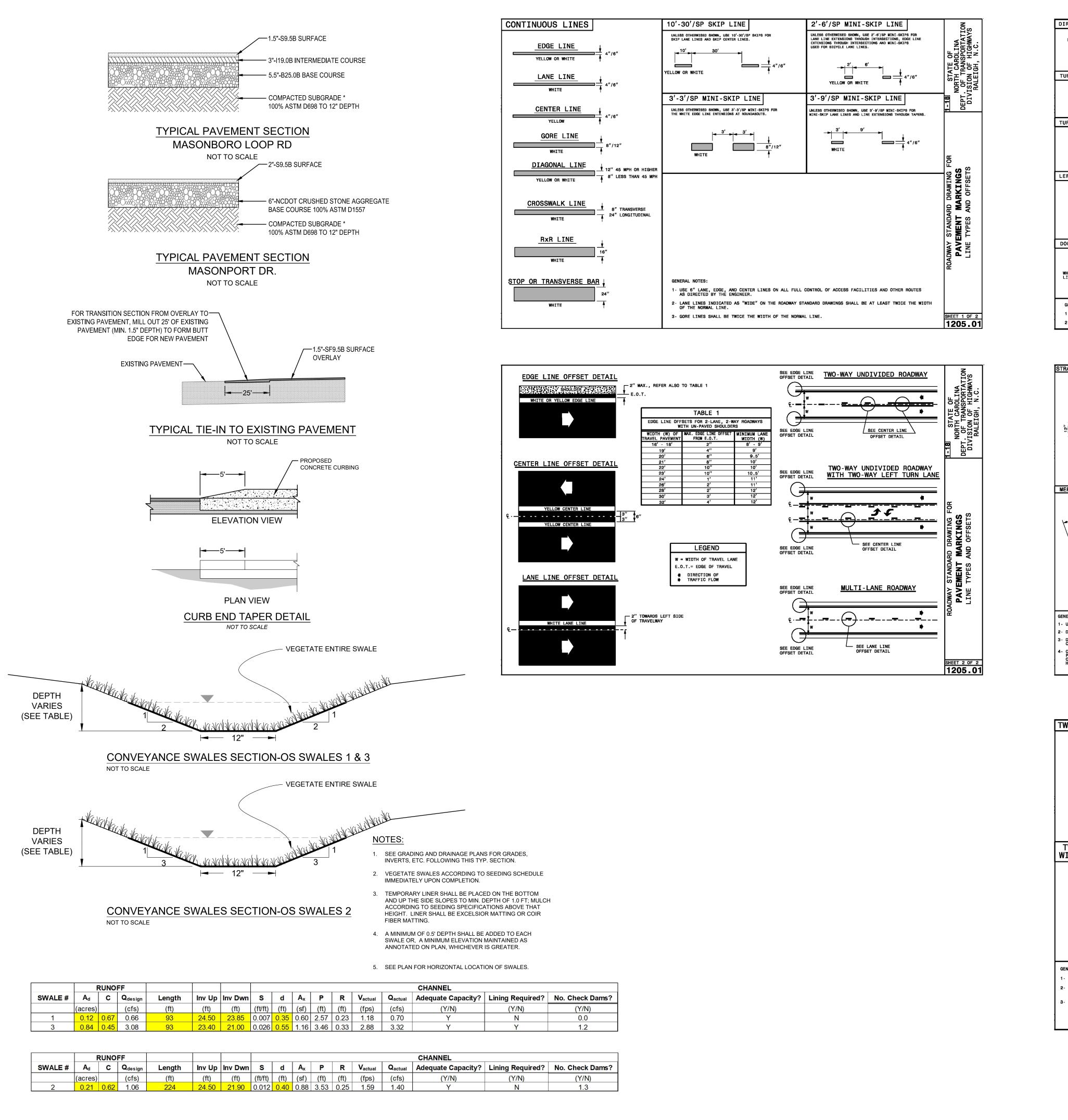
SLOPES STEEPER THAN 3:1

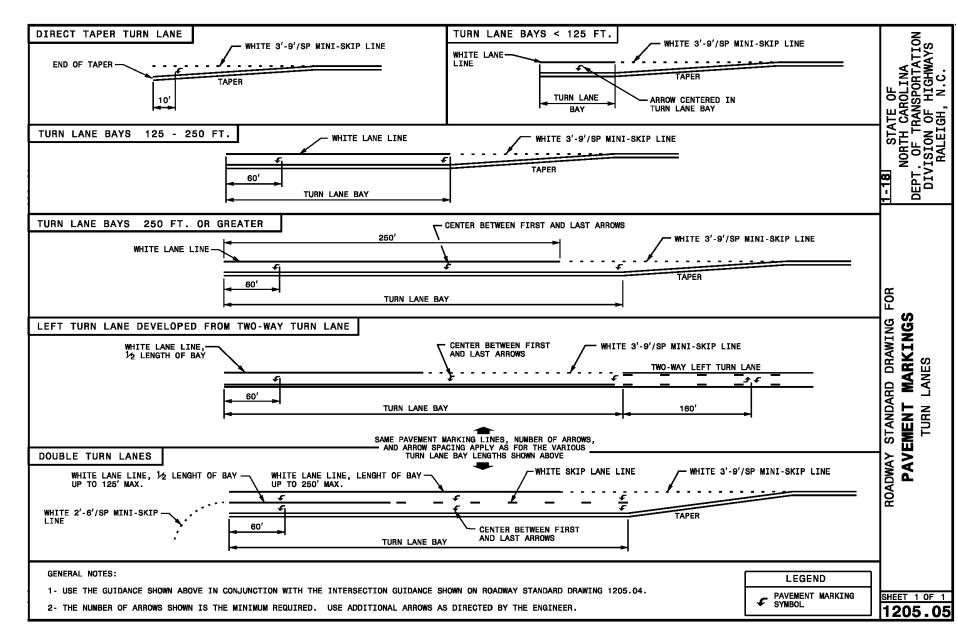
SLOPES 3:1 OR FLATTER

