ESTIMATE OF QUANTITIES

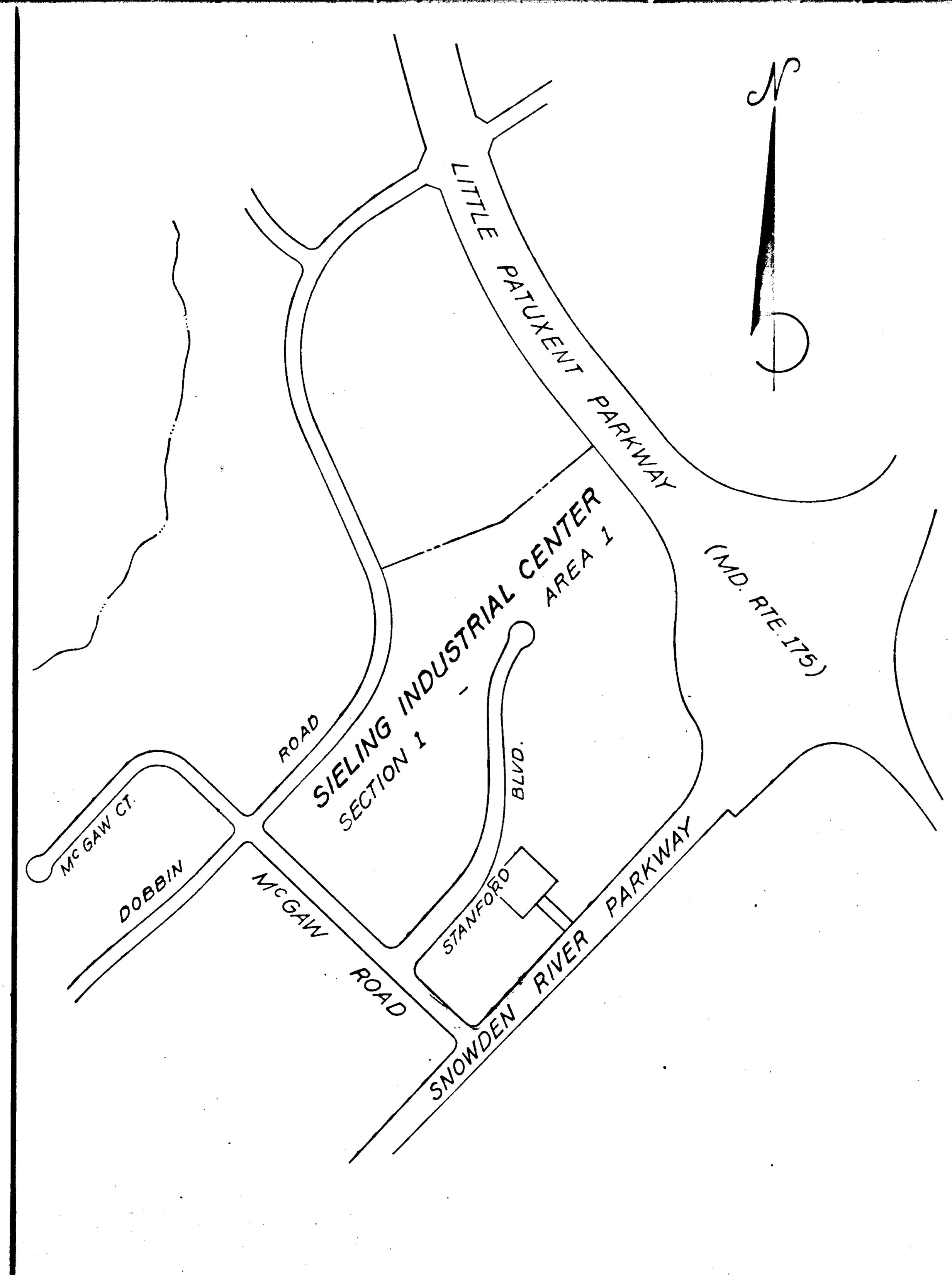
ITEM	DESCRIPTION	UNIT	QUANTITY

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET
2	ROAD PLAN & PROFILE
3	ROAD PLAN & PROFILE
4	ROAD PLAN & PROFILE
5	ROAD PLAN & PROFILE
6	ROAD PLAN & PROFILE
7	DRAINAGE AREA MAP
8	STORM DRAINS PROFILE
9	SEDIMENT & EROSION CONTROL PLAN
10	SEDIMENT & EROSION CONTROL PLAN
11	SEDIMENT & EROSION CONTROL PLAN

GENERAL NOTES

1. All work shall be performed in accordance with Howard County Standards, Specifications and Details for Construction.
2. All utility companies shall be notified 24 hours in advance of construction.
3. All inlets shall be Howard County Standard unless otherwise noted.
4. All street curb returns shall have 30 ft. radii unless otherwise noted.
5. Storm drain trenches within road rights-of-way shall be backfilled and compacted in accordance with Howard County Road Code.
6. Approximate location of existing utilities are shown. The contractor shall take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operations shall be repaired immediately at the contractor's expense.
7. The contractor shall test pit existing utilities where directed by the engineer a minimum of two weeks in advance of any construction.
8. Temporary compacted 18" high earth fill diversion dikes shall be constructed above the lips of fill slopes on the R.O.W. concurrently with the initial grading and directed to undisturbed sod areas at the end of each day.
9. Contractor to notify the Howard County Dept. of Inspections and Permits at least 3 days before starting work shown on these drawings. Phone # 992-2436.
10. All disturbed slope areas to be stabilized as soon as grading is completed.
11. All reinforced concrete for storm drain structures shall have a min. of 28 days strength of 3500 p.s.i.
12. All swales and slopes shall be permanently seeded.
13. Traffic control devices and their installation shall be in accordance with the manual on uniform traffic control devices, 1978 revised edition.
14. Stabilenka (filter cloth T-100) or equal shall be placed under all stone rip-rap (full width and length of stone).
15. Stone for rip-rap shall be as specified on the drawings. All rip-rap shall be unpaved.
16. All storm drains within the public road shall be CL IV minimum.
17. Existing inlets and pipes to be abandoned shall be removed and/or backfilled completely.



LOCATION MAP

SCALE: 1" = 600'

BENCH MARK

BM # 234401 ELEV. 307.49
STANDARD CONCRETE MONUMENT SET FLUSH WITH SURFACE
NORTH 491,333.018 EAST 858,206.723
BM # 2343001 ELEV. 288.24
3/4" RB. SET 0.3 FT. BELOW THE SURFACE
NORTH 492,140.801 EAST 857,226.671

LEGEND FOR SEDIMENT AND EROSION CONTROL PLAN

- SCE — STABILIZED CONSTRUCTION ENTRANCE.
- STORM DRAIN INLET PROTECTION.
- SBD — STRAW BALE DIKE.
- A-1 — EARTH DIKE.
- LIMIT OF DISTURBANCE

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chaper 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:
   - Total Area of Site 88.00 Acres
   - Area Disturbed 6.0 Acres
   - Area to be roofed or paved 3.60 Acres
   - Area to be vegetatively stabilized 2.30 Acres
   - Total Cut 4850 Cu. yds
   - Total Fill 4850 Cu. yds
   - Offsite waste/borrow area location ______
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector
10) On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11) Material Will Be Obtained From A Site With An Approved Sediment Control Plan.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred - Apply 2 tons per acre dolomitic Limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEQUENCE OF OPERATIONS

1. NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, PERMITS INSPECTOR, 48 HOURS PRIOR TO BEGINNING ANY WORK. ALL SEDIMENT CONTROLS UNDER APPROVED PLAN SDP 87-193 MUST BE IN PLACE AND FUNCTIONAL PRIOR TO START OF GRADING OPERATIONS.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. CLEAR AND GRUB FOR SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES ONLY.
4. INSTALL ALL SEDIMENT CONTROL MEASURES AND DEVICES.
5. CLEAR AND GRUB FOR THE REMAINING AREAS OF THE SITE TO BE DISTURBED.
6. BEGIN MAJOR GRADING AND MAINTAIN POSITIVE DRAINAGE TO THE SEDIMENT BASIN AND STONE OUTLET SEDIMENT TRAP AT ALL TIMES.
7. INSTALL STORM DRAINS. PROVIDE INLET PROTECTION AND STORM INLET SEDIMENT TRAPS.
8. INSTALL SUBBASE MATERIAL IN THE ROAD.
9. FINE GRADE REMAINING AREAS.
10. STABILIZE AREAS OF THE SITE NOT RECEIVING PAVING.
11. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE THE REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE.

OFFICE OF PLANNING & ZONING
[signature] 4/13/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SDP 87-193

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
[signature] 4-5-88
SIGNATURE — DATE
U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: [signature] 4/5/88
HOWARD S.C.D. — DATE

CERTIFICATION BY THE ENGINEER

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRATICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
[signature] 10/2/87
TAPOBRATA CHAKRABARTI REG. NO. — DATE

CERTIFICATION BY THE DEVELOPER

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF THE PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
[signature] 11-4-87
DATE

DEPARTMENT OF PUBLIC WORKS
[signature] 4-6-88
CHIEF, LAND DEVELOPMENT DIVISION — DATE — CHIEF, BUREAU OF HIGHWAYS — DATE
[signature] 4/8/88
CHIEF, BUREAU OF ENGINEERING — DATE — DATE

GWS
GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — TAPOBRATA CHAKRABARTI (seal)

DESIGNED BY: W.Z.
DRAWN BY: V.K.L.
CHECKED BY: P.R.C.

