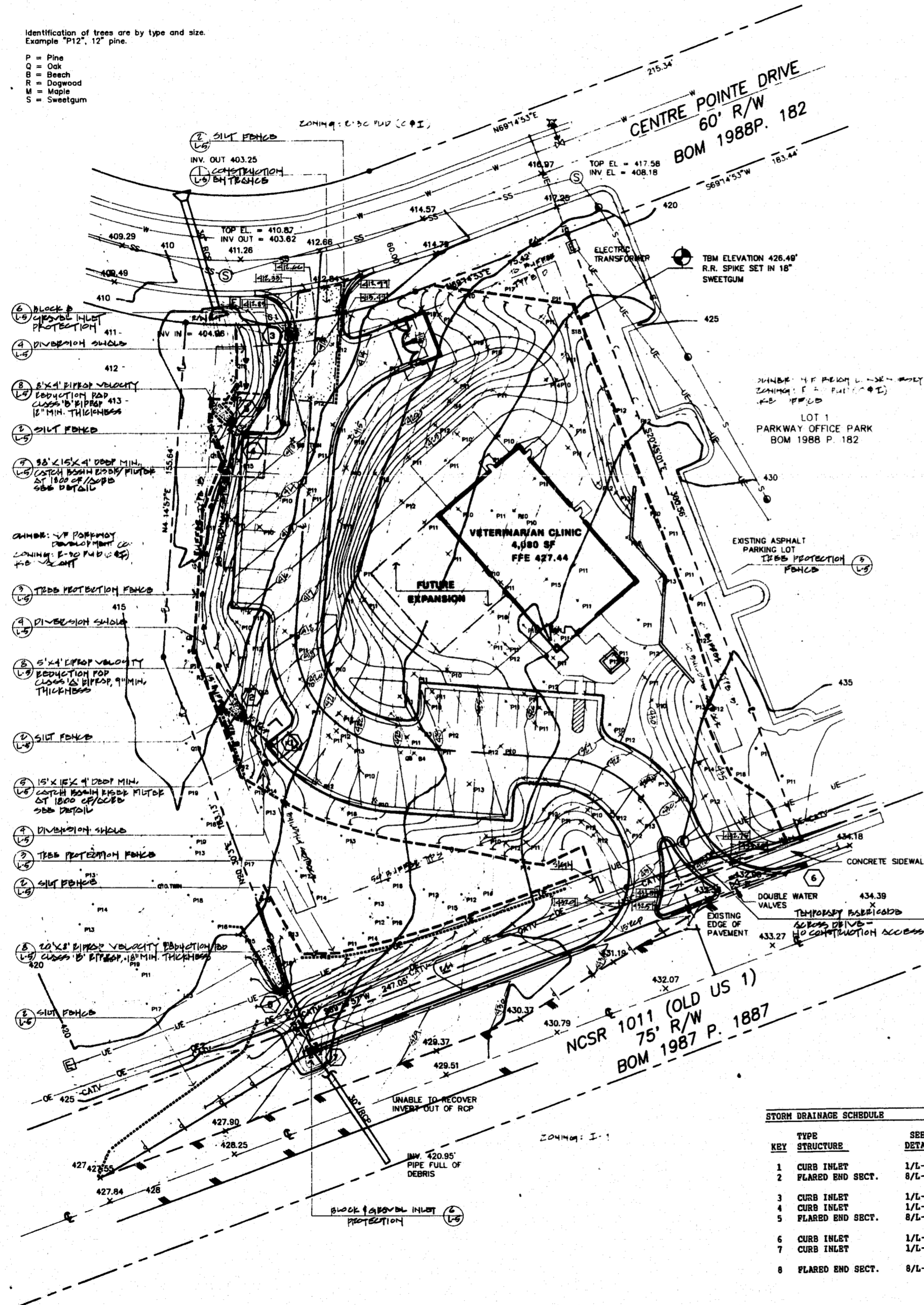


CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	235.72	108.89				

Identification of trees are by type and size.
Example "P12", 12" pine.

