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1. Site Plan
2. Site Details
3. Loop Road Flow Line Elevation Table and H.C. Details
4. Landscape Plan
5. Landscape Specifications & Details
6. Sediment Control Plan
7. Sediment Control Plan (off-site)
8. Sediment Control Details & Notes
9. Storm Drain Profiles & Schedules
10. Water & Sewer Profiles & Storm Drain Detail
11. Loop Road Flowline Profile-Right
12. Loop Road Flowline Profile-Left
13. Paving Plan

For Benchmark Descriptions See Sheet 3

VICINITY MAP
SCALE: 1"=2000'

SITE

Legend

- Exist. Contour
- Proposed Contour
- Proposed Spot Elev.
- Standard combination curb & gutter
- Reverse combination curb & gutter
- Temporary asphalt curb
- Exist. combination curb & gutter
- Number of Parking Spaces
- Btron/HC Access to bldg.
- Flow Line Elevation No.

E 1,365,500 N 557,600

REDLINE NOTE:
REDLINE REVISIONS DATED 8-5-04 AND NOTED HEREON MEET THE CONDITIONS OF THE APPROVAL BY THE HOWARD COUNTY DPZ DATED 7-26-04.

STATE OF MARYLAND — DAVID THOMAS SORRICK — No. 10153 — REGISTERED PROFESSIONAL ENGINEER — 8/5/04

GENERAL NOTES

1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standard and specifications if applicable.
2. The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (301) 792-7272 at least five (5) working days prior to the start of work.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
4. The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
5. Site area: 17.4 acres (approved mass grading GP 96-45 & F-96-41).
6. All plan dimensions are to face of curb unless otherwise noted.
7. Existing topography reflects mass grading as shown on GP 96-45.
8. Coordinates and bearings are based upon the MD State plan system (NAD '83).
9. Water and sewer shown is public.
10. Stormwater management for this site is proposed under GP 96-45.
11. All existing water and sewer is per Contract 24-3463-D.
12. All existing public storm drain is per F-96-41.
13. All curb radii is 5' unless noted otherwise.
14. Utility information taken from approved final construction plans for development.
15. Sidewalks adjacent to perpendicular parking shall be 6' wide. All other sidewalks shall be 4' wide except where dimensioned otherwise. Provide 3' radius rounding at all angle breaks and intersections.
16. Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (CL. 51) for 4" and 6" water house connections.
17. For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment to the first structure.
18. Use trench bedding class "C" for storm drains.
19. Paved areas indicated are private except as noted.
20. Project background: See Dept. of Planning & Zoning File Numbers: WP-96-33 SP 95-08, FDP 95-226, WP 95-94, GP 96-45, F-96-41 & ~~SDP-96-79~~
21. Recording reference: Plat Nos 12064-12065
22. All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and exits.
23. All water meters shall be located inside buildings.
24. The limits of public maintenance for waterhouse connections shall be 7' from the back of curb.
25. All proposed site utilities are to terminate 5' from the building. The building plumber shall connect to and extend these utilities to the inside of the building.

20a. There are no lot line building setbacks, except as indicated from the public Right-of-Way. No parking area shall be located within 10' of any lot line except shared parking facilities between two or more lots and except as approved by the Howard Co. Planning Board.

PARCEL "B"
"ROUTE 175 COMMERCIAL"
PLAT No.
ZONED: NT - COMMERCIAL

SITE ANALYSIS

1. AREA OF PARCEL: 466,220 S.F. / 10.70 AC.
2. ZONING: NEW TOWN
3. PROPOSED USE: RETAIL
4. BUILDING AREA: 130,850 S.F.
5. TOTAL PARKING REQUIRED: 130,850 S.F. @ 5 SP./1000 S.F. = 655 SPACES
6. TOTAL PARKING PROVIDED: 666 SPACES
7. TOTAL NO. OF HANDICAP SPACES REQUIRED: 14
8. NO. OF HANDICAP VAN SPACES REQUIRED: 2
9. TOTAL NO. OF HANDICAP SPACES PROVIDED: 17
10. NO. OF HANDICAP VAN SPACES PROVIDED: 9
11. MAX. No. OF EMPLOYEES: 200

E 1,364,500 N 557,750

OWNER / PREPARED FOR:

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
PHONE: (410) 992-6027

Approved: For Public Water & Sewerage Systems, Howard County Health Dept.
County Health Officer — Date 2/26/96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director — Date 2/29/96
Chief, Division of Land Development and Research — Date 2/29/96
Chief, Development Engineering Division — Date 2/27/96

ADDRESS CHART		
PARCEL NUMBER	STREET ADDRESS	
A	6111 DOBBIN ROAD	

WATER CODE:	SEWER CODE:	SUBDIVISION NAME:	SECTION/AREA	PARCEL
E05	4900000	ROUTE 175 COMMERCIAL	N/A	A

PLAT	ZONE	TAX MAP	BLOCK	ELEC. DIST.	CENSUS TRACT
12064 12065	NEW TOWN	36	10	6	6067.03

DATE	REVISION	BY	APP'R.
8-5-2004	REVISED STOREFRONT SIDEWALK, CURB, PLANTERS & BOLLARDS (BY URS CORPORATION)	DTM	
8-2-04	Coord. w/ utilities, Rev. Loop Rd. inlands, loading area wall, lot grades	KLP	

GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK – BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. | CHK.

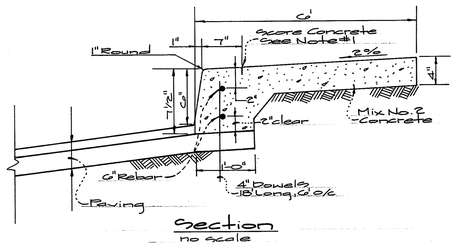
SITE DEVELOPMENT PLAN

ROUTE 175 COMMERCIAL
PARCEL "A"

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=50'	NT - COMMERCIAL	95003
DATE	TAX MAP No.	SHEET
January, 1996	36	1 OF 13

SDP-96-79

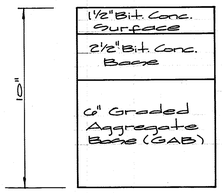


Section
no scale

Notes:
1. Longitudinal joint between sidewalk and curb shall be continuous and to a depth of ¼ the sidewalk thickness or 1" max.. Latitudinal joints shall run from back edge of sidewalk, continuous to the bottom face of curb to a depth of ¼" and spaced 5' apart.
2. Provide ½" expansion joints at 15' intervals. In latitudinal joints to full cross-section.