BY	NO.	REVISION	DATE

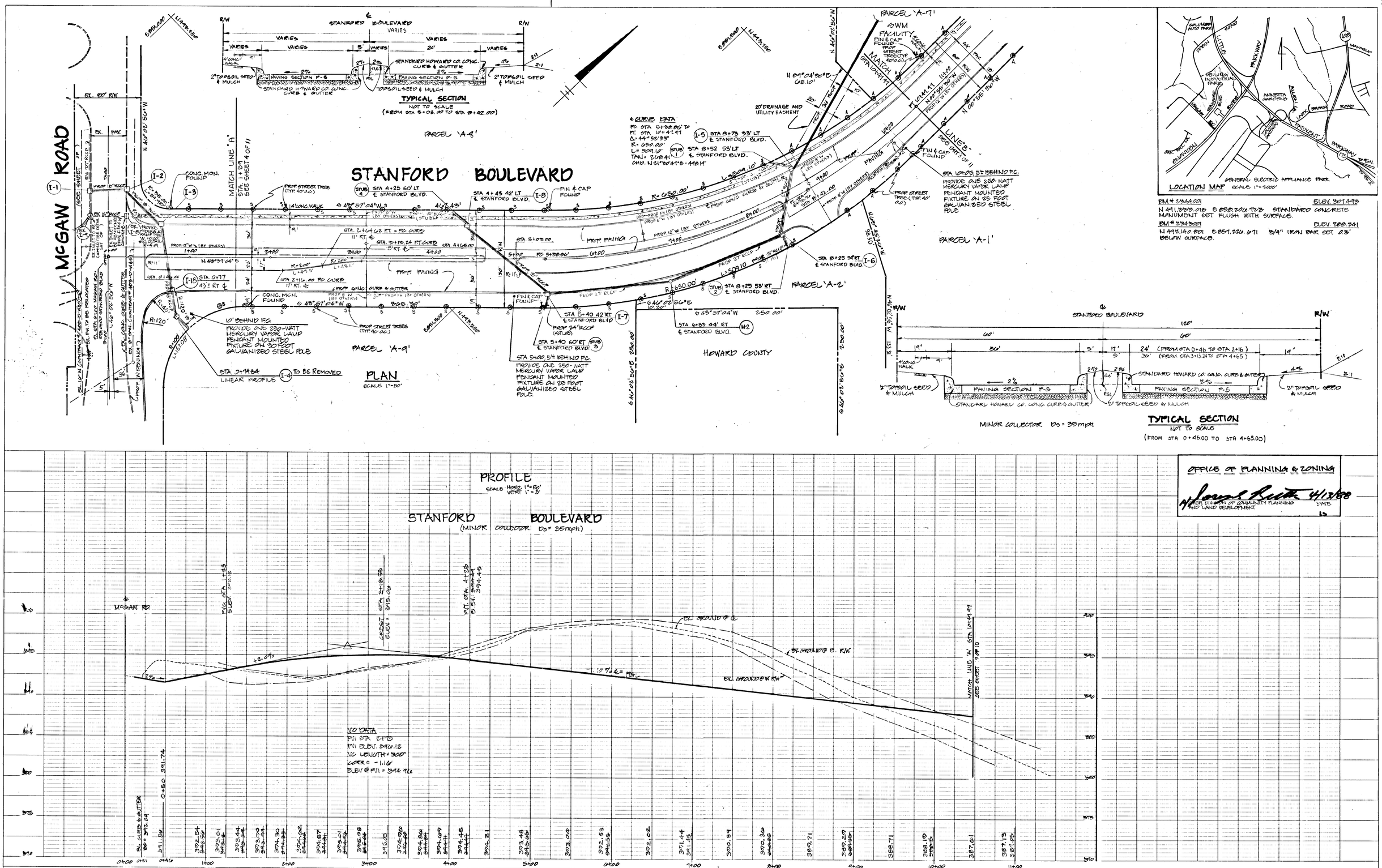
TITLE SHEET AND GENERAL NOTES

600' SCALE MAP NO. 36 — BLOCK NO. 23, 24

PROPOSED OFFICE
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1, AREA 1, PARCEL 'A-1' - 'A-9'
HOWARD COUNTY, MARYLAND — ELECTION DISTRICT 6
AUGUST 25, 1987

SCALE: AS SHOWN

F-88-109



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, BUREAU OF HIGHWAYS — DATE

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
303 ALLEGHENY AVENUE
TOWSON, MD 21204
301-825-8120

BY	NO	REVISION	DATE
GWS	1	REV. N.E. FILLET McGAW RD. & STANFORD BLVD	1/8/91
		ADDED I-18	

DES: W.Z.
DRN: D.A.L.
CHK: P.R.S.
DATE: 08-25-87

STANFORD BOULEVARD
PLAN & PROFILE
STA 0+00 TO STA 10+41.97

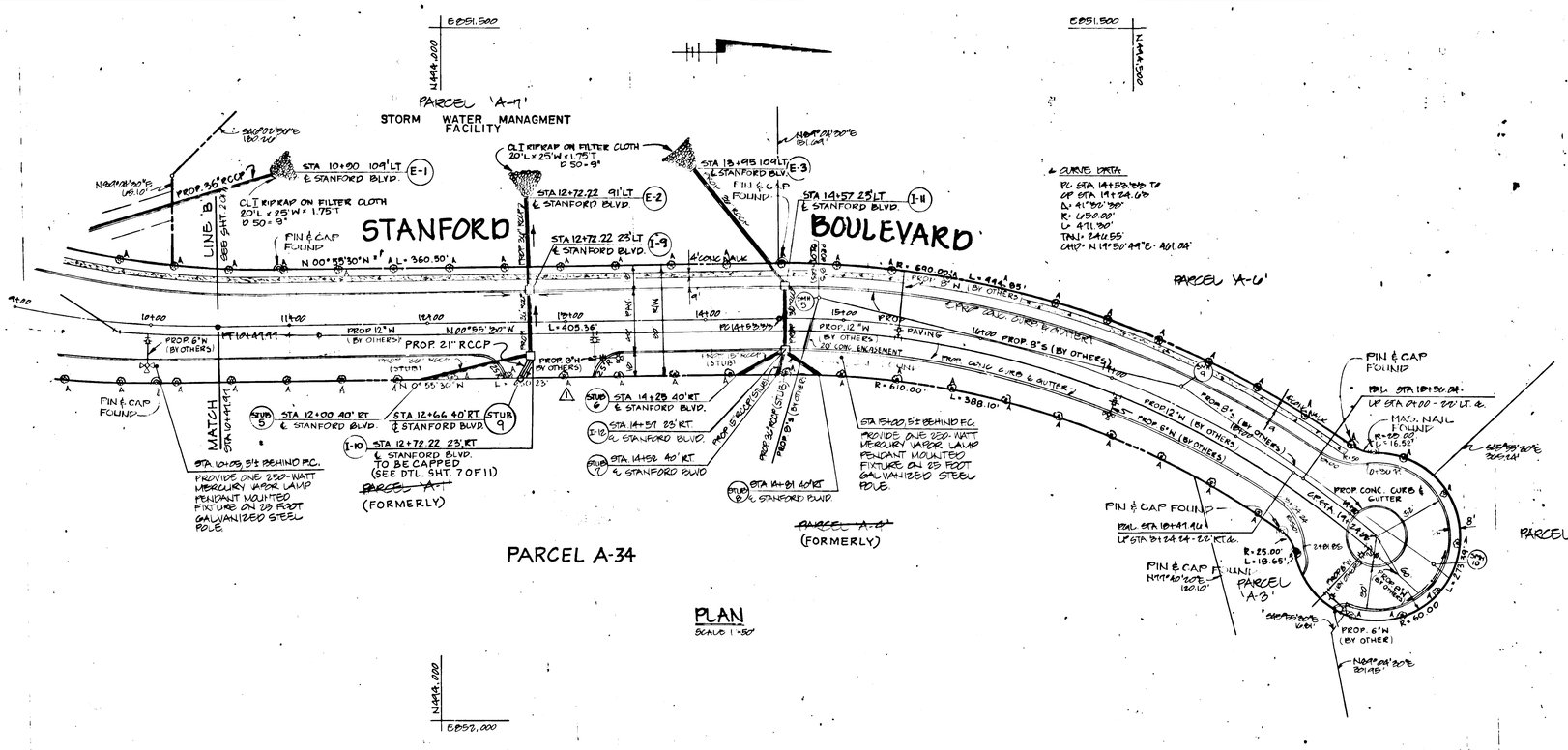
600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

COLUMBIA CORPORATE PARK
BEILINS INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS 'A-1'-'A-9'
HOWARD CO., MD. ELEC. DISTRICT 6
AUGUST 25, 1987

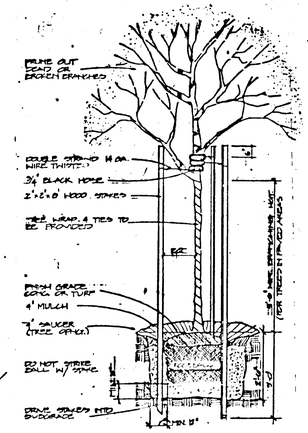
SCALE AS SHOWN
SHEET 2 OF 11

AS-BUILT 6/27/94

F-88-109

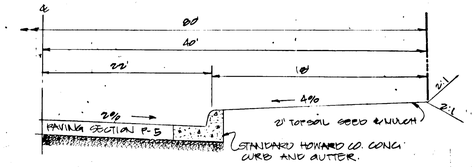


PLAN
SCALE 1"=50'



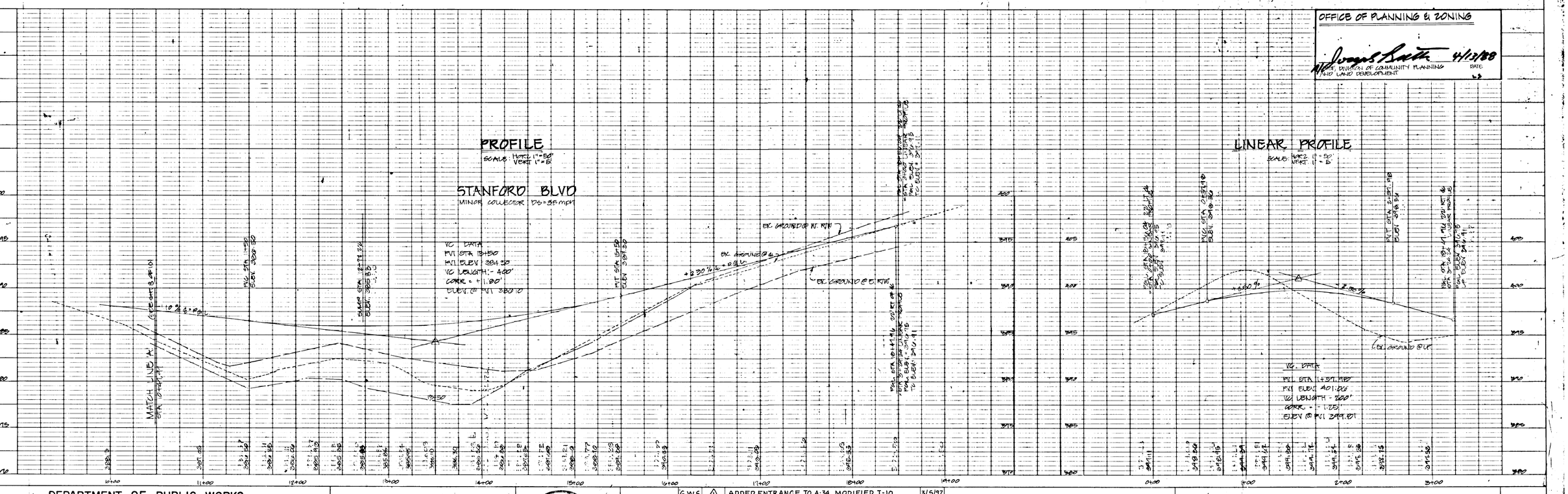
PLANT LIST

QTY.	KEY	BOTANICAL / COMMON NAME	SIZE	REMARKS
57	A	ACER SACCHARUM SUGAR MAPLE	13-15' HT. 2½-3" CAL.	B&B FULL
38	S	PLATANUS X ACERFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANETREE	13-15' HT. 2½-3" CAL.	B&B FULL



TYPICAL SECTION
STA 10+47.97 TO 18+47.96
NO SCALE
MINOR COLLECTOR DS=35mph

OFFICE OF PLANNING & ZONING
Joseph Bath 4/13/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE 4-8-88
CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88

GEORGE W. STEPHENS JR. & ASSOCIATES, INC.
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
301-825-8120

STATE OF MARYLAND — STAPLEBOARD, MARYLAND — REGISTERED PROFESSIONAL ENGINEER — 2/8/87 — 2130

DES: WZ	G.W.S.	△1	ADDED ENTRANCE TO A-34, MODIFIED I-10	3/5/97
DRN: DAL				
CHK: FRC				
DATE: 08-25-87	BY	NO	REVISION	DATE

STANFORD BOULEVARD
PLAN & PROFILE
STA 10+47.97 TO STA 19+24.63

600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

COLUMBIA CORPORATE PARK
SEILING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS 'A-1'-'A-9'
HOWARD CO., MD. ELECT. DISTRICT 6
AUGUST 25 1987

