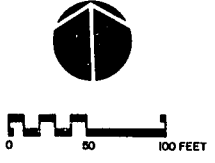
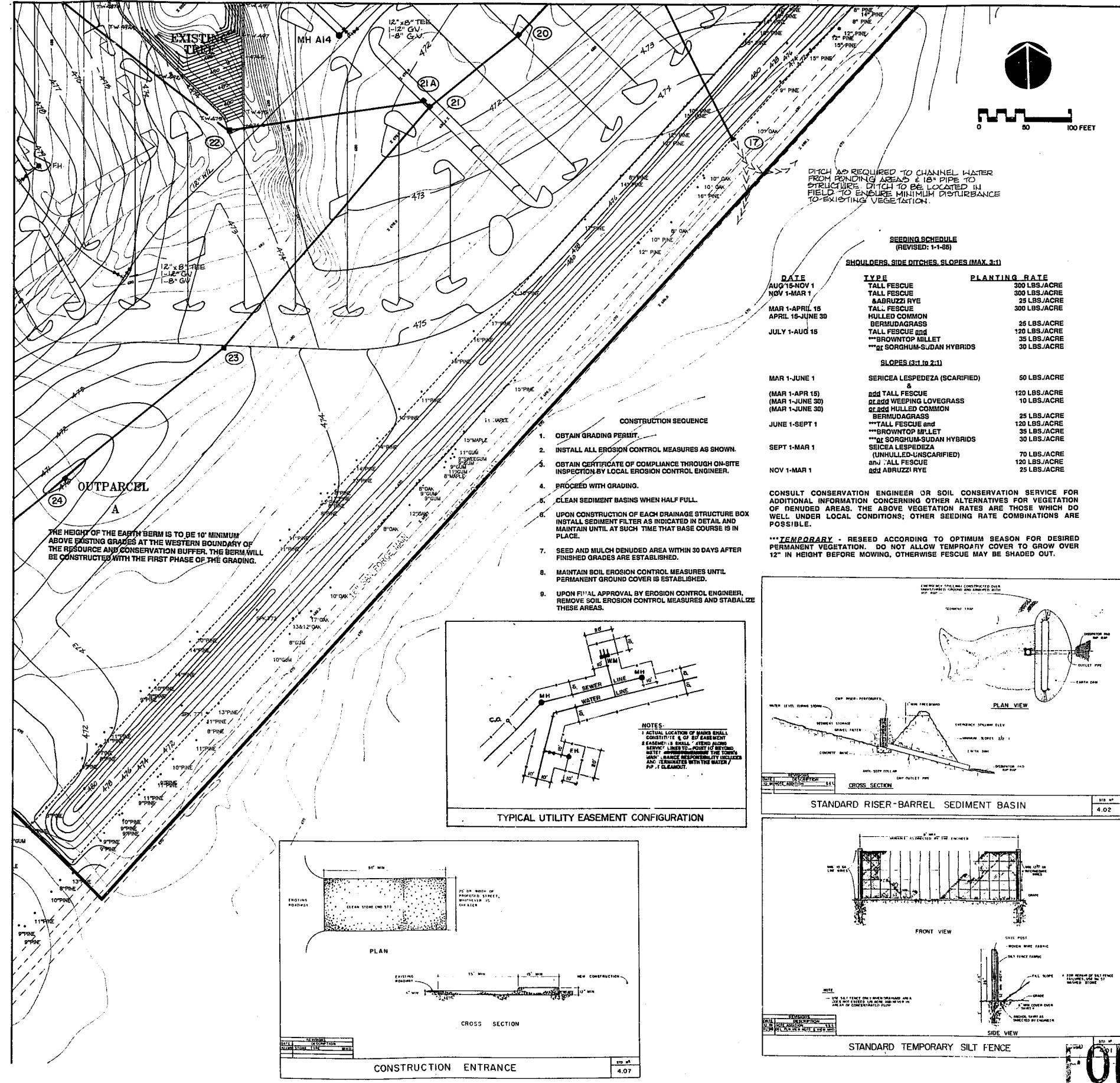




- Revisions
- JUNE 23, 1989 - 1st TOC REVIEW
  - JULY 10, 1989 - 2nd TOC REVIEW
  - JULY 24, 1989 - 3rd REVIEW



DITCH AS REQUIRED TO CHANNEL WATER FROM PONDING AREAS & 18" PIPE TO STRUCTURE. DITCH TO BE LOCATED IN FIELD TO ENSURE MINIMUM DISTURBANCE TO EXISTING VEGETATION.