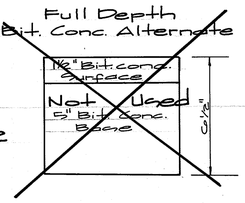
Monolithic Curb & Sidewalk
Private Parking Area

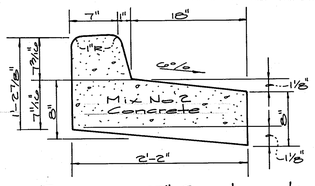
Granular Base Sections



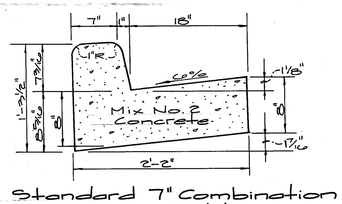
P-2

Full Depth Bit. Conc. Alternate



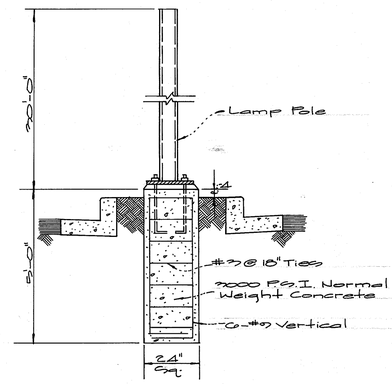


Reverse 7" Combination Curb & Gutter
N.T.S.

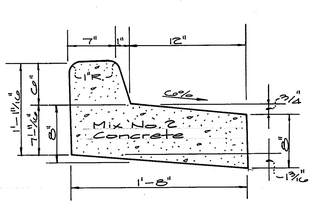


Standard 7" Combination Curb & Gutter
N.T.S.

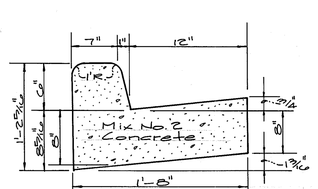
Note: Information not shown by lamp pole manufacturer



Lamp Pole Base Detail
(In curb & gutter island) N.T.S.



Reverse 6" Combination Curb & Gutter
N.T.S.



Standard 6" Combination Curb & Gutter
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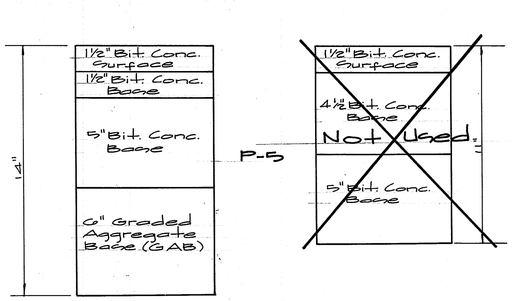
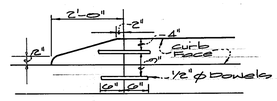


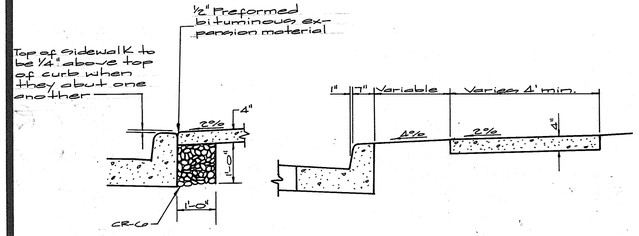
P-5

Paving Sections
N.T.S.

Note: Other equivalent paving sections may be approved where approved by a professional soils engineer.

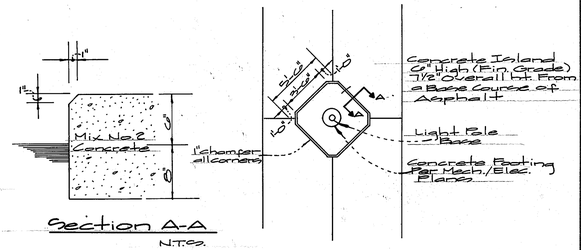


Nose Down Curb Detail
N.T.S.



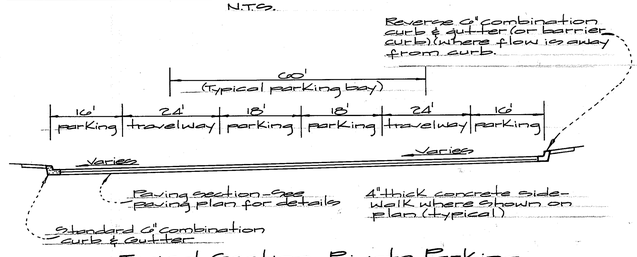
Detail

Notes:
1. Sidewalk to be scribed in 5' maximum squares.
2. Expansion joints across the sidewalk not to be more than 15' apart.
3. ½" preformed bituminous expansion material in expansion joints to be kept ¼" below surface of sidewalk.
4. Concrete to be mix No. 2.
5. When sidewalk abuts curb, walk shall be ½" above curb with preformed bituminous expansion material between sidewalk and curb and resting on a compacted crushed stone base. See detail A this sheet.
6. On longitudinal sidewalk grades of 5% or greater, a concrete header, 6" thick and 6" deep below the normal 4" sidewalk thickness shall be constructed for the full width of the sidewalk at intervals of 48 feet. The headers shall be placed at expansion joint locations and shall be monolithic with the sidewalk.

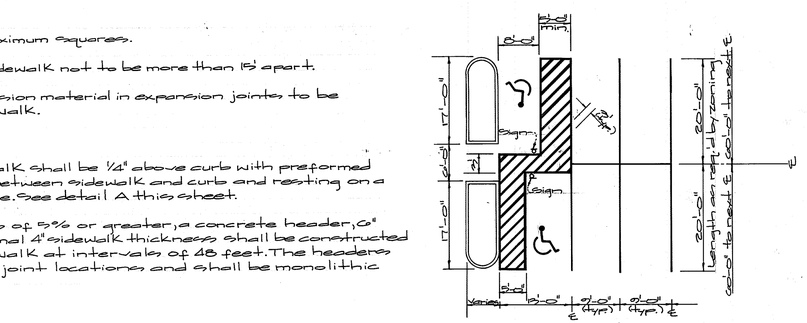


Section A-A
N.T.S.

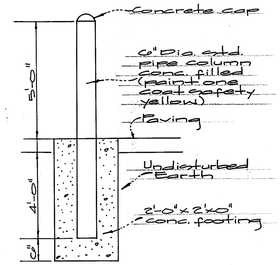
Concrete Light Pole Island
N.T.S.



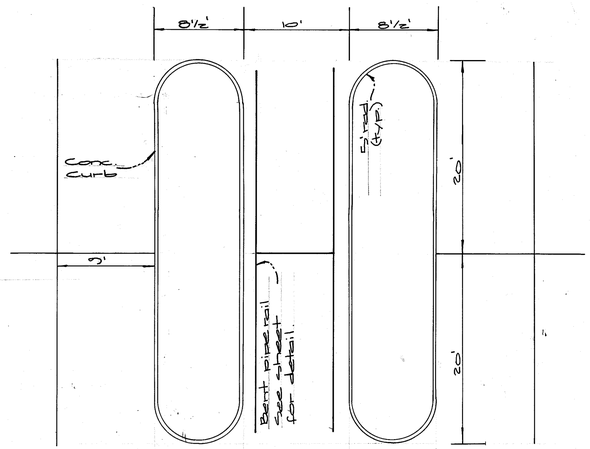
Typical Section - Private Parking
N.T.S.