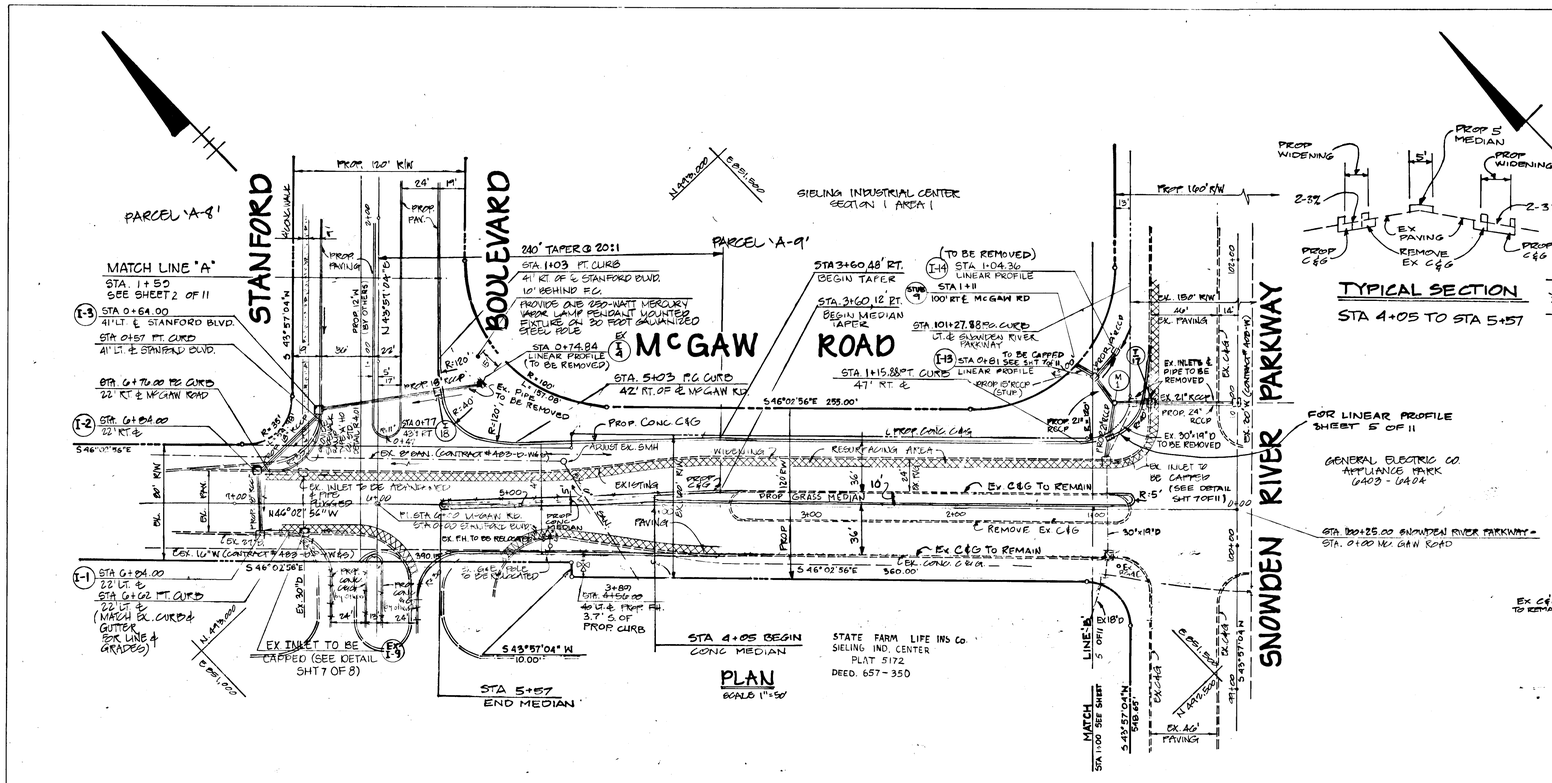
SCALE AS SHOWN
SHEET 3 OF 11

AS-BUILT 6/22/94

F-88-109

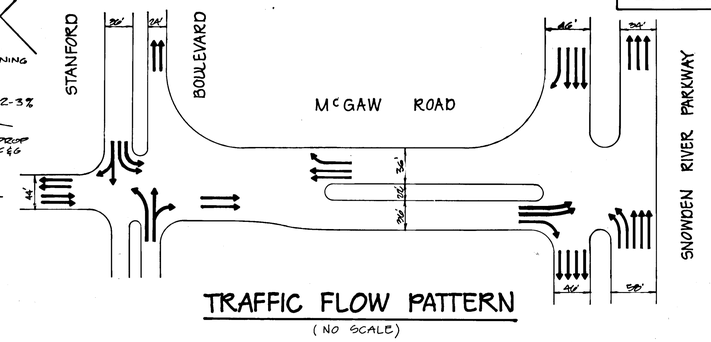
OFFICE OF PLANNING & ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 4/13/88



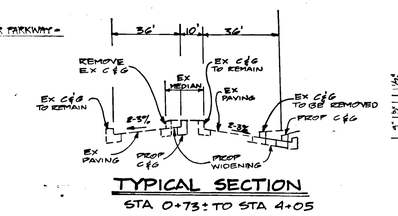
TYPICAL SECTION

STA 4+05 TO STA 5+57



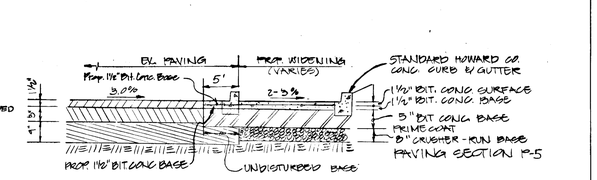
TRAFFIC FLOW PATTERN

(NO SCALE)



TYPICAL SECTION

STA 0+73± TO STA 4+05



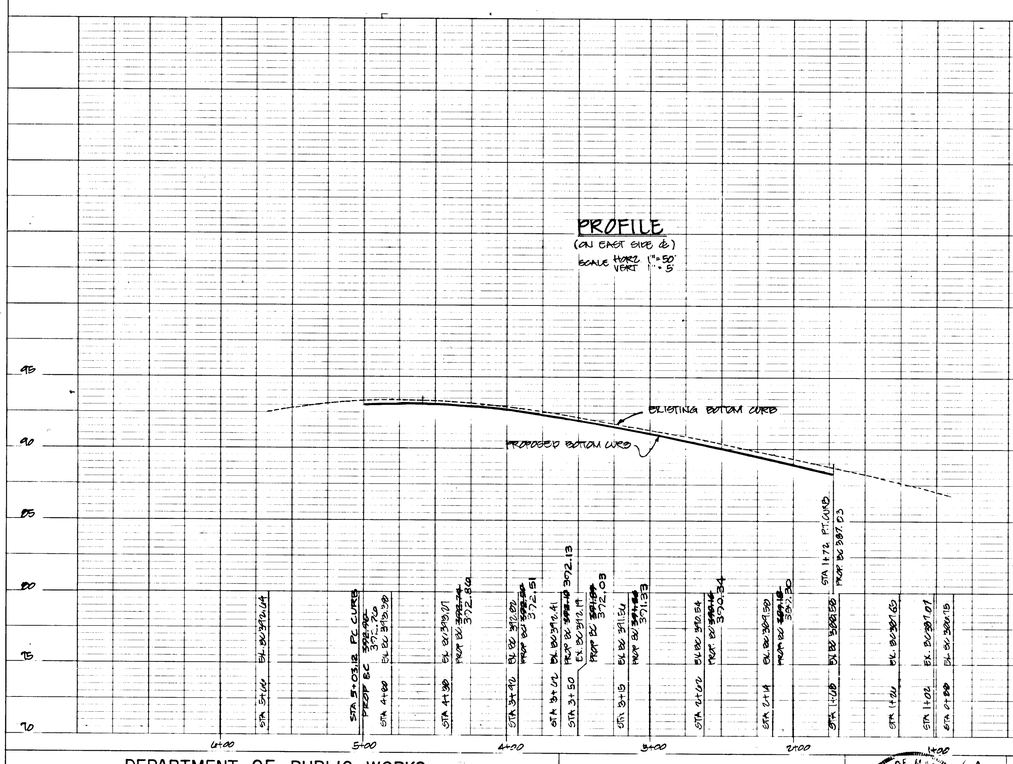
WIDENING DETAIL

(NOT TO SCALE)

PROFILE

(ON EAST SIDE ℄)

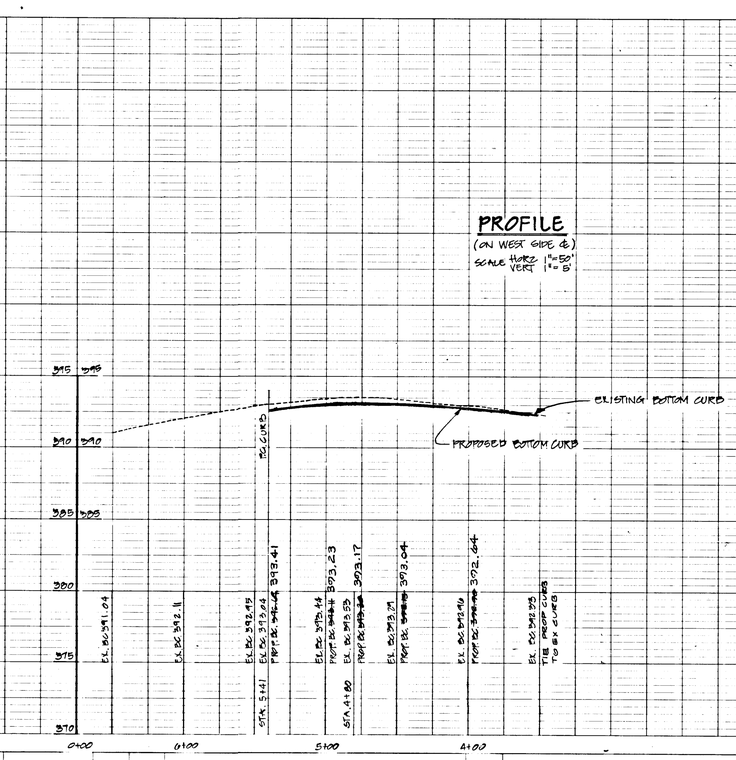
SCALE HORZ 1"=50' VERT 1"=5'



PROFILE

(ON WEST SIDE ℄)

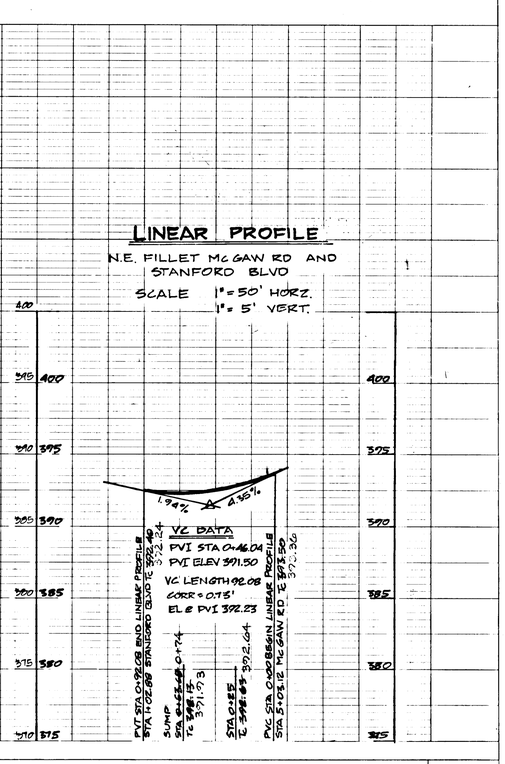
SCALE HORZ 1"=50' VERT 1"=5'



LINEAR PROFILE

N.E. FILLET McGAW RD AND STANFORD BLVD

SCALE 1"=50' HORZ.
1"=5' VERT.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE 4-8-88
CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
303 ALLEGHENY AVENUE
TOWSON, MD. 21204
301-825-8120

STATE OF MARYLAND — CORPORATE SEAL — 1-87

DES. WZ			
DRN. DAL			
CHK. RRG			
DATE 082587	G.W.S. BY	REVISION	DATE
		REMOVED I-15	
		REV. MEDIAN & REMOVED WIDENING S.W. SIDE McGAW	
	1	R.U. CURB NE SIDE McGAW RD ADDED I-18	11/21/90