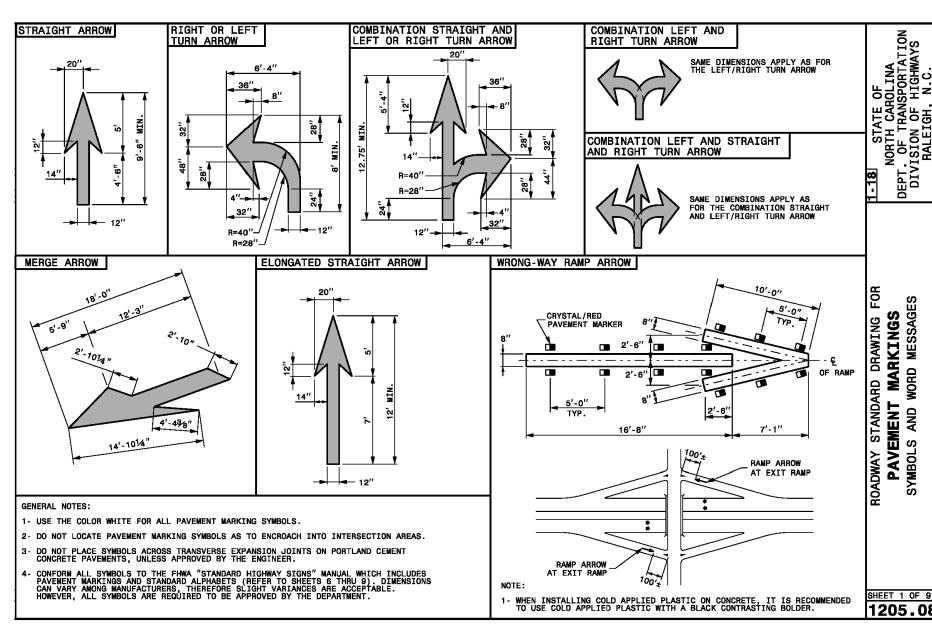
 $\overline{\mathcal{O}}$ INVESTORS,

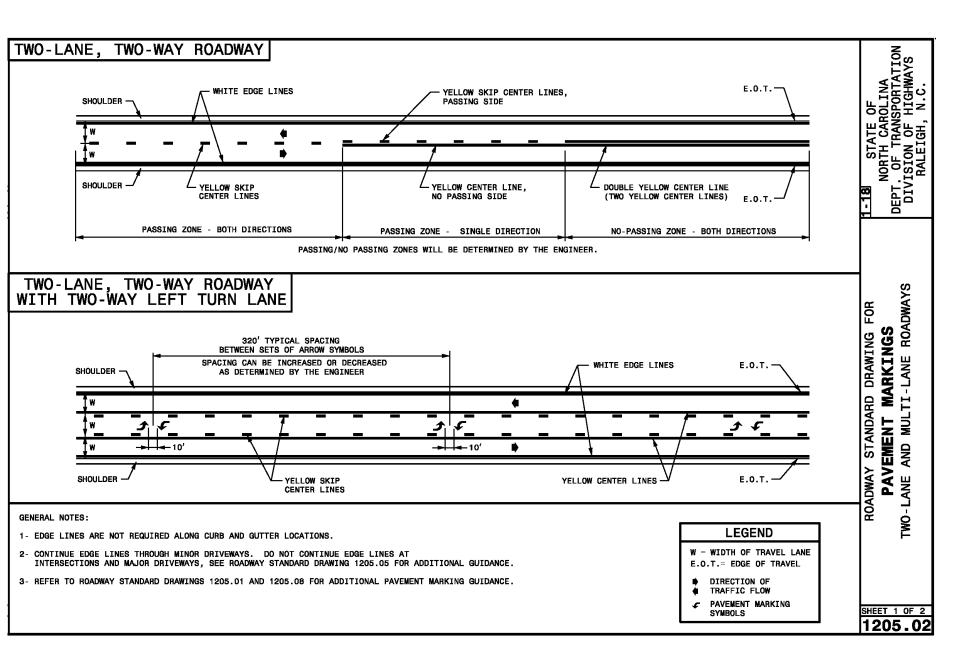
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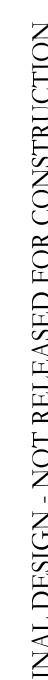
ASONBORO I