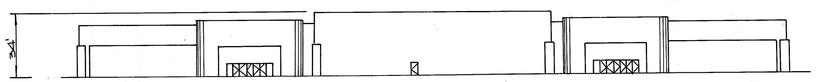
Typical Striping of Parking Lot and Handicap Parking Detail
N.T.S.
Note: 4" wide white stripes typical (unless noted otherwise)



Bollard Detail
N.T.S.



Cart Corral Detail
N.T.S.



Building Elevation
N.T.S.

Approved: For Public Water & Sewerage Systems, Howard County Health Dept.
Deputy Health Officer — Date 2/23/96

Approved: Howard County Department of Planning & Zoning
Director — Date 2/29/96
Chief, Division of Land Development — Date 2/9/96
Chief, Development Engineering Division — Date 2/27/96

GW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:
The Howard Research and Development Corporation
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044
(410)992-6027

Site Details
Route 175 Commercial
Parcel "A"
Guilford Election District No. 6 — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.: KBJ/KLP	As Shown	NT	95-003
CHK.:	DATE	TAX MAP No.	SHEET
	January 1996	39 PARCEL "A"	12 OF 13

SDP-96-79

Columbia Crossing Circle Flow Line Elevation Table

No.	Baseline Sta.	Baseline Offset	Elev. (flowline)	Profile Sta.	Gutter Type
1	2+59.41	23.50	399.10	1+71.89	Catch (Wet)
2	2+83.35	29.60	398.40	———	
3	3+01.44	46.41	397.69	———	Spill (Dry)
4	3+09.28	69.84	396.99	———	Spill (Dry)
5	See Plan	See Plan	396.34	———	Catch (Wet)
6	3+40.93	40.00	396.86	———	
7	3+59.24	21.70	396.96	———	
8	3+84.24	15.00	396.60	2+98.26	
10	4+37.24	15.00	396.28	3+51.26	
11	4+81.24	15.00	396.70	3+95.26	
12	5+21.24	15.00	397.34	4+35.26	
13	5+74.99	15.00	398.20	4+89.01	
14	6+14.99	15.00	398.84	5+29.01	
15	6+71.77	15.00	399.75	5+85.79	
16	7+13.75	15.00	400.41	6+27.77	
17	7+64.75	15.00	401.23	6+78.77	
18	7+80.66	15.00	401.49	6+91.01	
20	8+35.15	15.00	402.05	7+39.44	
21	8+64.89	15.00	402.09	7+69.18	
22	8+99.43	15.00	401.76	8+03.72	
23	9+25.85	15.00	401.25	8+30.14	
24	9+60.39	15.00	400.23	8+64.68	
25	9+86.80	15.00	399.31	8+91.09	
26	10+30.07	15.00	398.14	9+34.36	Catch (Wet)
27	10+49.23	15.00	397.69	9+53.52	Spill (Dry)
28	10+68.44	18.96	397.45	———	
29	10+84.70	30.22	397.22	———	
30	10+95.52	47.00	396.98	———	Spill (Dry)
31	See Plan	See Plan	396.83	———	Catch (Wet)
32	11+69.58	15.00	397.60	10+69.53	
33	17+41.41	15.00	395.56	16+41.36	
34	17+93.52	50.04	396.58	———	
35	17+99.42	72.76	397.21	———	Catch (Wet)
36	18+12.90	83.90	397.91	———	Spill (Dry)
37	18+13.28	55.33	397.65	———	Spill (Dry)
38	18+16.02	31.08	397.38	———	Spill (Dry)
39	18+30.72	16.57	397.64	———	Catch (Wet)
40	18+31.98	16.27	397.59	17+67.02	Catch (Wet)
41	18+40.64	19.47	397.37	———	Spill (Dry)
42	18+44.17	30.00	397.55	———	Spill (Dry)
43	18+68.17	35.00	396.85	———	Spill (Dry)
44	18+74.02	20.86	396.34	———	Catch (Wet)
45	18+88.17	15.00	395.84	18+23.21	
46	20+22.17	15.00	392.63	19+57.21	
47	20+36.31	20.86	392.86	———	
48	20+42.17	35.00	393.08	———	Catch (Wet)
49	20+76.45	47.39	393.93	———	Spill (Dry)
50	20+74.17	26.27	393.47	———	Spill (Dry)
51	20+92.17	15.00	393.51	20+27.21	Spill (Dry)
52	24+29.94	29.50	386.51	23+54.46	Catch (Wet)
53	24+29.94	7.50	387.17	———	Spill (Dry)
54	23+53.37	7.50	389.69	———	
55	23+45.87	0.00	390.19	———	
56	23+53.37	7.50	389.96	———	Catch (Wet)
57	24+29.94	7.50	386.56	———	Catch (Wet)
58	24+29.94	23.50	387.01	22+79.01	Spill (Dry)
59	22+72.31	23.50	393.91	21+21.38	Spill (Dry)
60	22+29.33	18.41	394.82	20+78.55	Spill (Dry)
61	22+17.08	18.11	394.95	20+66.30	
62	21+91.93	24.18	395.32	———	
63	21+73.18	42.03	395.69	———	
64	21+65.86	66.85	396.06	———	
65	21+37.51	65.00	395.85	———	Catch (Wet)

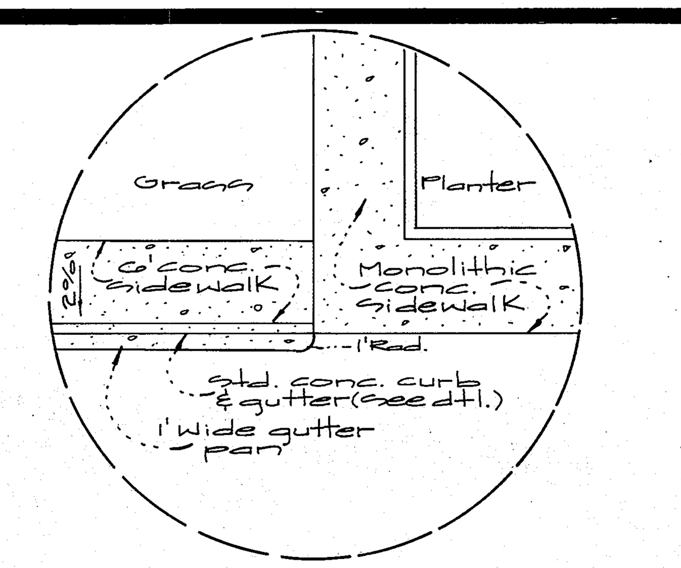
Columbia Crossing Circle Flow Line Elevation Table