McGAW ROAD
PLAN & PROFILE
STA 0+00 TO STA 7+00

600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS 'A-1'-'A-9'

HOWARD CO., MD. ELECT. DISTRICT 6

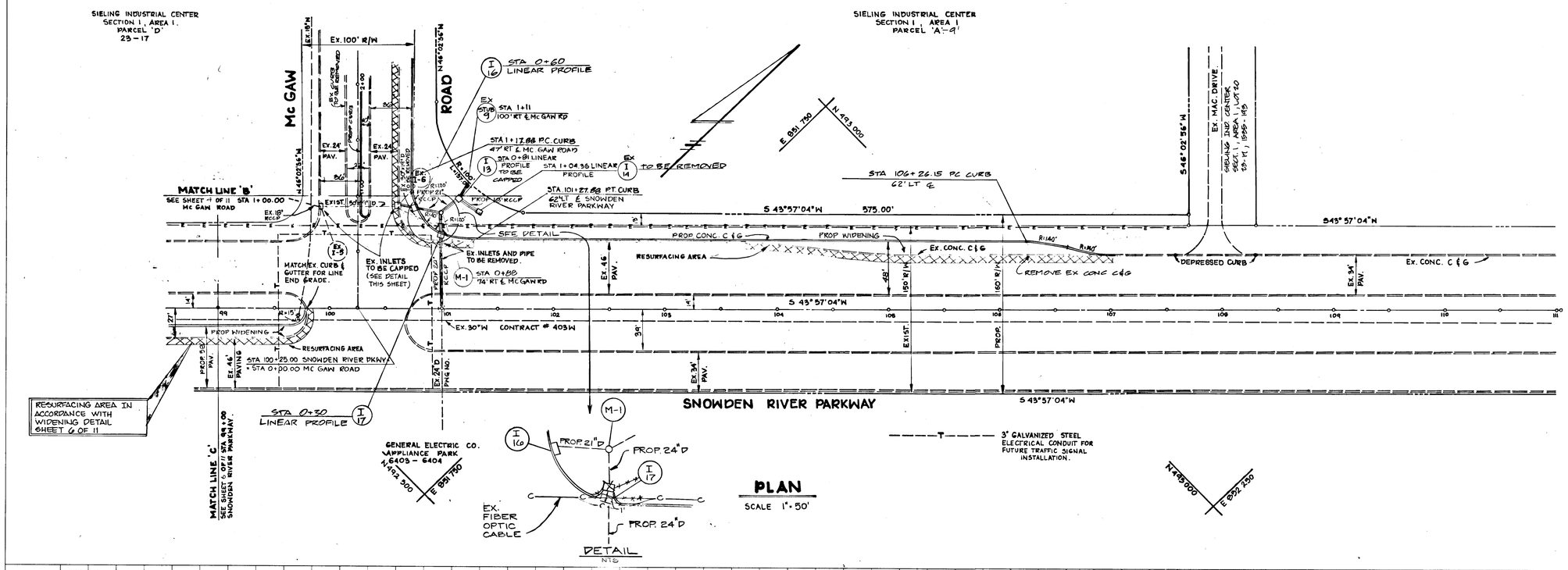
AUGUST 25 1987.

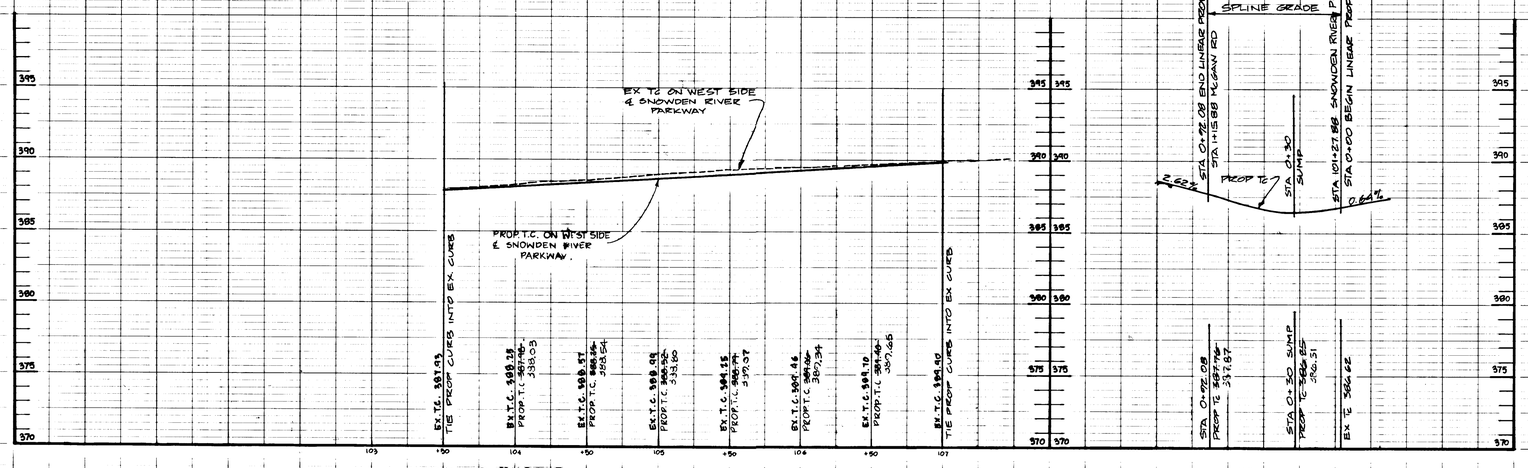
SCALE AS SHOWN

SHEET 4 OF 11.

AS-BUILT - 6/27/94

F-88-109





WIDENING PROFILE
SNOWDEN RIVER PARKWAY
FROM STA. 101+84.00 TO STA. 107+25.00
SCALE HORZ. 1" = 50'
VERT. 1" = 5'

LINEAR PROFILE
SCALE HORZ. 1" = 50'
VERT. 1" = 5'
PC CURB,
STA 101+27.88 60' LT ℄ SNOWDEN RIVER PARKWAY
TO STA 1+15.88 PT CURB
47' RT ℄ McGAW ROAD

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE
CHIEF, BUREAU OF HIGHWAYS — DATE

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
303 ALLEGHENY AVENUE
TOWSON, MD 21204
301-825-8120

DES: W.Z.
DRN: J.W.
CHK: P.R.C.
DATE: 08-25-87

BY	NO	REVISION	DATE
GWS	1	ADDED I-16 & I-17 REMOVED I-15 ADDED 3 CENTERED CURVE NORTH FILLET SNOWDEN RIVER PARKWAY & Mc GAW ROAD REVISED WIDENING SNOWDEN RIVER PKWY.	11/19/87
GWS	2	WIDENED RIGHT TURN LANE BY 2' ON SNOWDEN RIVER PKWY ONTO McGAW ROAD	6/10/93
GWS	3	ADDED INLET DETAIL	6/30/93

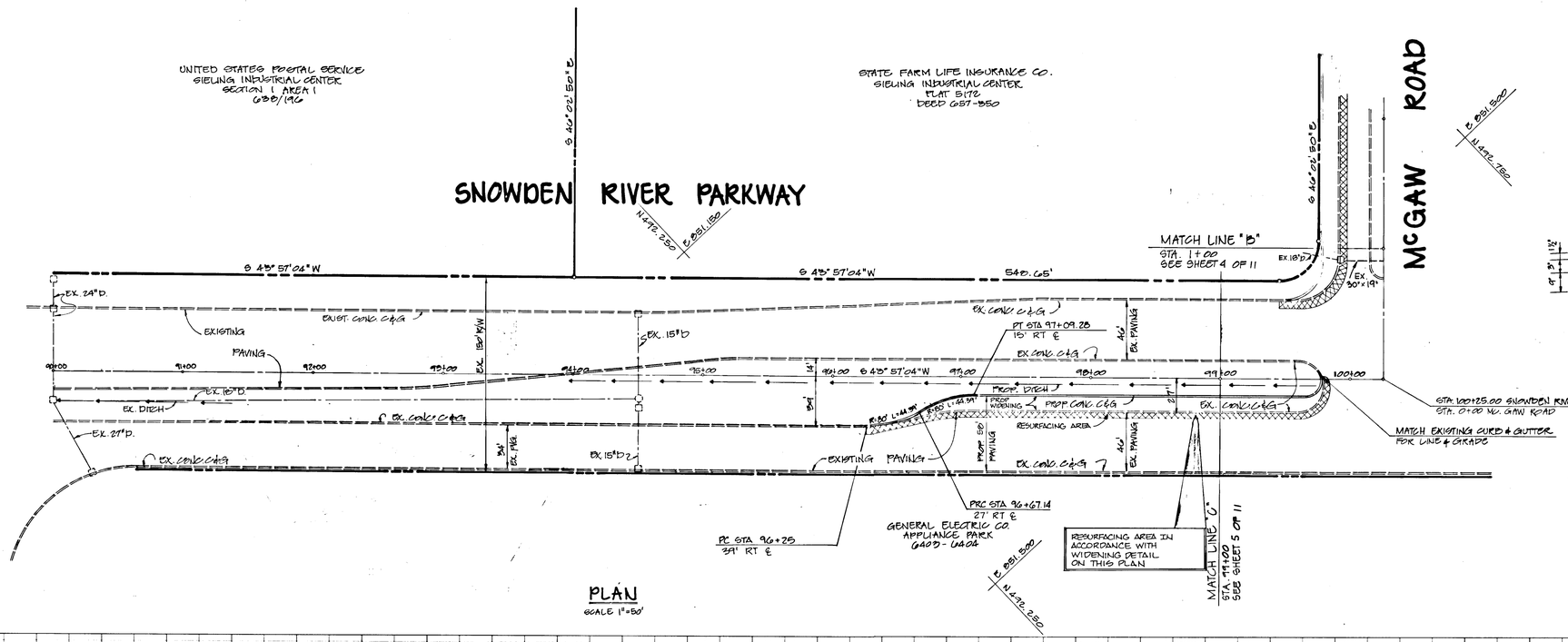
SNOWDEN RIVER PARKWAY
PLAN & PROFILE
STA 99+00.00 TO STA 107+27.88
600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

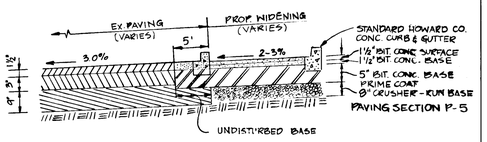
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS 'A-1'-'A-9'
HOWARD CO., MD. ELECT. DISCRICT 6
AUGUST 25 1987