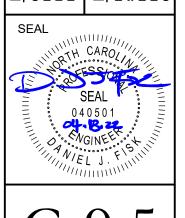








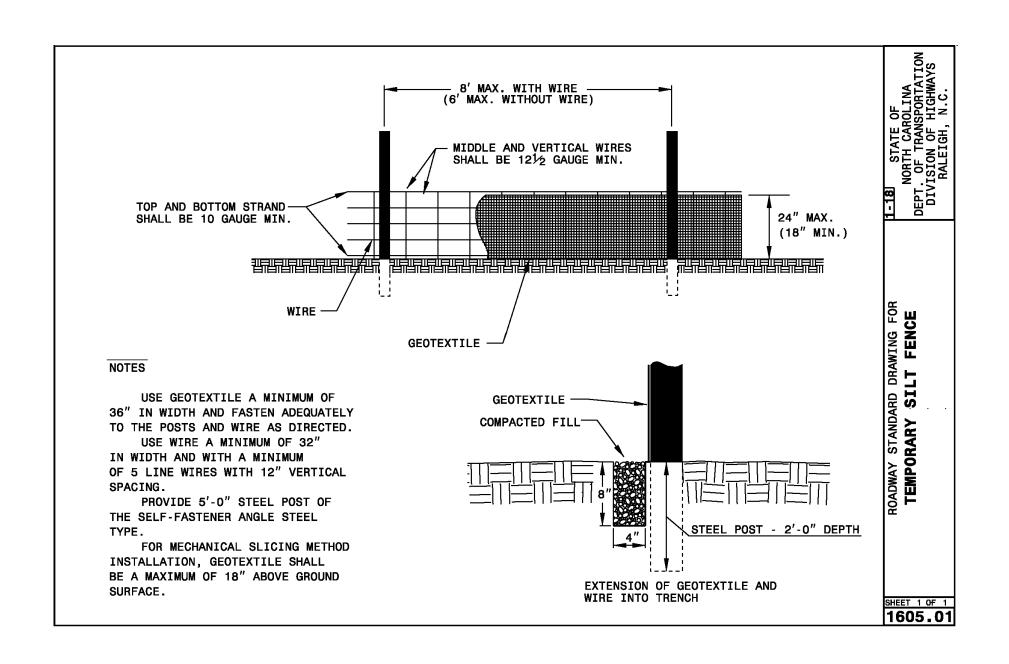
MASONBORO LOOP DETAILS

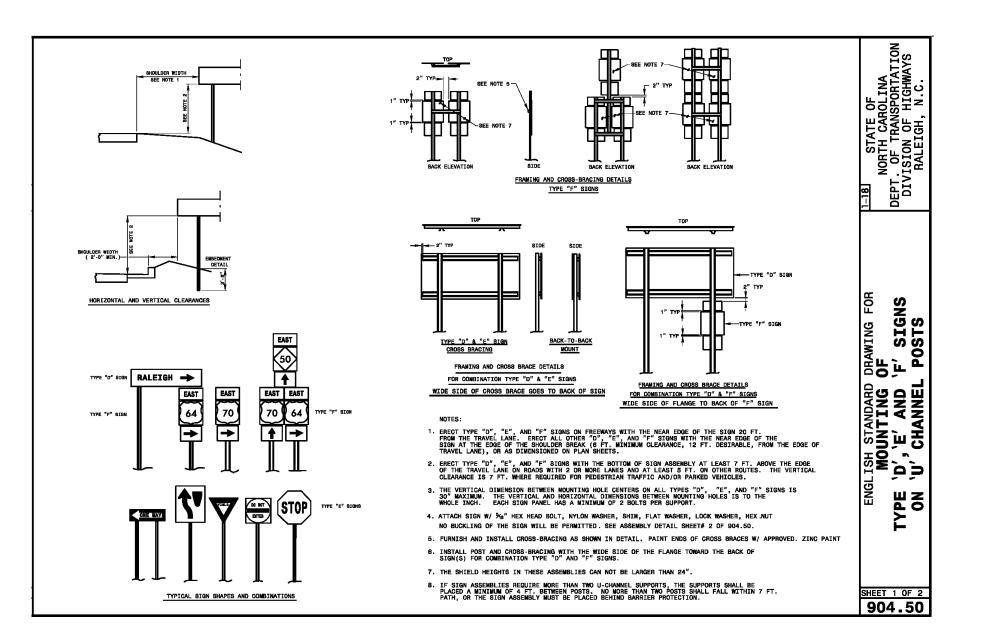