No.	Baseline Sta.	Baseline Offset	Elev. (flowline)	Profile Sta.	Gutter Type
66	21+30.82	40.00	395.14	———	Catch (Wet)
67	21+12.51	21.70	394.44	———	
68	20+87.51	15.00	393.73	19+36.29	Spill (Dry)
69	18+43.51	15.00	398.29	16+92.29	
70	18+09.48	15.00	397.95	16+66.11	
71	17+75.44	15.00	397.19	16+39.93	
72	17+41.41	15.00	396.53	16+13.75	
73	16+96.42	15.00	396.44	15+68.76	
74	16+57.41	15.00	397.23	15+29.75	
75	16+31.41	15.00	397.82	15+03.75	
76	15+95.41	15.00	398.65	14+67.75	
77	15+69.41	15.00	399.24	14+41.75	
78	15+35.41	15.00	400.01	14+07.75	
79	15+05.41	15.00	400.57	13+77.75	
80	14+71.41	15.00	400.99	13+43.75	
81	14+45.41	15.00	401.17	13+17.75	
82	14+11.41	15.00	401.21	12+83.75	
83	13+81.41	15.00	401.07	12+53.75	
84	13+47.41	15.00	400.70	12+19.75	
85	13+21.41	15.00	400.31	11+93.75	
86	12+85.41	15.00	399.77	11+57.75	
87	12+59.41	15.00	399.38	11+31.75	
88	12+17.90	15.00	398.76	10+90.24	
105A	3+66.23	15.00	398.08	2+80.29	
105B	3+64.65	15.00	398.12	2+78.71	
90	11+69.58	15.00	398.18	10+41.92	Spill (Dry)
91	11+44.58	21.70	398.11	10+15.74	
92	10+64.58	21.70	398.22	9+89.56	
93	10+39.58	15.00	398.51	9+63.38	
94	8+06.92	15.00	402.64	7+30.72	
95	7+85.83	15.00	402.26	7+04.77	
96	7+64.75	15.00	401.87	6+78.81	
97	6+49.24	15.00	400.11	5+63.29	
98	6+10.23	15.00	399.52	5+24.29	
99	5+80.23	15.00	399.05	4+94.29	
100	5+46.23	15.00	398.54	4+60.29	
101	5+20.23	15.00	398.14	4+34.29	
102	4+86.23	15.00	397.62	4+00.29	
103	4+60.23	15.00	397.30	3+74.29	
104	4+26.23	15.00	397.23	3+40.29	
105	4+00.23	15.00	397.45	3+14.29	
106	3+64.39	14.72	398.17	2+76.83	
107	3+36.39	25.81	399.04	2+48.42	
108	3+02.88	58.22	401.21	———	
109	2+96.01	41.35	400.91	———	
110	2+78.42	36.62	401.04	1+91.14	
111	2+39.19	40.50	401.65	1+51.66	Spill (Wet)
112	2+82.50	7.50	399.88	———	Catch (Wet)
113	2+96.00	0.00	399.48	———	Spill (Dry)
114	2+82.50	7.50	399.31	———	
18A	7+96.56	15.00	401.61	7+03.24	
27A	10+39.58		397.77	9+43.87	