P = Pine
O = Oak
B = Beech
R = Dogwood
M = Maple
S = Sweetgum

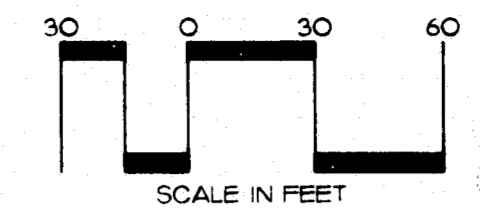


STORM DRAINAGE SCHEDULE

KEY	TYPE STRUCTURE	SEE DETAIL	TOP ELEV.	INLET ELEV.	INV. IN	INV. OUT	CUMUL. DISCH.	DISCHARGE PIPE	GRADE PERCENT	VELOCITY	AVAILABLE Q
1	CURB INLET FLARED END SECT.	1/L-6	420.17	419.50	415.77	415.33	1.23 CFS	22 LP-15" RCP	2.00%	5.19 FPS	7.91 CFS
3	CURB INLET	1/L-6	412.75	412.08	408.31	408.83	1.57 CFS	52 LP-15" RCP	1.00%	4.34 FPS	4.89 CFS
4	CURB INLET	1/L-6	412.06	411.39	408.01	408.01	4.30 CFS	10 LP-15" RCP	1.00%	5.63 FPS	2.16 CFS
5	FLARED END SECT.	8/L-5					4.30 CFS			5.63 FPS	
6	CURB INLET	1/L-6	433.62	432.95	429.53	429.53	1.79 CFS	244 LP-15" RCP	2.06%	5.84 FPS	7.48 CFS
7	CURB INLET	1/L-6	428.59	427.92	424.50(5)	424.50(5)	3.57 CFS	30" RCP			
8	FLARED END SECT.	8/L-5									

- CONSTRUCTION SEQUENCE**
- 1) Obtain Environmental Permit from the Construction Management Department of the Town of Cary, located at 316 North Academy Street. Any fines, penalties, or additional charges incurred by the Owner due to land disturbing activities by the Contractor prior to the issuance of an Environmental Permit shall be charged to the Contractor.
 - 2) Install all erosion control measures as shown on the approved Grading Plan. Clear only those areas necessary for the installation of said measures. Install catch basin riser filters prior to any site grading. Contractor may relocate or modify erosion control measures to make adjustments for unforeseen field conditions so long as sizes, volumes, and construction are maintained to insure the integrity and usefulness of the proposed measures. All relocations or modifications shall have the prior approval of the Landscape Architect.
 - 3) Obtain Certificate of Compliance through on-site inspection by Town of Cary Erosion Control Engineer. Contractor shall ensure conformance with the approved plan throughout construction.
 - 4) Proceed with grading and installation of storm drainage system and other utilities.
 - 5) All partially completed storm drain lines shall be protected at the end of each day in accordance with detail 7/L-5.
 - 6) Provide required maintenance on all erosion control measures. Inspect all catch basin/riser filters, block and gravel inlet protection measures, diversion swales, and silt fencing after each rainfall event and repair any damaged or weakened segments. Clean out catch basin/riser filters when any accumulated sediment reaches one-half of the design capacity. Restore basins to original design capacity.
 - 7) Seed and mulch denuded areas within 30 days after finished grades are established. Seeding for erosion control purposes shall be in accordance with the schedules found on the drawings.
 - 8) Catch basin riser filters can be removed following placement of the aggregate base course and stabilization by seeding of the fill slopes adjacent to the building.
 - 9) Maintain soil erosion control measures until permanent ground cover is established.
 - 10) Request final approval by Town of Cary Erosion Engineer.
 - 11) Remove soil erosion control measures and stabilize these areas.
- Construction phasing may be improved by the relocation of certain erosion measures or the installation of additional measures. It is the intent of the Owner to limit the disturbed area wherever possible by flexibility with the erosion control measures as construction progresses. (All phasing proposals by Contractor shall be submitted to the Landscape Architect for approval with subsequent approval by the Town of Cary required.) Contractor shall provide, install, and maintain all measures necessary to complete the work shown on these drawings.