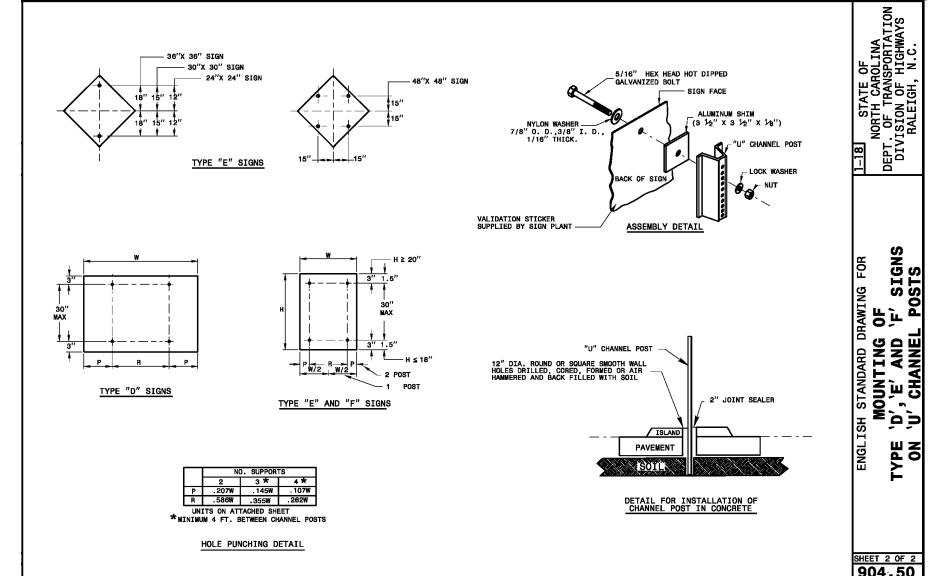
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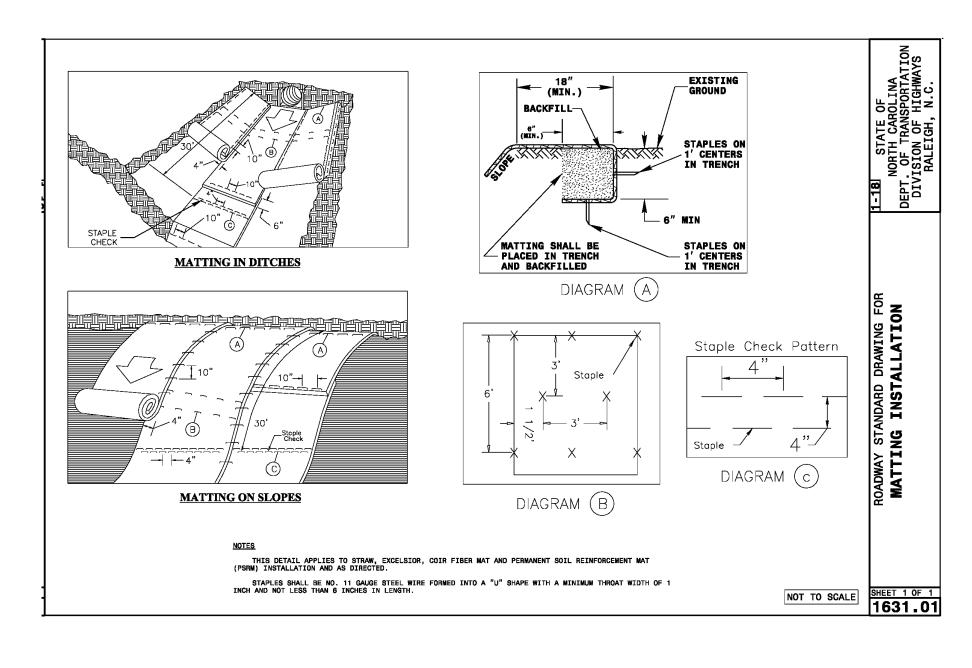
31 FALLS OF NEUSE RD.
RALEIGH, NC 27609