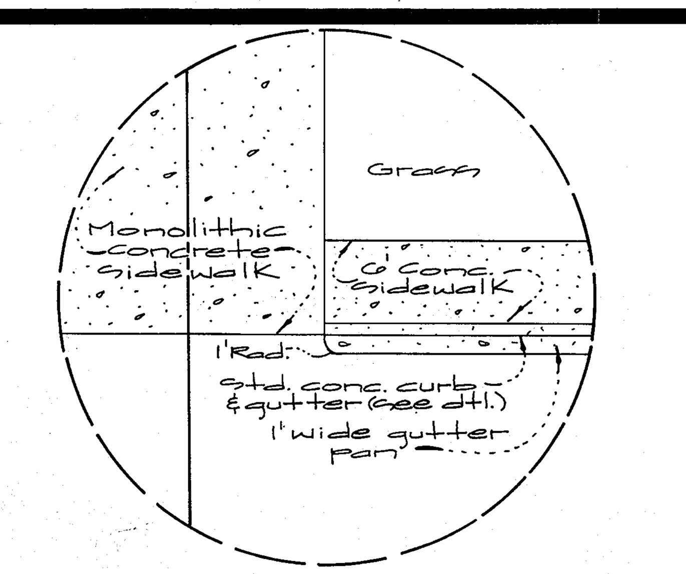
For Continuation – See Right

Columbia Crossing Circle Flow Line Elevation Table

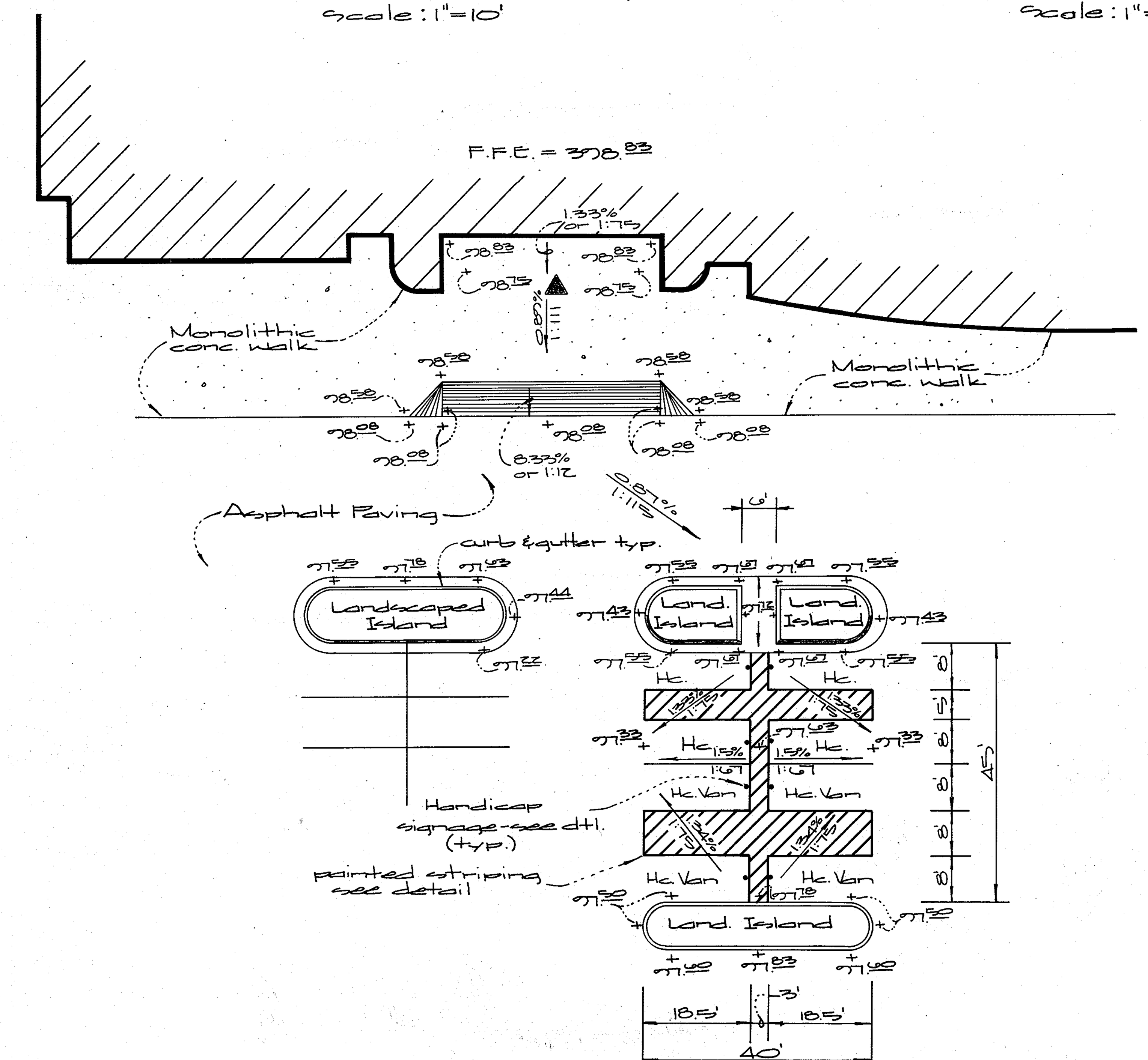
No.	Baseline Sta.	Baseline Offset	Elev. (flowline)	Profile Sta.	Gutter Type
115	21+69.89	14.57	393.96	21+03.39	Spill (Dry)
116	21+95.05	20.65	393.46	———	
117	22+13.80	38.49	392.92	———	
118	22+21.11	69.32	392.38	———	
119	22+46.57	79.51	390.96	———	Catch (Wet)
120	22+53.26	54.51	391.92	———	
121	22+71.56	36.20	391.91	———	
122	22+96.57	29.50	391.17	22+31.46	



Curb Transition Detail - Left
Scale: 1"=10'



Curb Transition Detail - Right
Scale: 1"=10'



Handicap Accessibility Detail
Left Entrance (Right Entrance opposite)
Scale: 1"=20'

Benchmark Description

Station 2542001 (Concrete Monument)
Elev. 426.971 (For Vertical Control Only)
Station is Location on B.G.&E. Transmission
Lines 1060± S.W. of Dobbin Road

Benchmark Description

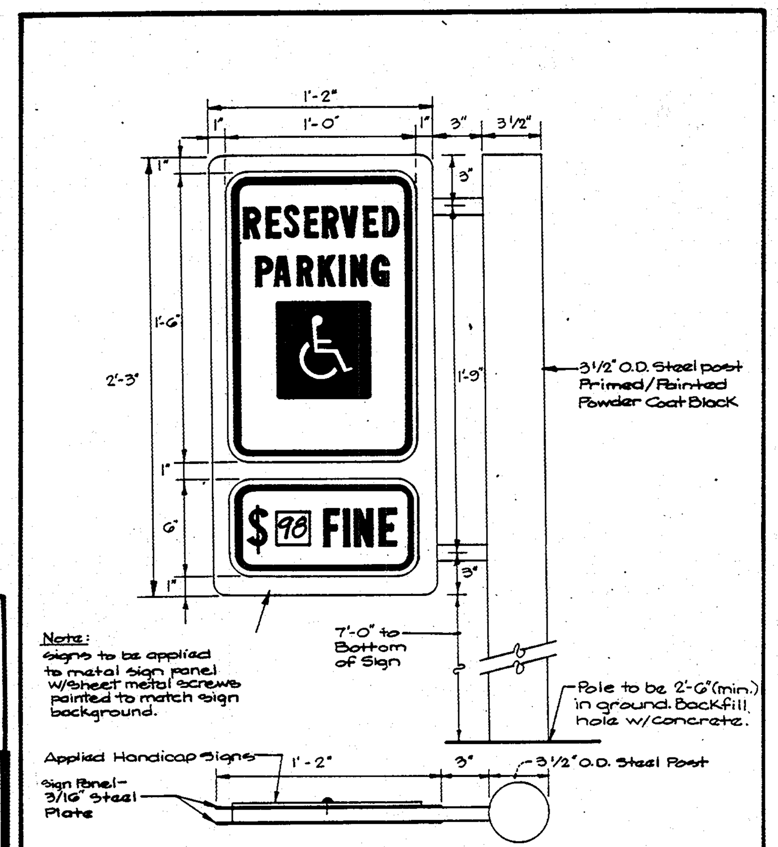
Station 2542002 (Concrete Monument)
Elev. 363.638 (For Vertical Control Only)
Station is Located 1000'± West of Rte. 175
on Transmission Line @ G.E. Tower 19-E.

Benchmark Description

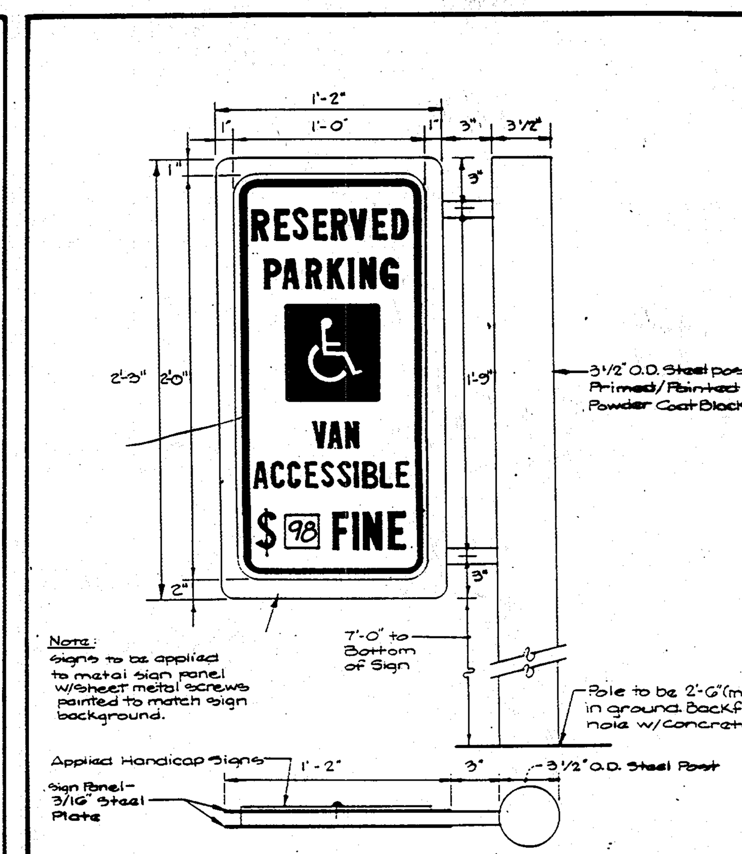
Station 37 DR (1/2" Rebar)
N.169881.1794, E.4165666.7155 (For Horizontal Control Only)
Station is Located 0.45± miles North of Rte. 175
and 46'± East of the East curb of Snowden River Pkwy.