- GRADING NOTES**
- 1) Topographic data taken from actual field survey and map titled "Topographic and Tree Survey, Parkway Animal Hospital, Lot 2 - Parkway Pointe Office Park", dated 11/23/93, by Dewberry & Davis, Raleigh, North Carolina. Topographic data shown is to 1"MM elevation 426.49' at railroad spike set in 1" sweetgum tied to NCGS benchmark monument "1929".
 - 2) Contractor shall verify all grades and dimensions on site prior to construction and shall report any discrepancies to the Landscape Architect for adjustment.
 - 3) Locations for existing utilities shown on these plans are approximate only. Contractor shall verify the locations of all utilities and shall be responsible for any damage to same. PRIOR TO ANY TRENCHING OR EXCAVATION, CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE TO COORDINATE THESE ACTIVITIES.
 - 4) Contractor shall at all times maintain adequate safety measures, activities, and barricades for the protection of all persons on or about the site.
- ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE OCCUPATIONAL SAFETY AND HEALTH DIVISION OF THE NORTH CAROLINA DEPARTMENT OF LABOR. Copies of the applicable regulations may be obtained from the North Carolina Department of Labor, Occupational Health and Safety Division, 413 North Salisbury Street, Raleigh, North Carolina.
- Contractor shall be responsible for the design of adequate shoring and bracing in all trenches and excavations that are a part of the construction operations of this project. Contractor shall be responsible for installation and maintenance of adequate shoring and bracing, and the protection of all persons and property on or about the construction site.
- 5) All storm drainage pipe shall be ASTM C-76 (Latest), Class III minimum (unless noted otherwise on the plans). Joints shall be sealed with a preformed plastic sealing compound that meets Federal Specification SS-9-0210, Type I, Rope Form.
- All pipe lengths called out on the plans are provided for the convenience of the Contractor and are approximate only.
- 6) All cut/fill slopes shall be 1.5:1 or flatter.
 - 7) Disturbed area is 57,429 square feet.
 - 8) Soil below storm sewer outlets is White Store sandy loam, 6 to 10 percent slopes (US2), as taken from an approximate site location on Sheet No. 56 of the Soil Survey of Wake County, North Carolina issued November, 1970, by the United States Department of Agriculture.
 - 9) See utility drawings for water and sewer service connections.



- SEEDING FOR EROSION CONTROL**
- 1) Chisel compacted areas and spread topsoil 3 inches deep over adverse soil conditions, if available.
 - 2) Rip the entire area to a 6-inch depth.
 - 3) Remove all loose rocks, roots, and other obstructions leaving surfaces 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 4-6 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 reseed within the planting season if possible. If grass stand should be over 50% damaged, reestablish following original lime, fertilizer, and seeding rates.
 - 9) Consult 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 - 10-10-10 analysis @ 1000 lbs/acre
Superphosphate - 500 lbs/acre of 20% analysis superphosphate
Mulch - 2 tons (approx. 80 bales) small grain straw/acre
Anchor - Tack with asphalt emulsion @ 300 gals/acre or erosion control matting

Shoulders, Side Ditches, Slopes (Max. 3:1)

DATE	TYPE	RATE
Aug 15 - Nov 1	Fescue Mix*	300 lbs/acre
Nov 1 - Mar 1	Fescue Mix* and Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Fescue Mix*	25 lbs/acre
Apr 15 - Jul 15	Hulled Common Bermudagrass	300 lbs/acre
Jul 15 - Aug 15	Fescue Mix* and Browntop Millet**	25 lbs/acre
	or Sorghum-Sudan Hybrids**	120 lbs/acre
		35 lbs/acre

Slopes (3:1 to 2:1)

DATE	TYPE	RATE
Mar 1 - Jun 1	Sericea Lespedeza (scarified) and add Fescue Mix	50 lbs/acre
(Mar 1 - Apr 15)	add Fescue Mix	120 lbs/acre
(Mar 1 - Jun 30)	or add Weeping Lovegrass	10 lbs/acre
(Mar 1 - Jun 30)	or add Hulled Common Bermuda	25 lbs/acre
Jun 1 - Sep 1	Tall Fescue** and Browntop Millet**	120 lbs/acre
	or Sorghum-Sudan Hybrids**	35 lbs/acre
Sep 1 - Mar 1	Sericea Lespedeza (unhulled-uncarified) and Tall Fescue	70 lbs/acre
(Nov 1 - Mar 1)	add Abruzzi Rye	120 lbs/acre
		25 lbs/acre

Consult Conservation Engineer or Soil Conservation Service 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 rates combinations are possible.

*Fescue Mix shall be 75% Kentucky-31 Fescue and 25% Rebel Fescue

**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.

REVISIONS
10/27/93
10/27/93

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A PROJECT BY THE CENTRE GROUP
PARKWAY ANIMAL HOSPITAL
NCSR 1011 (OLD U.S. 1)
CARY, NORTH CAROLINA

DRAWN BY: ABC
CHECKED BY: GNF
PROJECT NO. 93-37
DATE: 29 DEC. 1993
L-2
SHEET OF

1 GRADING & EROSION CONTROL PLAN
SCALE: 1" = 30'-0"

THESE PLANS ARE PREPARED FOR REVIEW AND PERMITTING BY THE LOCAL AUTHORITIES HAVING JURISDICTION OVER APPLICABLE PORTIONS OF THE WORK, AND AS SUCH ARE NOT RELEASED FOR CONSTRUCTION UNTIL SO NOTED.