SCALE AS SHOWN
SHEET 5 OF 11

AS-BUILT 6/27/94

F-88-109





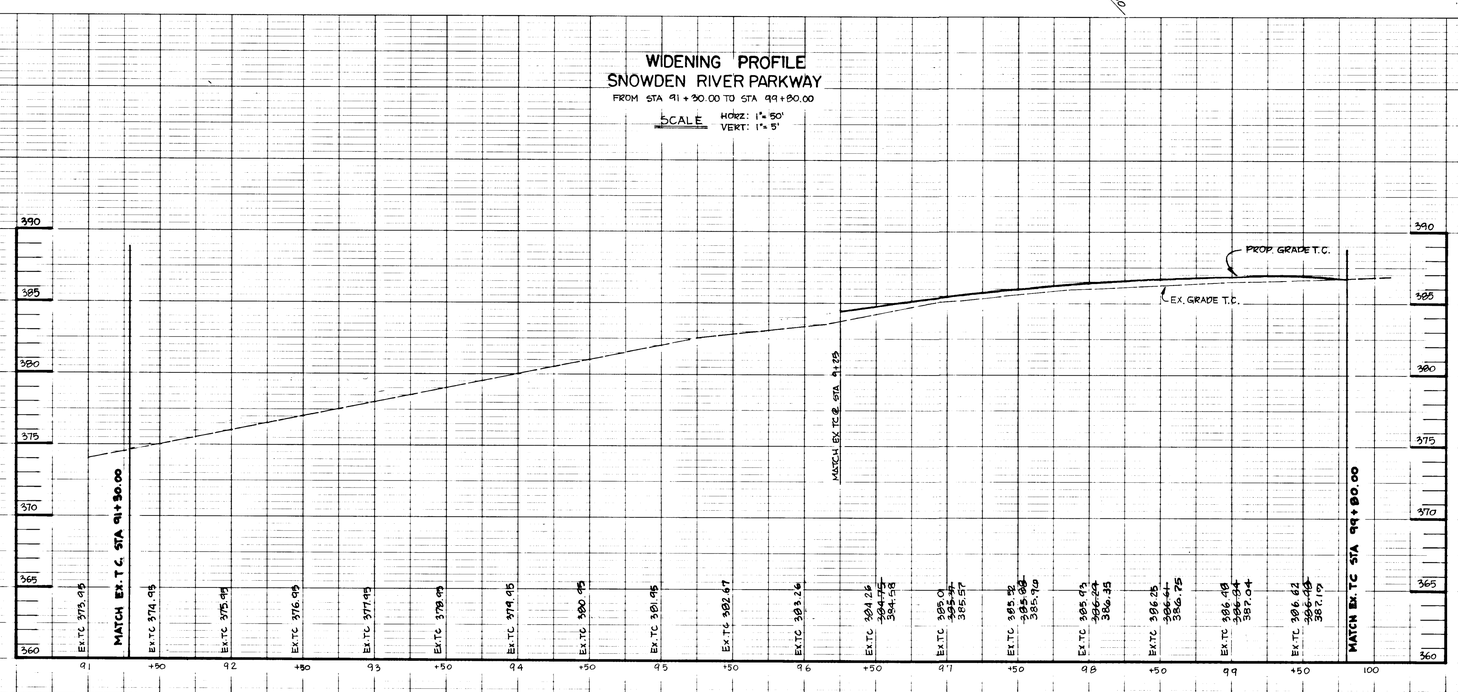
WIDENING DETAIL

NOT TO SCALE

SNOWDEN RIVER PARKWAY
STA 96+25 TO STA 99+80±

OFFICE OF PLANNING & ZONING

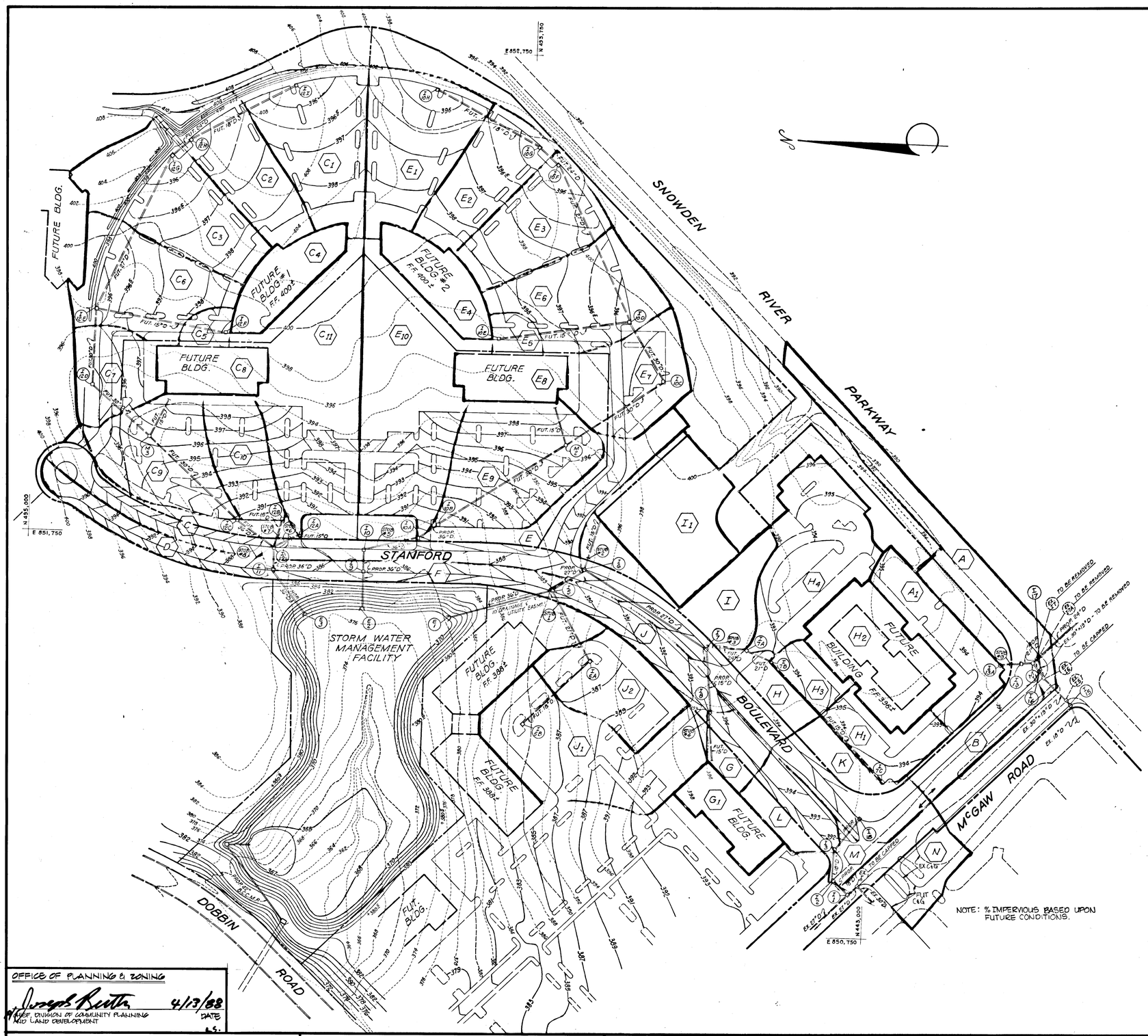
Howard Roth 4/15/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE



DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	GEORGE W. STEPHENS JR. & ASSOCIATES INC. 303 ALLEGHENY AVENUE TOWSON, MD. 21204 301-825-8120		DES: WZ. DRN: VKL. CHK: FRG DATE: 8-25-87	GW5 1 SHORTENED DOUBLE LEFT TURN LANE ON NORTHBOUND SNOWDEN RIVER PKWY ONTO McGAW RD 6/10/93	SNOWDEN RIVER PARKWAY ROAD PLAN STA 91+00 TO STA 99+00	COLUMBIA CORPORATE PARK SIELING INDUSTRIAL CENTER SECTION 1 AREA 1 PARCELS A-1'-A-9' HOWARD CO., MD. ELECT. DISTRICT 6	SCALE AS SHOWN
CHIEF, LAND DEVELOPMENT DIVISION — DATE CHIEF, DIVISION OF ENGINEERING — DATE CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88				BY NO REVISION DATE	600' SCALE MAP NO. 36 BLOCK NO. 23 & 29	AUGUST 25, 1987	SHEET 6 OF 11

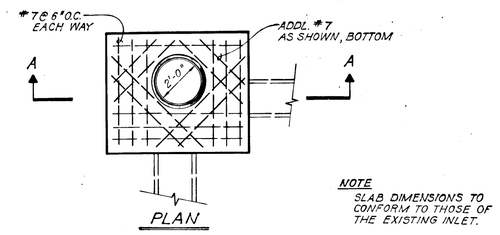
AS-BUILT 6/27/94

F-88-109

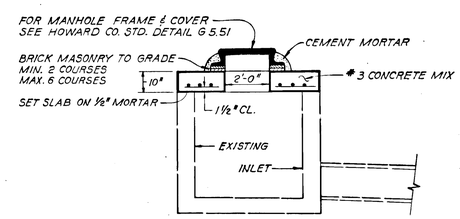


STORM DRAIN DESIGN DATA

D.A.	AREA	"C"	IMPERVIOUS	GRASS	D.A.	AREA	"C"	IMPERVIOUS	GRASS
A	1.49 Ac±	0.66	55%	45%	E_8	0.49 Ac±	0.95	100%	—
A_1	0.80 Ac±	0.78	72%	28%	E_9	1.60 Ac±	0.88	89%	11%
B	0.56 Ac±	0.71	64%	36%	E_{10}	1.72 Ac±	0.69	57%	43%
C	0.76 Ac±	0.66	51%	49%	F	1.12 Ac±	0.78	72%	28%
C_1	1.33 Ac±	0.81	77%	23%	G	0.34 Ac±	0.58	38%	42%
C_2	0.97 Ac±	0.79	73%	27%	G_1	0.48 Ac±	0.95	100%	—
C_3	1.39 Ac±	0.68	55%	45%	H	0.56 Ac±	0.60	42%	58%
C_4	0.58 Ac±	0.95	100%	—	H_1	0.55 Ac±	0.79	73%	27%
C_5	0.15 Ac±	0.79	73%	27%	H_2	1.19 Ac±	0.95	100%	—
C_6	1.37 Ac±	0.77	70%	30%	H_3	0.29 Ac±	0.78	72%	28%
C_7	0.77 Ac±	0.66	51%	49%	H_4	1.38 Ac±	0.72	62%	38%
C_8	0.49 Ac±	0.95	100%	—	I	1.10 Ac±	0.52	28%	72%
C_9	1.13 Ac±	0.87	87%	13%	I_1	1.27 Ac±	0.45	17%	83%
C_{10}	0.81 Ac±	0.90	92%	8%	J	0.60 Ac±	0.72	62%	38%
C_{11}	1.72 Ac±	0.69	57%	23%	J_1	1.64 Ac±	0.72	62%	38%
D	0.50 Ac±	0.78	72%	28%	J_2	1.00 Ac±	0.73	63%	37%
E	1.79 Ac±	0.61	43%	57%	K	0.83 Ac±	0.56	40%	60%
E_1	1.25 Ac±	0.87	87%	13%	L	0.49 Ac±	0.55	33%	57%
E_2	0.93 Ac±	0.85	84%	16%	M	0.12 Ac±	0.90	92%	8%
E_3	1.07 Ac±	0.81	77%	23%	N	0.66 Ac±	0.79	73%	27%
E_4	0.58 Ac±	0.95	100%	—					
E_5	0.15 Ac±	0.79	73%	27%					
E_6	0.99 Ac±	0.75	67%	33%					
E_7	1.14 Ac±	0.72	62%	38%					



NOTE
SLAB DIMENSIONS TO CONFORM TO THOSE OF THE EXISTING INLET.



SECTION A-A

INLET CAPPING DETAIL

NO SCALE

OFFICE OF PLANNING & ZONING

Joseph Rutter 4/13/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE — CHIEF, BUREAU OF ENGINEERING — DATE 4/21/88

Bernard W. Wetzel 4/7/88
CHIEF, BUREAU OF HIGHWAYS — DATE

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — Jonathan Carr Lee — 10/27/87 — P.E. #23138

DESIGNED BY: N.J.B.
DRAWN BY: V.K-L.
CHECKED BY: N.J.B.