Benchmark Description

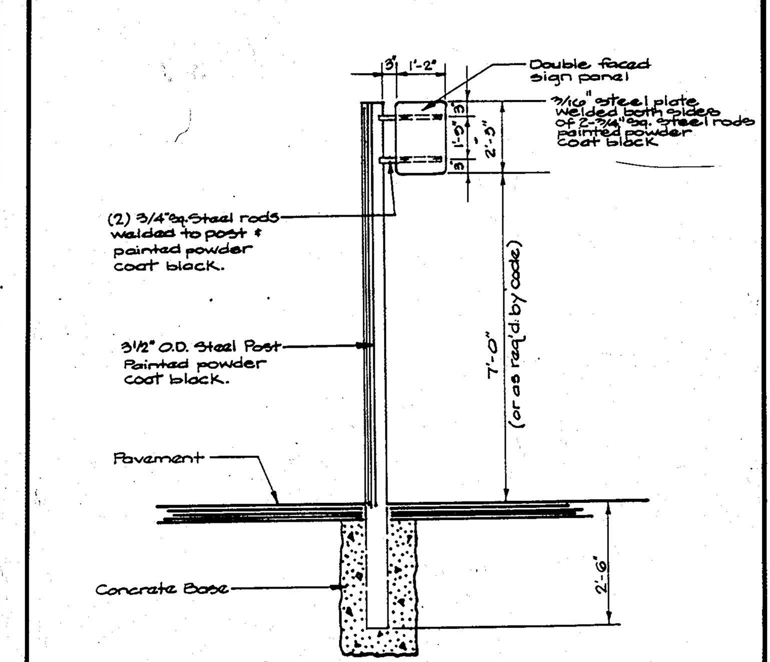
Station 3601A (Concrete monument)
N.169205.9263, E.41631351.19 (For Horizontal Control Only)
Station is Located @ the Southeast Corner of the
intersection of Snowden River Parkway and Rte. 175
3'± From curb and 5.7± From guardrail end



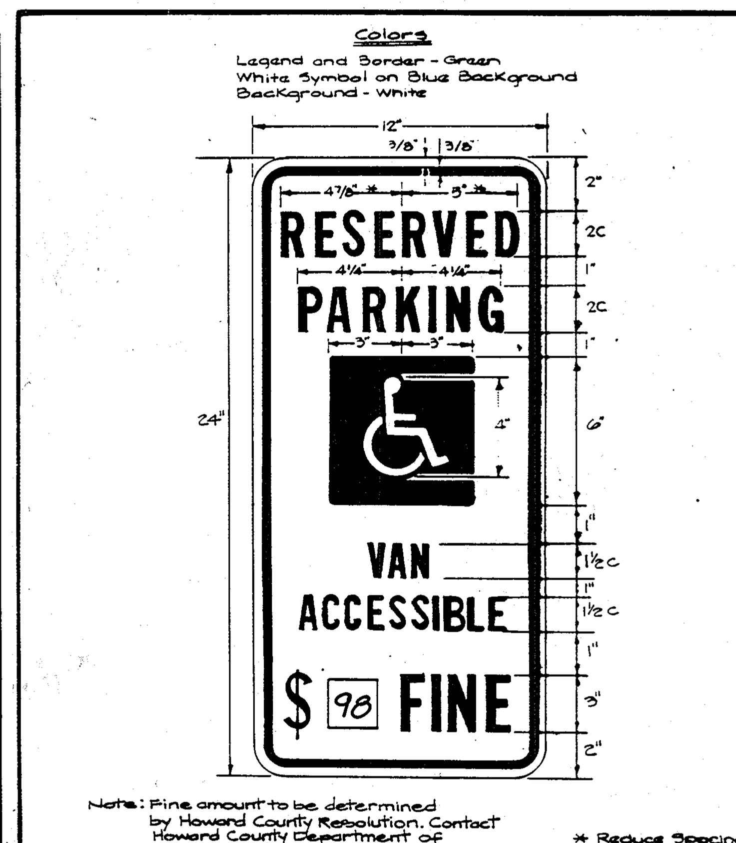
Mounting Detail For Parking Restriction Sign
No Scale



Mounting Detail For Parking Restriction Sign
No Scale



Post & Sign Panel Detail For Parking Restriction Sign
No Scale



Parking Restriction Sign for Van Handicapped Parking
No Scale

Parking Restriction Sign for Handicapped Parking
No Scale

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M Boyd ... 2/26/96
COUNTY HEALTH OFFICER — DATE

Approved: Howard County Department of Planning & Zoning
Director — 2/29/96 Date
Chief, Division of Land Development and Research — 2/29/96 Date
Chief, Development Engineering Div. M.K. — 2/27/96 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

PREPARED FOR:
The Howard Research and Development Corporation
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044
(410)992-6027