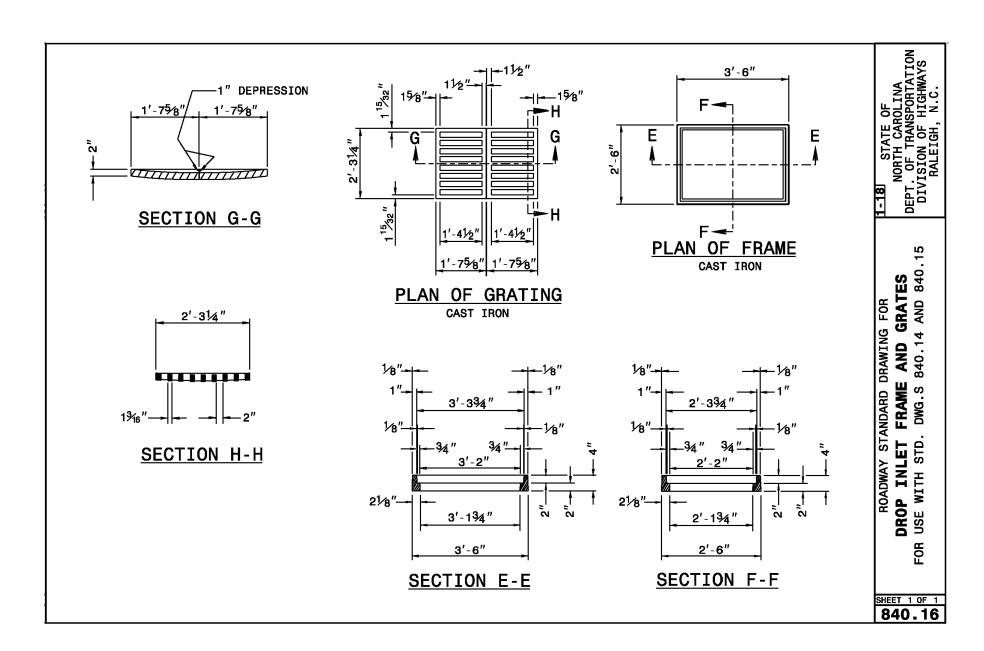
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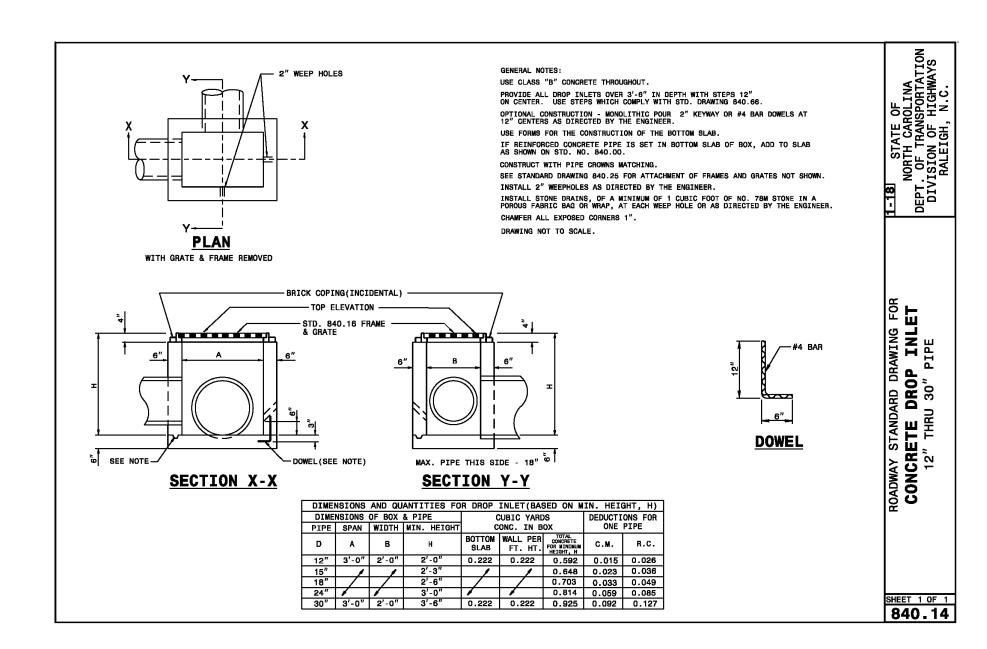