**SEEDING SCHEDULE (REVISED: 1-1-88)**

**SHOULDERS, SIDE DITCHES, SLOPES (MAX. 3:1)**

DATE	TYPE	PLANTING RATE
AUG 15-NOV 1	TALL FESCUE	300 LBS./ACRE
NOV 1-MAR 1	TALL FESCUE ABRUZZI RYE	300 LBS./ACRE 25 LBS./ACRE
MAR 1-APR 15	TALL FESCUE	300 LBS./ACRE
APR 15-JUNE 30	HULLED COMMON BERMUDAGRASS	120 LBS./ACRE 25 LBS./ACRE
JULY 1-AUG 15	TALL FESCUE and BROWNSTOP MILLET Sorghum-Sudan Hybrids	120 LBS./ACRE 30 LBS./ACRE 30 LBS./ACRE
MAR 1-JUNE 1	SERICEA LESPEDEZA (SCARIFIED) & TALL FESCUE	60 LBS./ACRE 120 LBS./ACRE
(MAR 1-APR 15) (MAR 1-JUNE 30) (MAR 1-JUNE 30)	LEGG WEEPING LOVEGRASS or HULLED COMMON BERMUDAGRASS	10 LBS./ACRE 25 LBS./ACRE 25 LBS./ACRE
JUNE 1-SEPT 1	TALL FESCUE and BROWNSTOP MILLET Sorghum-Sudan Hybrids	120 LBS./ACRE 30 LBS./ACRE 30 LBS./ACRE
SEPT 1-MAR 1	SERICEA LESPEDEZA (UNMULLED-UNSCARIFIED) and TALL FESCUE	70 LBS./ACRE 120 LBS./ACRE
NOV 1-MAR 1	ABRUZZI RYE	25 LBS./ACRE

CONSULT CONSERVATION ENGINEER OR SOIL CONSERVATION SERVICE FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDE AREAS. THE ABOVE VEGETATION RATES ARE THOSE WHICH DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

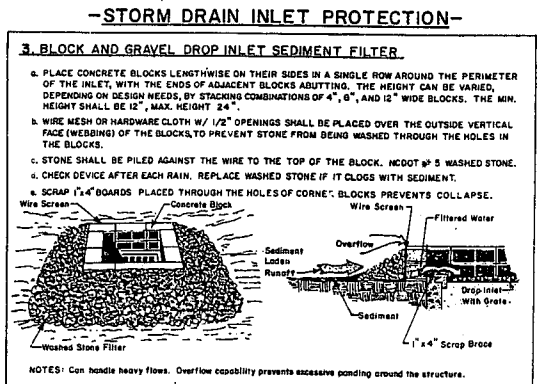
\*\*\*TEMPORARY - RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW OVER 12" IN HEIGHT BEFORE MOWING, OTHERWISE FESCUE MAY BE SHADED OUT.