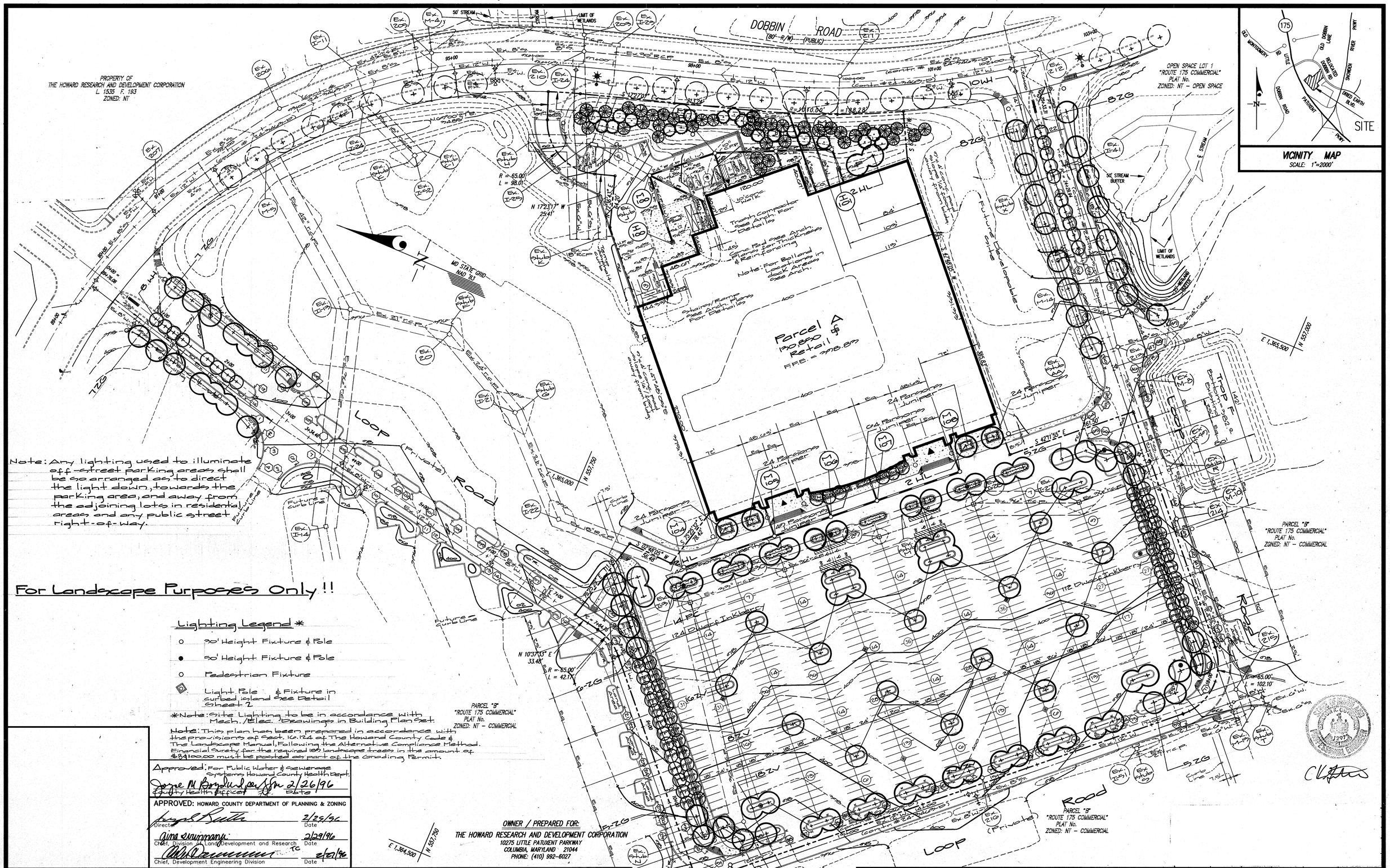
Loop Road Flow Line Table and Handicap Access Detail

Route 175 Commercial
Parcel "A"

Guilford Election District No. 6 — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.: WSJ./GT.	As Shown	NT	95-003
CHK.:	DATE: January, 1996	TAX MAP No.: 36	SHEET: 3 OF 13

SDP-96-79



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3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK - BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. WSJ | CHK.

DATE	REVISION	BY	APP'R.
8-96	Revise lighting, loading area wall, & sidewalks.	KLP	

Landscape and Lighting Plan

ROUTE 175 COMMERCIAL
PARCEL "A"

GUILFORD ELECTION DISTRICT No. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=50'	NT - COMMERCIAL	95003
DATE	TAX MAP No.	SHEET
January, 1996	36	4 OF 13

SDP-96-79

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

3. Plant Measurements

All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.

a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.

b. Minimum branching height for all trees shall be six feet (6'), maximum eight feet (8').

c. Minimum size for planting shade trees shall be 3-3½" caliper, 14'-15' in height.

d. Minimum size for planting minor or intermediate focus trees (pines, crabapples, etc.) shall be 3"-3½" caliper, 10'-12' in height.

e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.

f. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3½"	14'-16'	6'-8'	32" diameter
3½"- 4"	14'-16'	8'-10'	36" diameter
4" - 4½"	16'-18'	8'-10'	40" diameter
4½"- 5"	16'-17'	10'-12'	44" diameter
5" - 5½"	16'-20'	10'-12'	48" diameter
5½"- 6"	18'-20'	12'-14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

1. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

2. Digging

All plant material shall be dug, balled and burlapped (B+B) in accordance with the "AAN Standards".

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.

b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	ROOT BALL	PIT DIAMETER	PIT DEPTH
3" - 3½" cal.	32"	64"	28"
3½"- 4" cal.	36"	72"	32"
4" - 4½" cal.	40"	80"	36"
4½"- 5" cal.	44"	88"	40"
5" - 5½" cal.	48"	96"	44"
5½"- 6" cal.	52"	104"	48"

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.

b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.

c. Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.

d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail".

5. Plant Pruning, Edging and Mulching

a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound dressing.

b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

c. After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

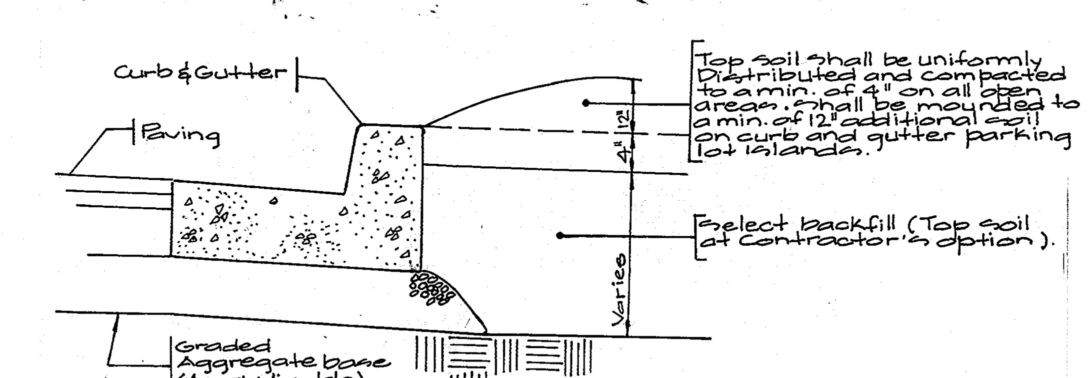
a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

b. Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

Sodding

All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

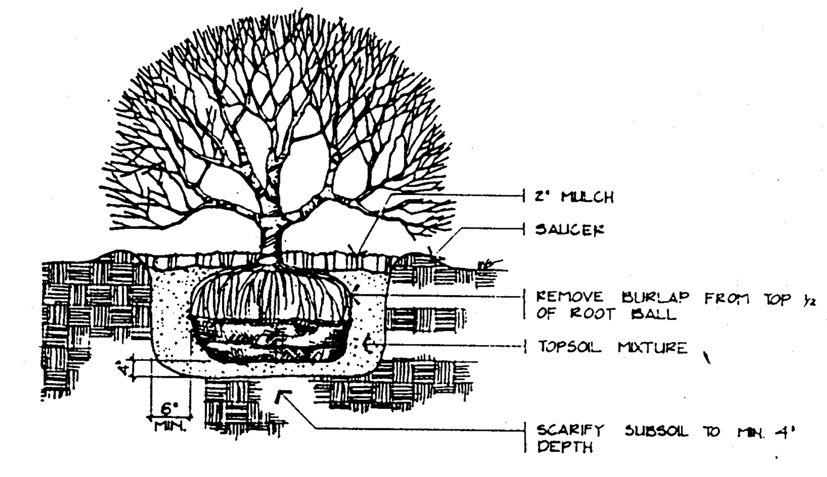
All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or Escort.