BY:	NO.	REVISION	DATE
G.W.S.	1	ADDED I-16 & I-17 & I-18	11/21/90

DRAINAGE AREA MAP

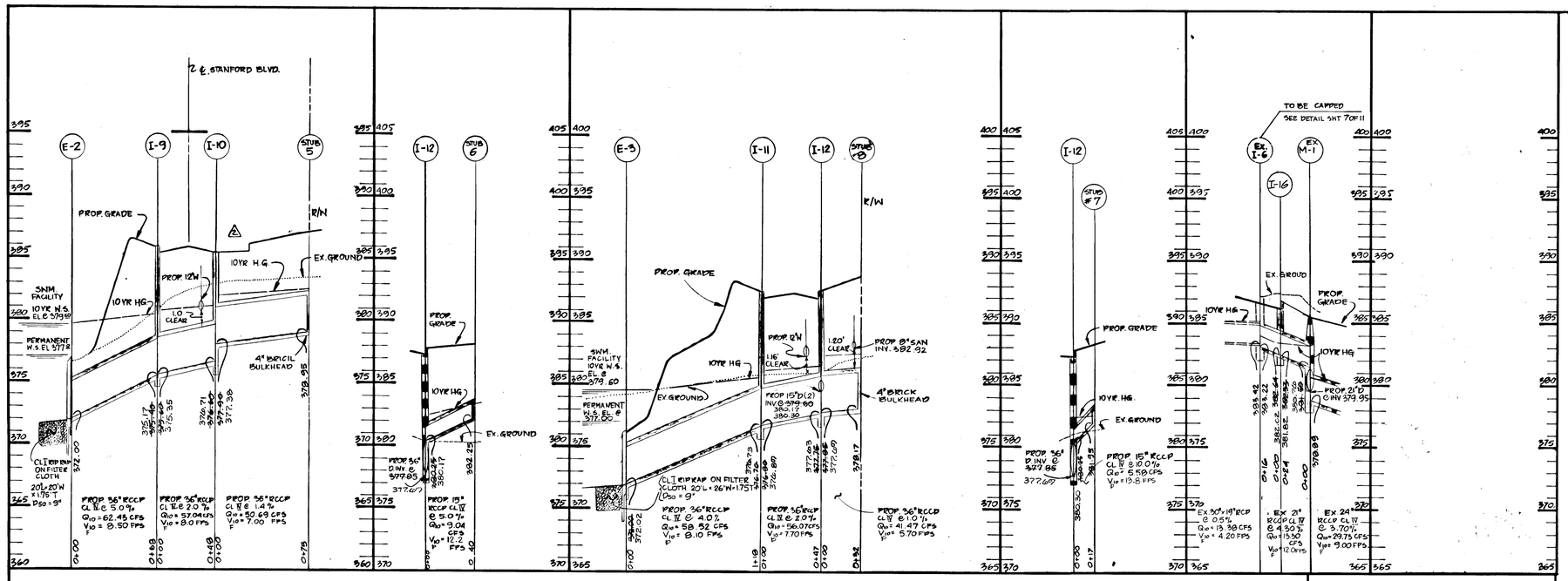
600' SCALE MAP NO. 36 — BLOCK NO. 23,24

PROPOSED OFFICE
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL PARK
SECTION 1, AREA 1, PARCELS 'A-1'-'A-9'
HOWARD COUNTY, MARYLAND — ELECTION DISTRICT 6
AUGUST 25, 1987

SCALE: 1"=100'

SHEET NO. 7 OF 11

F-88-109



INLET SHEDULE

NO	TYPE	ELEVATION TOP	ELEVATION INV. IN	ELEVATION INV. OUT	REMARKS
I 1	DBL 5' COMB	390.75	385.75	385.00	HO. CO. STD. DET. 4.34
I 2	TYPE A 5 INLET	391.20	386.22	386.12	HO. CO. STD. DET. 4.01 & 4.03
I 3	TYPE A 5 INLET	391.74	386.80	386.70	HO. CO. STD. DET. 4.01
I 5	TYPE A 5 INLET	389.50	378.70	377.95	HO. CO. STD. DET. 4.01
I 6	TYPE A 5 INLET	390.00	382.00	381.90	HO. CO. STD. DET. 4.01
I 7	TYPE A 5 INLET	393.00	387.70	386.70	HO. CO. STD. DET. 4.01
I 8	TYPE A 5 INLET	394.10	390.15	390.05	HO. CO. STD. DET. 4.01
I 9	TYPE A 10 INLET	385.90	375.60	375.40	HO. CO. STD. DET. 4.02
I 10	TYPE A 10 INLET	~~385.90~~ 385.30	377.90	376.60	HO. CO. STD. DET. 4.02
I 11	TYPE A 5 INLET	387.90	376.90	376.70	HO. CO. STD. DET. 4.01
I 12	TYPE A 5 INLET	387.90	377.85	377.75	HO. CO. STD. DET. 4.01
EX I 13	TYPE A 5 INLET	386.10	380.32	380.17	HO. CO. STD. DET. 4.01
I 16	TYPE A 5 INLET	~~386.70~~	~~382.64~~	~~382.55~~	HO. CO. STD. DET. 4.01
I 17	TYPE A 10 INLET	386.25	378.15	378.00	HO. CO. STD. DET. 4.02
I 18	TYPE A 5 INLET	392.13	387.30	387.50	HO. CO. STD. DET. 4.01

2 TO BE CAPPED SEE DTL. SHT. 7 OF 11

TO BE CAPPED SEE DET. SHT 7 OF 11

STRUCTURE SHEDULE

NO	TYPE	ELEVATION TOP	ELEVATION INV. IN	ELEVATION INV. OUT	REMARKS
EX M 1	5'-0" BRICK MH	385.60	381.50	~~378.09~~	HO. CO. STD. DET. 5.01
M 2	5'-0" BRICK MH	391.95	384.45	384.25	HO. CO. STD. DET. 5.01
E 1	TYPE 'A' HEADWALL	371.91	372.00	371.90	HO. CO. STD. DET. 5.11
E 2	TYPE 'A' HEADWALL	—	372.00	371.90	HO. CO. STD. DET. 5.11
E 3	TYPE 'A' HEADWALL	—	372.00	371.90	HO. CO. STD. DET. 5.11

STORM DRAIN PROFILES

scale: 1" = 50' HORZ
1" = 5' VERT

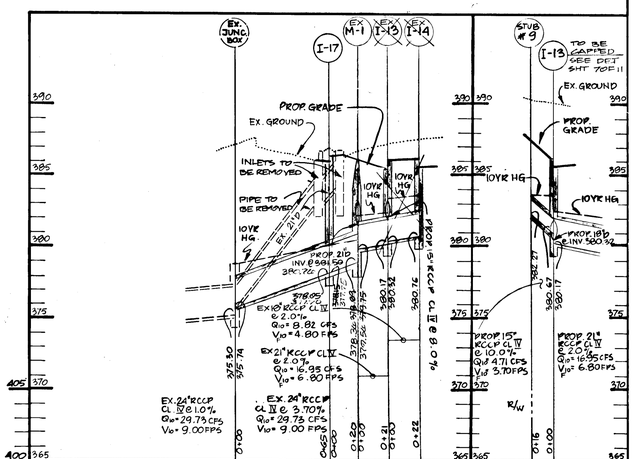
OFFICE OF PLANNING & ZONING

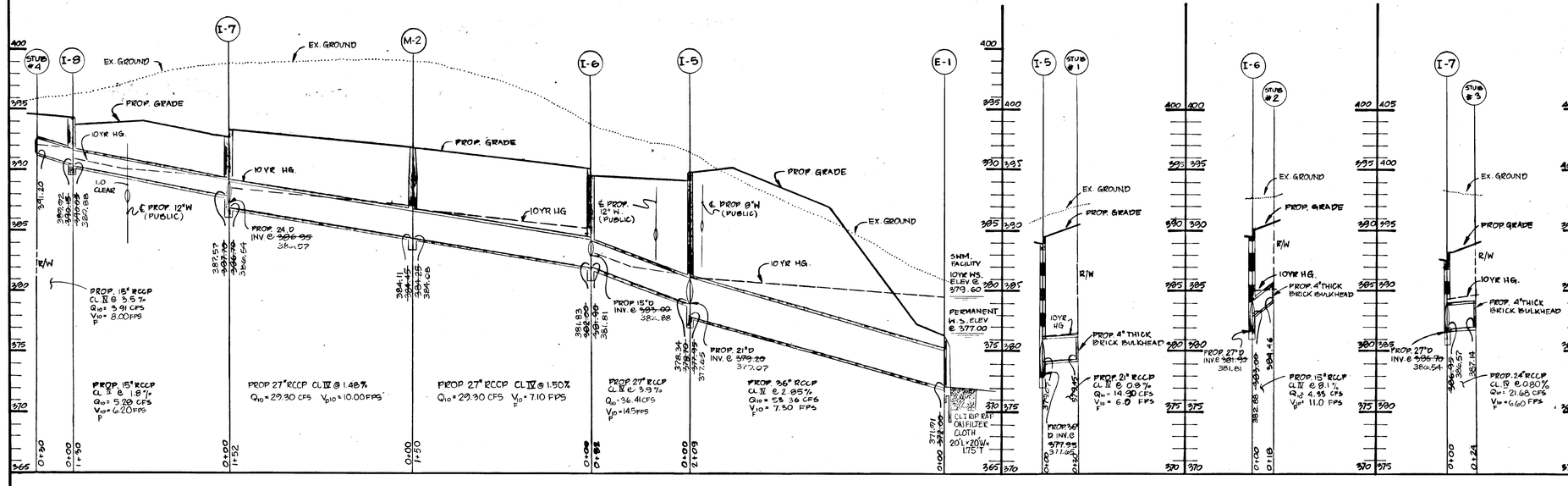
Joseph Rutter 4/13/88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

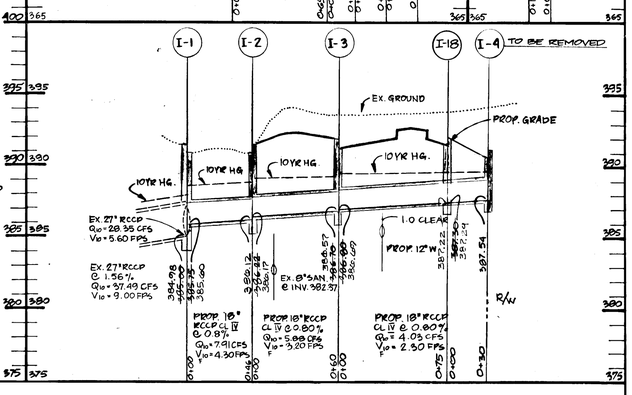
L.S.

NOTE: ALL STORM DRAINS TO BE CLASS IV MINIMUM.

ALL VELOCITIES ARE BASED ON INVERT OF PIPE.
(V_F = FULL FLOW VELOCITY, V_P = PARTIAL FLOW VELOCITY)







DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE 4/8/88
CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES, INC.
CIVIL ENGINEERS & LAND SURVEYORS
303 ALLEGHENY AVENUE
TOWSON, MARYLAND 21204
(301) 825-8120

STATE OF MARYLAND — REGISTERED PROFESSIONAL ENGINEER — No. 8920 — 4/7/87

DESIGNED BY: N.J.B.
DRAWN BY: J.J.W.
CHECKED BY: N.J.B.

BY:	NO.	REVISION	DATE
G.W.S.	1	ADDED I-16 & I-17 & I-18 ELIMINATED I-15	11/21/90
G.W.S.	2	REVISED I-10 TOP ELEV. & INLET SCHEDULE	3/5/97

STORM DRAIN PROFILES

CONTRACT NO.
600' SCALE MAP NO. — BLOCK NO.

COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1, AREA 1, PARCELS 'A-1' - 'A-9'
HOWARD COUNTY, MARYLAND — ELECTION DISTRICT 6

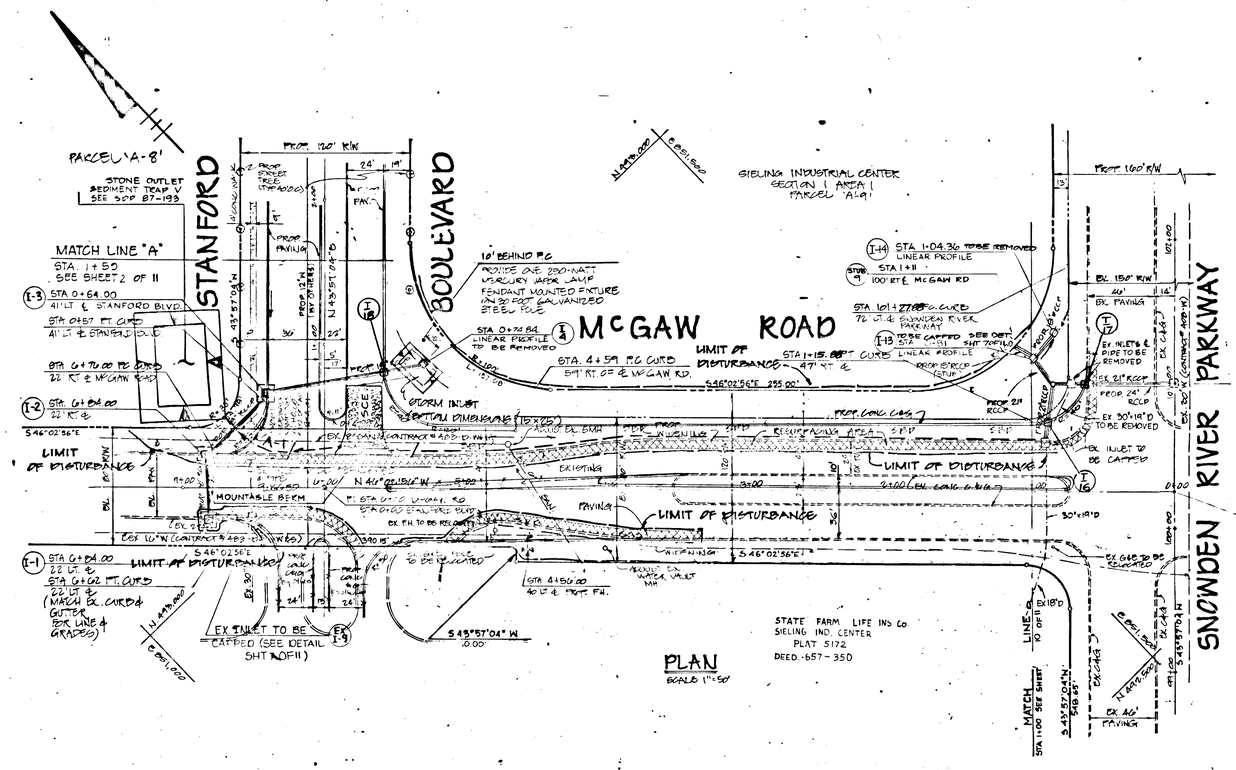
SCALE: HORZ 1" = 50' VERT 1" = 5'

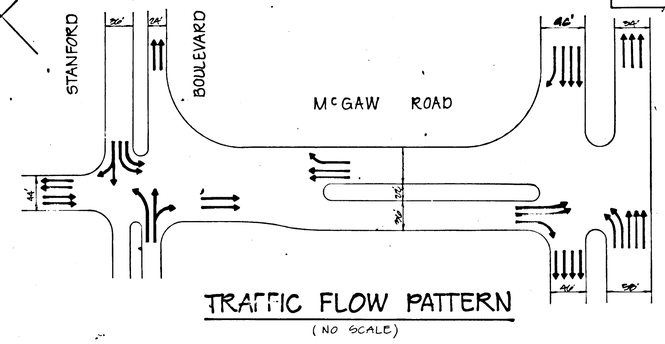
SHEET NO. 8 OF 11

AS-BUILT 6/27/94

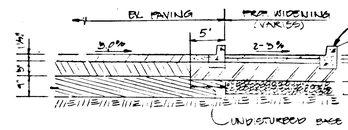
F-88-109

OFFICE OF PLANNING & ZONING
4/18/88
DIVISION OF LAND DEVELOPMENT & COMMUNITY PLANNING





TRAFFIC FLOW PATTERN
(NO SCALE)



WIDENING DETAIL
(NOT TO SCALE)

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Subhrata Chakraborty 8930 10/27/87
ENGINEER'S NAME (PLEASE PRINT) REG. NO. DATE

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DEVELOPER: Christopher W. Kay DATE: 11-4-87

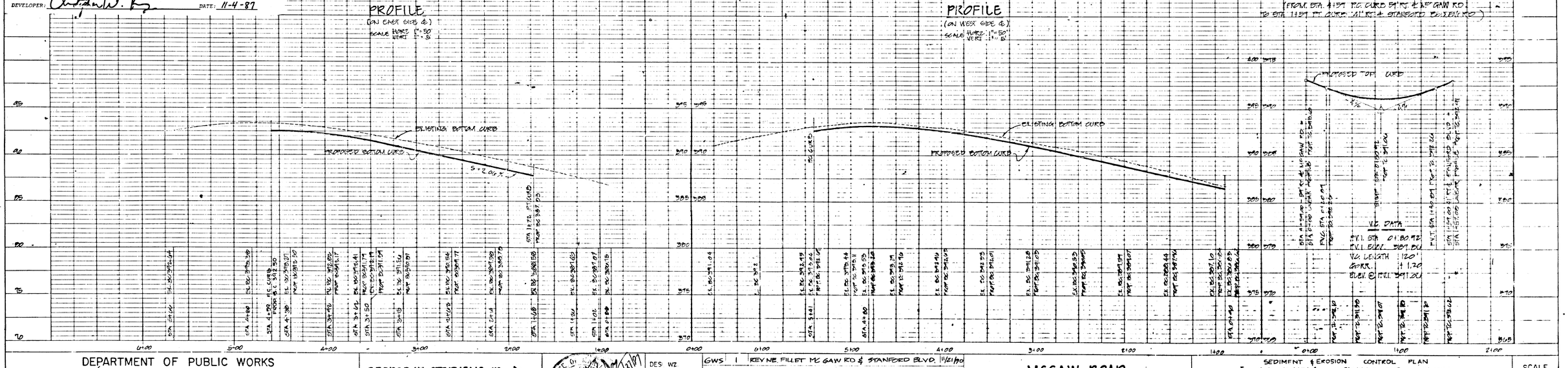
Reviewed for Howard Soil Conservation District and meets technical requirements.

4-5-88
The United States Soil Conservation Services Date
Howard County Soil Conservation District

The Development is approved for soil erosion & sediment control by the Howard County Soil Conservation District.

4-5-88
APPROVED: Howard Soil Conservation District Date

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SDP-87-193.



DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, LAND DEVELOPMENT DIVISION — DATE 4-6-88
CHIEF, BUREAU OF ENGINEERING — DATE 4-8-88
CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
303 ALLEGHENY AVENUE
TOWSON, MD. 21204
301-825-8120

10/21/87

DES. WZ	GWS 1	REV. NE FILLET MC GAW RD & STANFORD BLVD. & CURB N. MCGAW RD ADDED I-16, I-17 & I-18.	11/21/90	
DRN. EWL				
CHK. FRG				
DATE 082587	BY	NO	REVISION	DATE

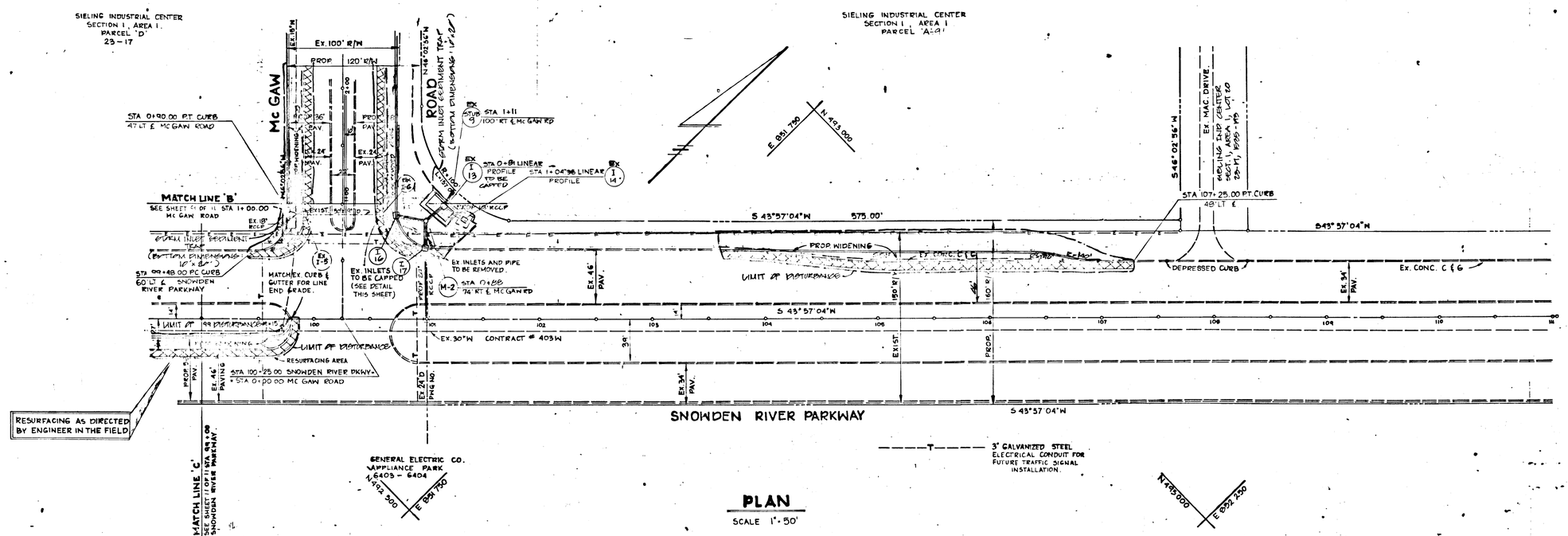
McGAW ROAD
STA 0+00 TO STA 9+00
600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

SEDIMENT & EROSION CONTROL PLAN
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCEL 'A-1'-'A-9'
HOWARD CO., MD. ELECT. DISTRICT 6
AUGUST 25 1987

SCALE AS SHOWN
SHEET 9 OF 11

AS-BUILT 6/27/94

F-88-109



PLAN

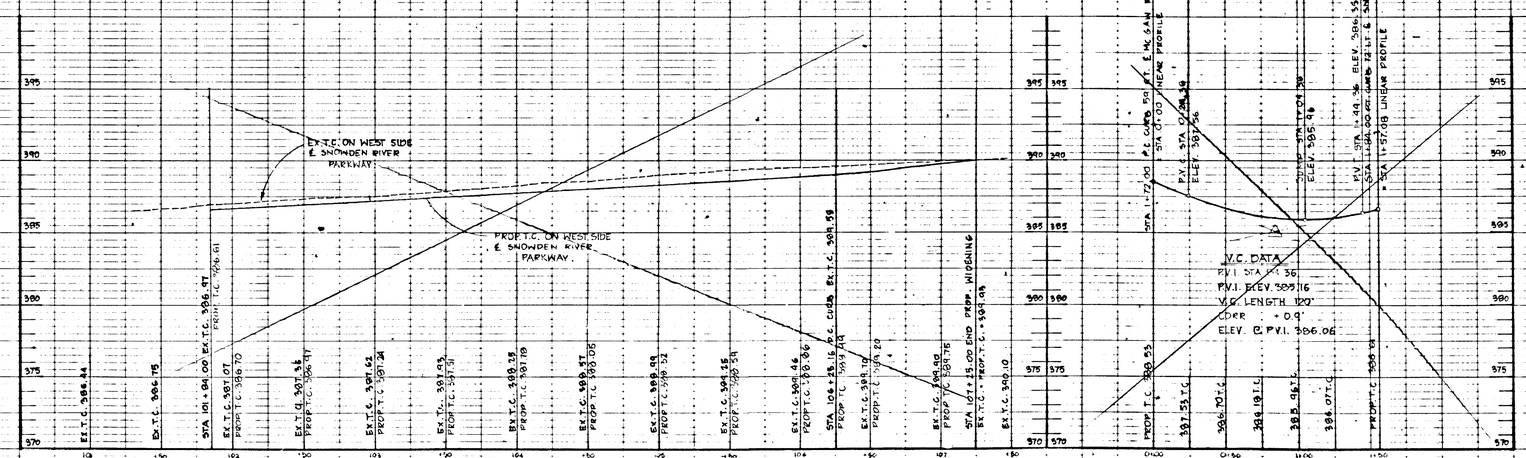
SCALE 1" = 50'

OFFICE OF PLANNING & ZONING

4/13/88

CHIEF, DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT — DATE

L.S.



