NOTE: PIPE LENGTHS 11-15 AND 14-15 SHOULD NOT BE INSTALLED UNTIL THE END OF CONSTRUCTION TO PREVENT RUNOFF FROM BYPASSING SEDIMENT BASIN.

HARRISON OAKS BOULEVARD

PROPERTY LINE

ZONING LINE

NORTH HARRISON AVENUE

FUTURE SIDEWALK NOT INCLUDED IN THIS CONTRACT

PANTRY SITE UNDER CONSTRUCTION

CONSTRUCTION ENTRANCE

-STORM DRAIN INLET PROTECTION-

B BLOCK AND GRAVEL CURB INLET SEDIMENT FILTER

STANDARD CONCRETE CATCH BASIN

STANDARD CONCRETE CATCH BASIN

STANDARD YARD INLET WITH CONCRETE SLAB

CATCH BASIN RISER / FILTER

-STORM DRAIN INLET PROTECTION-

A BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

STANDARD TEMPORARY SILT FENCE

SEEDBED PREPARATION

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP WHERE UNDESIRABLE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO 6 INCHES DEPTH.
3. REMOVE STONES, ROOTS, BRUSH, AND OTHER OBSTRUCTIONS LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER, AND SUPERPHOSPHATE 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. SLOPE OF 3 FEASIBLE PREPARED SURFACE SHALL CHILD SEED SLIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. WHERE CONCENTRATED FLOW WILL OCCUR, LAY MATTING.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDING.
9. MAINTAIN SEEDED AREAS UNTIL GRASS IS WELL ESTABLISHED. SEE MAINTENANCE, WATERING AND FOLLOWING SEEDING LIME, FERTILIZER AND RESEEDING RATES.
10. CONTINUE CONSERVATION INSPECTION OF MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

* APPLY: AGRICULTURAL LIMESTONE - 2 TONS/ACRE
FERTILIZER - 10 - 10 - 10 ANALYSIS 1000 - 2,000 LBS./ACRE
SUPERPHOSPHATE - 500 LBS./ACRE OF 20% ANALYSIS SUPERPHOSPHATE
MULCH - 1½ TONS STRAW OR HAY PER ACRE, ANCHORED
ASPHALT - 200 WITH LIQUID ASPHALT AT 400 GALLONS/ACRE OR EMULSIFIED ASPHALT AT 300 GALLONS/ACRE.

SEEDING SCHEDULE
(Earthwork)(3-88)

BOUNDARIES, SIDE DITCHES, SLOPES (excl. 1:1)

DATE	SEED	QUANTITY RATE
JUNE. 15 - NOV. 1	TALL FESCUE	300 LBS./ACRE
NOV. 1 - MAR. 1	TALL FESCUE & GROWTEST RYE	300 LBS./ACRE 25 LBS./ACRE
MAR. 1 - APR. 15	TALL FESCUE	300 LBS./ACRE
APR. 15 - JUNE. 30	WEEPING LOVEGRASS	10 LBS./ACRE
JULY. 1 - AUG. 15	TALL FESCUE ***SERICEA LESPEDEZA ***BROWN MILLET	300 LBS./ACRE 75 LBS./ACRE 50 LBS./ACRE

SLOPES 1½:1 OR 2:1:

DATE	SEED	QUANTITY RATE
MAR. 1 - JUNE. 1	SERICEA LESPEDEZA (SCARIFIED) AND	75 LBS./ACRE
JUNE. 1 - SEPT. 15	TALL FESCUE	300 LBS./ACRE
JUNE. 1 - JULY. 30	TALL FESCUE AND ***BROWN MILLET	300 LBS./ACRE 50 LBS./ACRE
JULY. 1 - AUG. 15	TALL FESCUE AND ***SERICEA LESPEDEZA (HULLED-UNSCARIFIED)	300 LBS./ACRE 100 LBS./ACRE
SEPT. 1 - MAR. 1	TALL FESCUE AND GROWTEST RYE	300 LBS./ACRE 75 LBS./ACRE

COMPLY CONSERVATION SPECIFICS BY SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR MIXTURE OR BOUNDARY AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH IN MOST WHOLE LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

***SERICEA LESPEDEZA - RECEIVE ACCORDING TO OPTIMUM DATES FOR DESIRED MANAGEMENT PRACTICE. DO NOT ALLOW TERMINAL GROWTH TO EXCEED 6 TO 8 INCHES IN HEIGHT BEFORE MOWING. OTHERWISE PLANTS MAY BE SHADED OUT.