FROM	TO	DIA (in)	LTH (ft)	SLOPE (%)	AREA (sq)	'C' (ft)	FLOW (cfs)			INVERT
							TOTAL	LOCAL	DOWNSTREAM	
1	2	48	80	0.80	0.78	0.95	194.00	5.50	444.00	450.11
2	3	15	9	1.97	0.78	0.95	189.50	5.50	452.94	453.02
3	4	48	45	1.60	0.78	0.95	188.00	5.50	450.11	450.69
4	5	24	105	1.15	0.50	0.95	24.20	3.00	452.04	453.27
5	6	24	145	0.85	0.50	0.95	20.80	3.00	452.04	453.27
6	7	24	70	0.60	0.60	0.85	17.20	3.00	453.27	453.00
7	8	18	70	1.68	0.50	0.85	13.80	3.00	453.89	454.85
8	9	18	100	1.00	0.50	0.85	10.00	3.00	454.85	456.85
9	10	18	150	0.80	0.50	0.85	6.50	3.00	455.85	458.00
10	11	18	125	0.60	0.50	0.85	4.50	3.00	456.00	459.00
11	12	15	125	2.40	0.22	0.95	1.60	1.50	455.80	455.00
12	13	15	100	1.25	0.85	0.85	152.50	4.00	450.83	454.84
13	14	48	190	1.05	0.00	1.00	147.80	5.40	454.84	458.20
14	15	18	100	2.00	2.20	1.00	16.50	16.50	455.30	458.80
15	16	18	100	0.80	0.80	0.90	4.50	4.50	452.00	452.18
16	17	18	70	0.70	0.80	0.90	121.50	4.50	457.43	458.27
17	18	18	125	0.70	0.80	0.90	121.50	0.00	458.20	457.43
18	19	24	190	1.00	2.50	1.00	18.00	18.00	458.32	461.82
19	20	24	200	0.50	0.50	0.90	18.00	18.00	459.50	467.00
20	21	30	120	1.30	0.75	0.85	75.30	5.30	458.88	460.54
21	22	18	210	2.00	0.80	0.90	14.00	6.00	460.94	465.14
22	23	18	350	1.35	1.06	1.00	8.00	8.00	465.14	469.87
23	24	18	8	5.00	0.75	0.95	5.30	5.30	460.54	460.94
24	25	18	300	0.80	1.10	0.95	5.07	7.80	460.54	462.99
25	26	38	220	0.50	2.30	0.80	42.80	15.50	462.99	467.49
26	27	15	215	0.67	0.12	0.85	6.80	6.80	464.68	468.88
27	28	15	25	1.00	0.78	1.00	5.80	5.80	465.58	468.81
28	29	18	30	0.60	0.17	0.85	10.90	1.20	457.00	455.05
29	30	18	30	2.50	0.15	0.85	9.70	1.10	456.05	455.05
30	31	18	70	2.40	0.81	0.85	8.80	4.30	455.80	457.48
31	32	15	65	1.00	0.81	0.85	4.35	4.30	457.58	458.53
32	33	15	128	1.00	0.42	0.85	4.80	4.20	456.75	458.00
33	34	15	40	0.50	0.48	0.85	3.30	3.30	455.00	458.80
34	35	15	50	0.50	0.20	0.85	3.10	3.10	455.50	458.75
35	36	15	70	0.50	0.24	0.85	1.70	1.70	458.75	453.10
36	37	30	95	1.00	0.40	0.85	41.40	2.00	458.05	457.00
37	38	30	85	0.90	0.50	0.85	38.50	3.00	457.00	457.77
38	39	30	70	0.70	0.50	0.85	34.90	3.00	457.77	458.26
39	40	24	120	1.00	0.50	0.85	31.30	3.00	458.26	458.35
40	41	24	120	1.50	0.50	0.85	27.70	3.80	458.35	460.15
41	42	15	115	1.80	0.50	0.85	3.80	3.80	460.15	462.22
42	43	24	300	1.00	-	-	20.50	16.70	458.68	461.88
43	44	15	165	2.50	1.30	1.00	9.80	9.80	461.88	468.00
44	45	15	160	0.80	1.50	0.95	10.70	10.70	467.50	478.50
45	46	24	120	1.00	0.50	0.85	19.10	3.50	458.80	461.00
46	47	18	245	2.88	0.20	1.00	15.80	1.40	461.00	468.00
47	48	18	100	2.00	1.90	1.00	14.20	14.20	468.00	470.00
48	49	24	75	38.41	0.20	0.85	36.60	1.40	438.00	460.81
49	50	15	80	1.20	0.50	0.85	7.00	3.50	460.81	461.53
50	51	15	80	1.00	0.50	0.85	3.90	3.90	461.53	462.13
51	52	24	65	3.00	0.45	0.85	38.70	3.50	461.00	462.95
52	53	18	95	3.00	0.50	0.85	17.50	3.50	463.15	464.20
53	54	15	70	1.00	0.50	0.85	3.50	3.50	463.50	464.20
54	55	18	140	2.80	0.50	0.85	17.70	3.50	464.48	468.40
55	56	15	50	1.30	1.00	0.95	7.10	7.10	468.40	469.05
56	57	18	90	0.50	0.50	0.95	3.50	3.50	468.95	468.75
57	58	18	90	3.00	-	-	14.00	0.00	464.20	465.00

**EROSION CONTROL CHART (5/23/89)**

STR. NO.	DISTURBED AREA (AC)	FILTER BASIN (FEET-LXWXD)	RIP RAP PADS (LXWXCLASS)	RISER/ BARREL SIZING (LXWXCLASS)
1	29.7	116X116X4	30X60 CLASS II	72" CMP/ 60" CMP
39	9.6	76X76X3	24X48 CLASS II	42" CMP/ 36" CMP

- UTILITY NOTES:**
- SEDIMENT BASIN CAPACITY IS BASED ON 0.57 DISTURBED ACRE PER YEAR. SIZE SHOWN IS FOR THE SEDIMENT STORAGE ZONE AS PER TOC STANDARDS.
  - ALL SYSTEMS NOT RELEASING INTO SEDIMENT BASINS NEAR STRUCTURES 1 OR 39 SHALL UTILIZE THE BLOCK AND GRAVEL FILTER SHOWN ON THESE PLANS.
  - ALL PROPOSED WATER AND SANITARY SEWER LINES CONNECTING TO PUBLIC UTILITIES WILL ALSO BE LOCATED IN PUBLIC EASEMENTS AS PER TYPICAL DETAIL SHOWN ON THESE PLANS.
  - ALL STORM DRAINAGE OUTSIDE PUBLIC RIGHT OF WAY IS PRIVATE.



Project  
**CARY VILLAGE MALL**

**UTILITIES, GRADING,  
EROSION CONTROL**

Date  
**JUNE 1, 1989**

Scale  
**1"=50'**

Sheet  
**U-4**

**FOR CONSTRUCTION**