WIDENING PROFILE

SNOWDEN RIVER PARKWAY

FROM STA. 101+84.00 TO STA. 107+25.00

SCALE: HORZ. 1" = 50' VERT. 1" = 5'

LINEAR PROFILE

SCALE: HORZ. 1" = 50' VERT. 1" = 5'

FROM STA 1+72.00 P.C. CURB 59' RT. ℄ Mc GAW RD TO STA 101+84 P.T. CURB 72' L.T. ℄ SNOWDEN RIVER PARKWAY

Howard County Soil Conservation District

The Development is approved for soil erosion & sediment control by the Howard County Soil Conservation District.

4-5-88

Approved: Howard Soil Conservation District — Date

Reviewed for Howard Soil Conservation District and meets technical requirements.

4-5-88

The United States Soil Conservation Services — Date

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DEVELOPER: DATE: 11-4-87

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Lakshmata Chaturvedi 8730 10/27/87

ENGINEER — REG. NO. — DATE

SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SDP-87-193.

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CHIEF, LAND DEVELOPMENT DIVISION — DATE

CHIEF, BUREAU OF ENGINEERING — DATE 4-8-88

CHIEF, BUREAU OF HIGHWAYS — DATE 4/7/88

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
303 ALLEGHENY AVENUE
TOWSON, MD 21204
301-825-8120

DES. W.Z.	BY	NO	REVISION	DATE
DRN. J.W.	EWS	1	REV CURB NE SIDE Mc GAW RD	11/21/90
CHK. P.R.C.			REV WIDENING SNOWDEN RIVER PARKWAY	
DATE 08-25-87				

SNOWDEN RIVER PARKWAY

STA 99+00.00 TO STA 107+25.00

600' SCALE MAP NO. 25 BLOCK NO. 23 & 24

SEDIMENT & EROSION CONTROL PLAN
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS 'A-1'-'A-9'

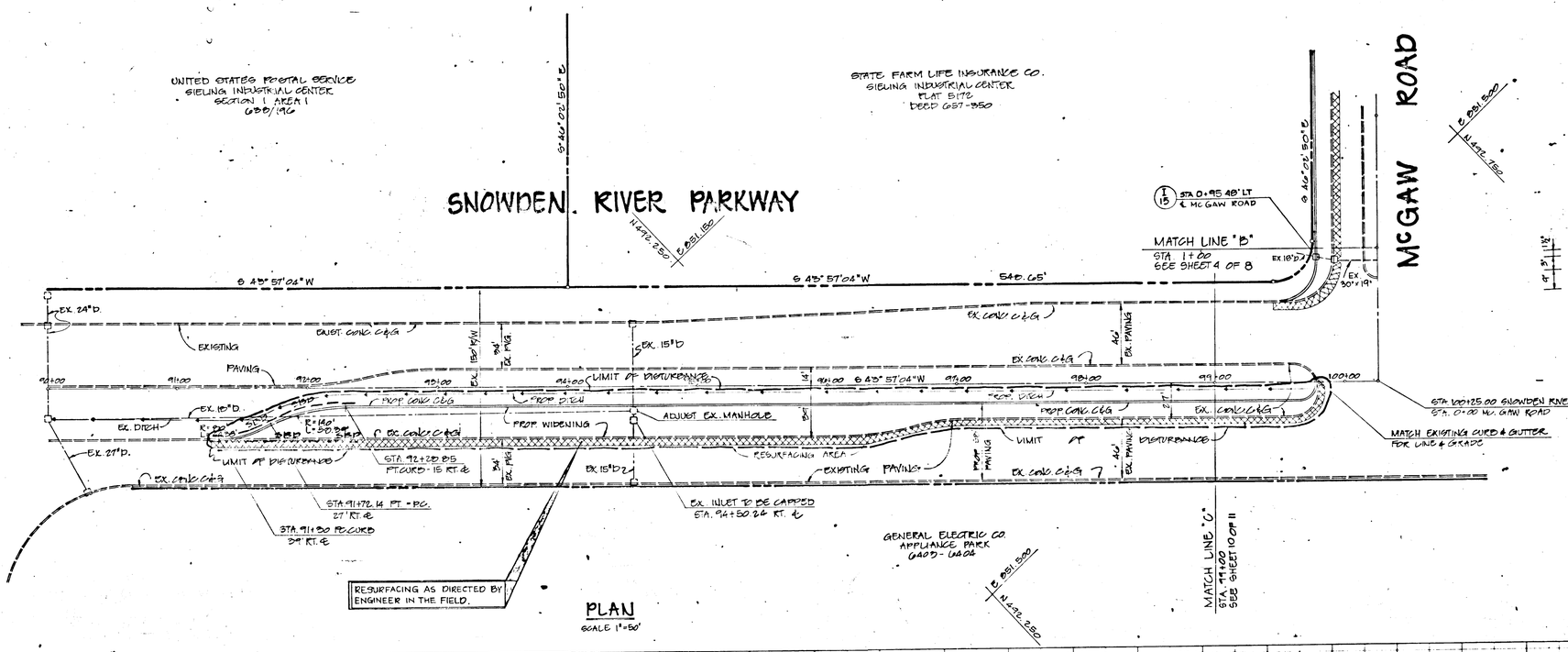
HOWARD CO., MD. — ELECT. DISTRICT 6

AUGUST 25 1987

SCALE AS SHOWN

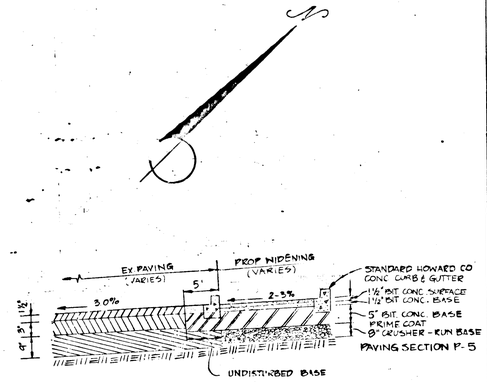
SHEET 10 OF 1

F-88-109



PLAN

SCALE 1"=50'



WIDENING DETAIL

NOT TO SCALE

OFFICE OF PLANNING & ZONING

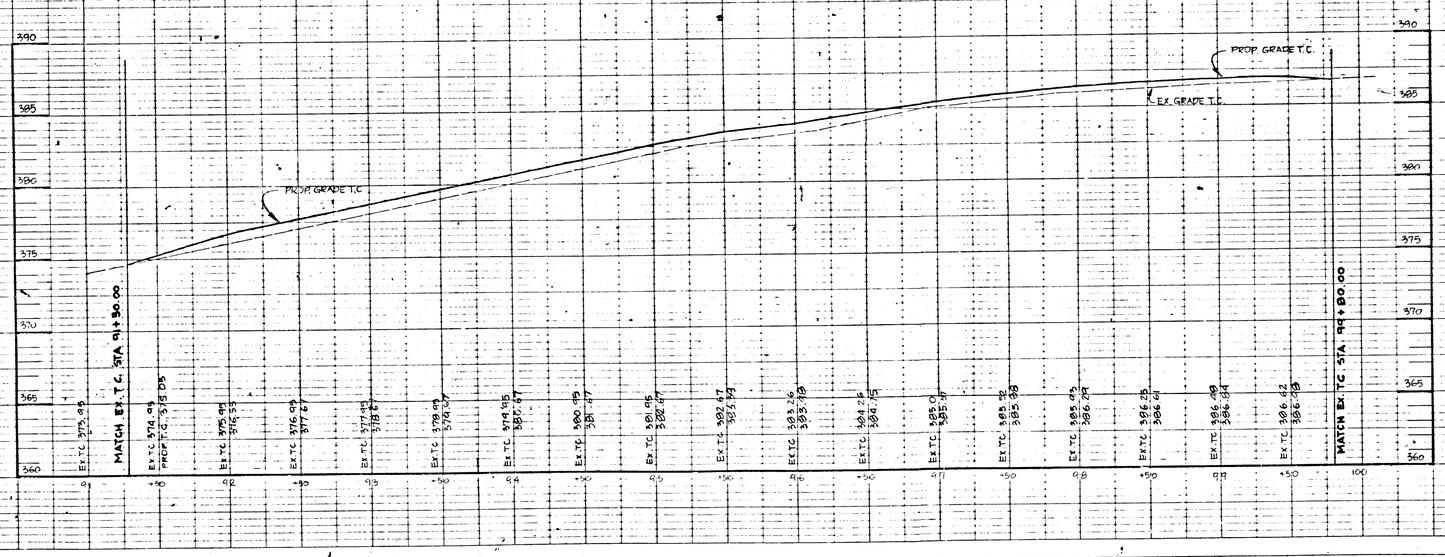
4/13/88

CHIEF, DIV. OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE

WIDENING PROFILE
SNOWDEN RIVER PARKWAY

FROM STA 91+30.00 TO STA 99+80.00

SCALE HORZ: 1"=50'
VERT: 1"=5'



SEDIMENT CONTROL MEASURES FOR THIS CONTRACT WILL BE IMPLEMENTED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SOP- 87-193.

Howard County Soil Conservation District

The Development is approved for soil erosion & sediment control by the Howard County Soil Conservation District.

4/5/88
Date

Approved: Howard Soil Conservation District

Reviewed for Howard Soil Conservation District and meets technical requirements.

7-5-88
Date

The United States Soil Conservation Services

DEVELOPER'S CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

DEVELOPER: _____ *DATE:* 11-4-87

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

_____ 10/27/87
ENGINEER VIRGINIA GREEN ASSOCIATES, INC. — DATE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

4-8-88
CHIEF, LAND DEVELOPMENT DIVISION — DATE
CHIEF, BUREAU OF ENGINEERING — DATE

4/7/88
CHIEF, BUREAU OF HIGHWAYS — DATE

GEORGE W. STEPHENS JR. & ASSOCIATES INC.
305 ALLEGHENY AVENUE
TOWSON, MD. 21204
301-825-8120

10/27/87

DES	WZ.
DRN	VKL.
CHK	FRG
DATE	8-25-87

BY	NO	REVISION	DATE

SNOWDEN RIVER PARKWAY

STA 91+00 TO STA 99+00

600' SCALE MAP NO. 36 BLOCK NO. 23 & 24

SEDIMENT & EROSION CONTROL PLAN
COLUMBIA CORPORATE PARK
SIELING INDUSTRIAL CENTER
SECTION 1 AREA 1 PARCELS "A-1"-"A-9"
HOWARD CO., MD. ELECT. DISTRICT 6
AUGUST 25, 1987

SCALE AS SHOWN

SHEET 11 OF 11

F-88-109