CONSTRUCTION SEQUENCE (CARY)

1. OBTAIN GRADING PERMIT.
2. INSTALL ALL EROSION CONTROL MEASURES AS SHOWN.
3. OBTAIN CERTIFICATE OF COMPLIANCE THROUGH ON - SITE INSPECTION BY TOWN EROSION CONTROL ENGINEER.
4. PROCEED WITH GRADING.
5. CLEAN SEDIMENT BASINS WHEN HALF FULL.
6. SEED AND MULCH DENUDED AREA WITHIN 30 DAYS AFTER FINISHED GRADES ARE ESTABLISHED.
7. MAINTAIN SOIL EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
8. REQUEST FINAL APPROVAL BY TOWN EROSION CONTROL ENGINEER.
9. REMOVE SOIL EROSION CONTROL MEASURES AND STABILIZE THESE AREAS.
10. TOTAL DENUDED AREA - 13.5 ACRES.

STORM DRAINAGE DATA

INLET NUMB	D.A. (AC)	C	I	Q	PIPE NUMB	Q TOTAL	PIPE DIA. (IN)	PIPE LENGTH (FT)	SLOPE I	INV	TOP
1 FES	5.0	.9	7.5	33.7						443.5	
					1-3	33.7	30	268	1.9		
2 C.I.	1.9	.9	7.5	12.8						440.3	446.0
					2-3	12.8	18	4	7.5		
3 C.I.	.75	.9	7.5	5.1						440.0	446.0
					3-5	51.6	30	188	1.8		
4 C.I.	.9	.9	7.5	6.1						437.0	442.0
					4-5	6.1	15	4	10.0		
5 C.I.	.9	.9	7.5	6.1						436.6	442.0
					5-6	63.8	36	8	1.25		
6 C.I.	.3	.9	7.5	2.0						436.5	442.0
					6-7	65.8	36	26	0.9		
7 C.I.	.3	.9	7.5	2.0						436.27	442.0
					7-10	67.8	36	144	.9		
8 C.I.	.8	.9	7.5	5.4						436.0	442.0
					8-10	5.4	15	8	12.9		
9 C.I.	.7	.9	7.5	4.7						436.33	444.0
					9-10	9.4	18	136	1.0		
9A C.I.	.7	.9	7.5	4.7						436.43	444.0
					9A-9	4.7	15	4	7.5		
10 C.I.	.8	.9	7.5	5.4						436.97	442.0
					10-11	87.3	42	237	0.8		
11 J.B.	.5	.9	7.5	2.0						437.95	442.0
					11-15	89.3	42	68	18.2		
12 C.I.	1.6	.9	7.5	10.8						434.0	438.0
					12-13	10.8	18	36	1.0		
13 C.I.	.6	.9	7.5	4.0						433.64	437.6
					14	14.8	24	200	1.0		
14 C.I.	.7	.9	7.5	4.7						431.4	440.0
					14-15	19.5	24	22	24.4		
15 Y.I.	.67	.9	7.5	4.5						414.0	+423.0
					15-OUT	313.3	EXIST. 48" RCP			438.5	443.5
16 C.I.	1.8	.9	7.5	12.5							
					16-17	12.5	18	48	4.2	+436.5	440.0
17							EXIST. YARD INLET				

* FROM "AS-BUILT" MAP DATED FEB 24, 1988 BY DELEON CATHEY & COMPANY

Y.I. - YARD INLET
C.I. - CURB INLET
J.B. - JUNCTION BOX

NOTE: ALL CONSTRUCTION WILL BE TO TOWN OF CARY STANDARDS AND SPECIFICATIONS.

BASS, NIXON & KENNEDY, INC., CONSULTING ENGINEERS
919/851-4422/7416 CHAPEL HILL ROAD RALEIGH, N. C. 27607

REVISIONS TO
HARRISON PARK RETAIL FACILITY
CARY, WAKE COUNTY, NORTH CAROLINA

GRADING, STORM DRAINAGE & EROSION CONTROL PLAN

SCALE: 1" = 50'
DRAWN BY: JWC
DATE: 4-89
JOB NO. 88-100

SHEET 8 OF 8

5-25-89

Job Number _____ Book Number _____