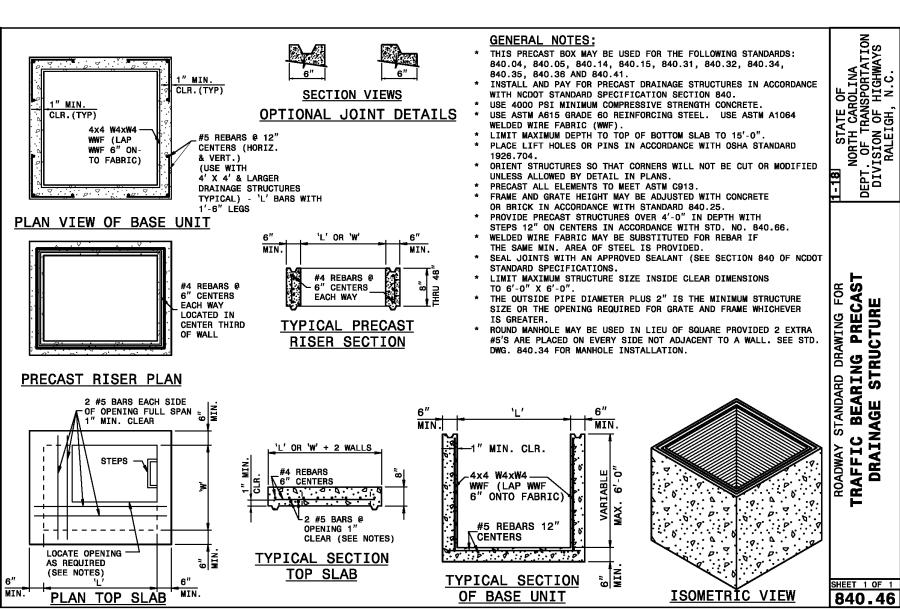


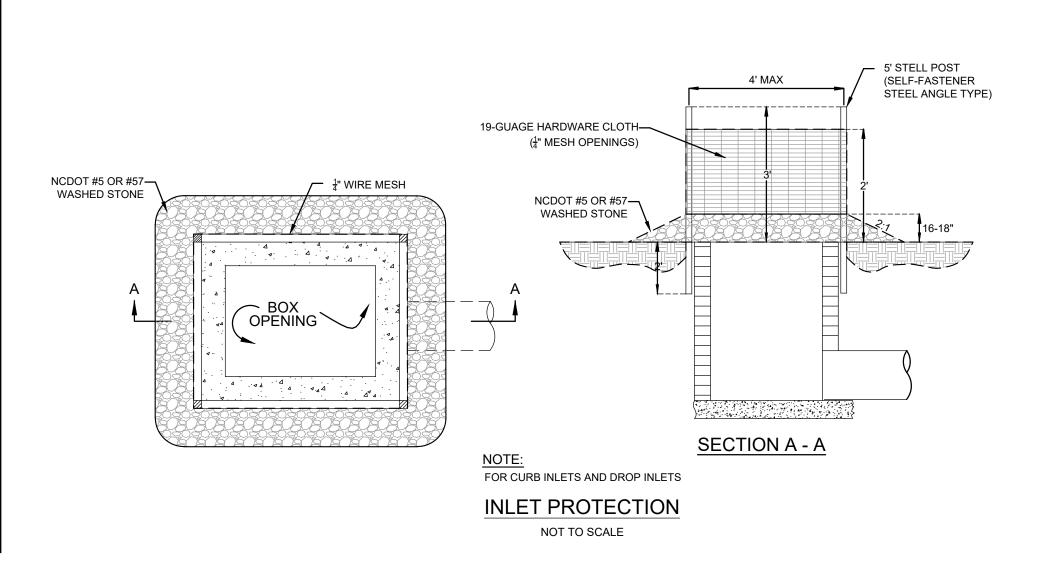


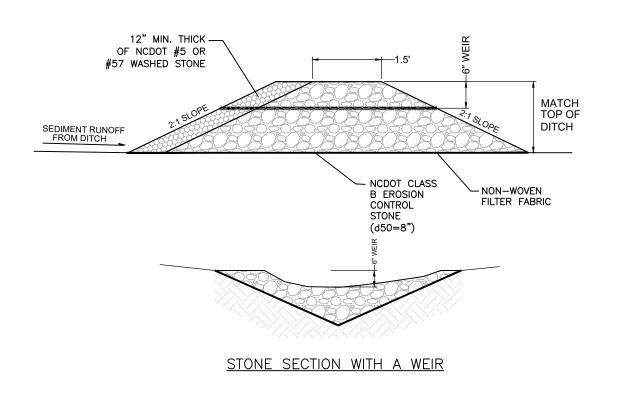












TEMPORARY CHECK DAM DETAIL NOT TO SCALE

PLACE NCDOT #57 STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER

- FABRIC FOUNDATION. 2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL
- WHERE THE DAM ABUTS THE CHANNEL BANKS.
- 3. EXTEND STONE AT LEAST 1.5 FT. BEYOND THE DITCH BANKS TO KEEP OVERFLOW FROM
- 4. ENSURE THAT CHANNEL APPURTENANCES, SUCH AS CULVERT ENTRANCES BELOW CHECK

DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES. 5. INSPECT CHECK DAMS AND CHANNELS FOR DAMAGE AFTER EACH RUNOFF EVENT.

UNDERCUTTING THE DAM AS IT RE-ENTERS THE CHANNEL.



DETAIL

ASON NBORO SOUND RD

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