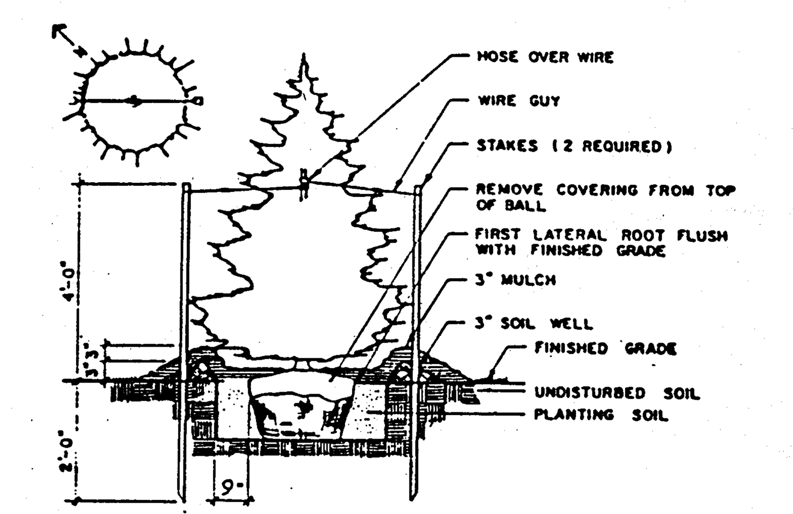
Topsoiling Detail
No scale

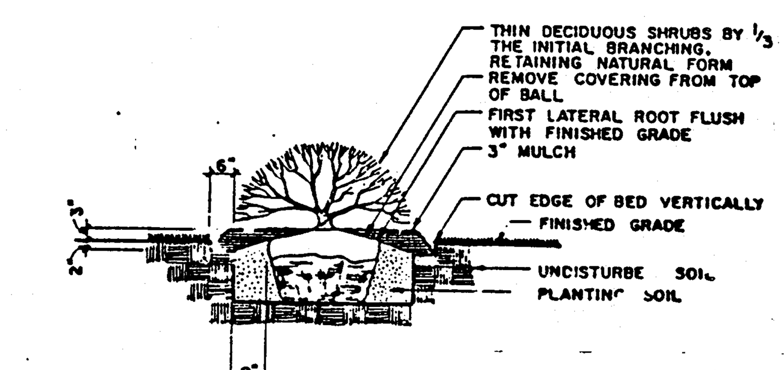
Materials:

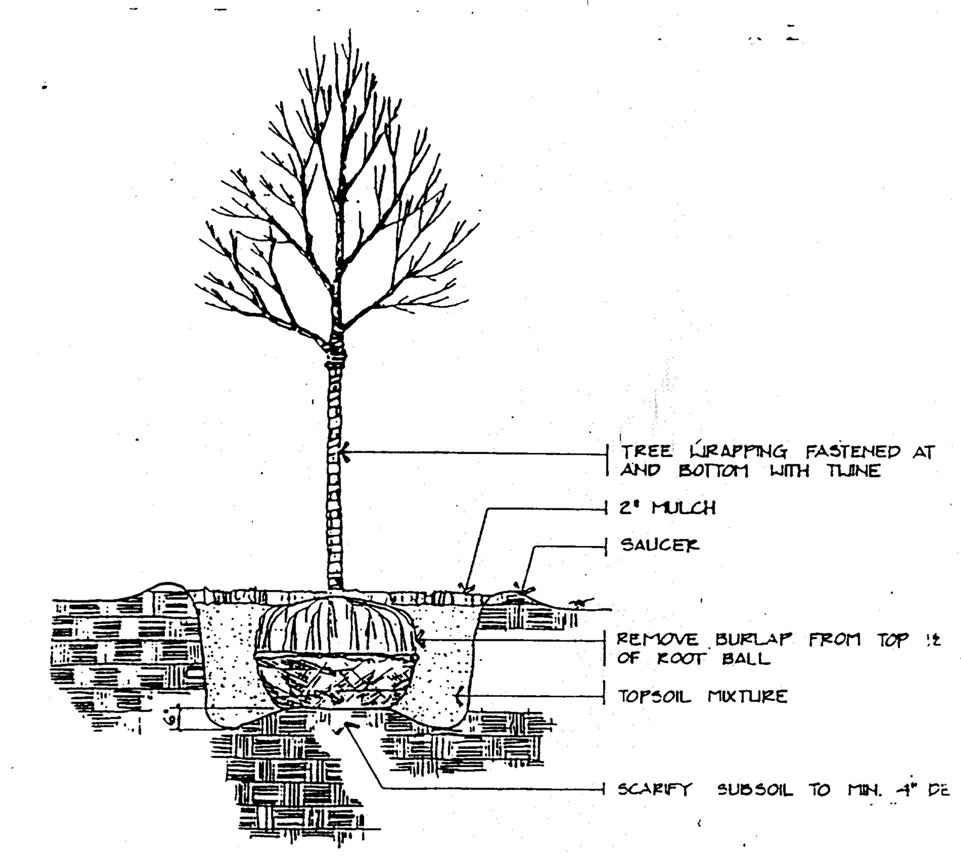
Top soil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand or other soil as approved by an Agronomist or soil scientist. It shall not have a mixture of contrasting textured subsoil and contain no more than 5 percent by volume of cinders, stones, slag, coarse fragment, gravel, sticks, roots, trash or other extraneous materils larger than 1½" in dia. Top soil must be free of plants or plant parts of Bermuda grass, Quack grass, Jonson grass, Nutsedge, Poison Ivy, Thistles, or others as specified. All top soil shall be tested by a recognized laboratory for organic matter content, pH and soluble salts. A pH of 6.0 to 7.5 and an organic content of not less than 1.5 percent by weight is required. If pH value is less than 6.0, lime shall be applied and incorporated with the top soil to adjust the pH to 6.5 or higher. Top soil containing soluble salts greater than 500 per million shall not be used.



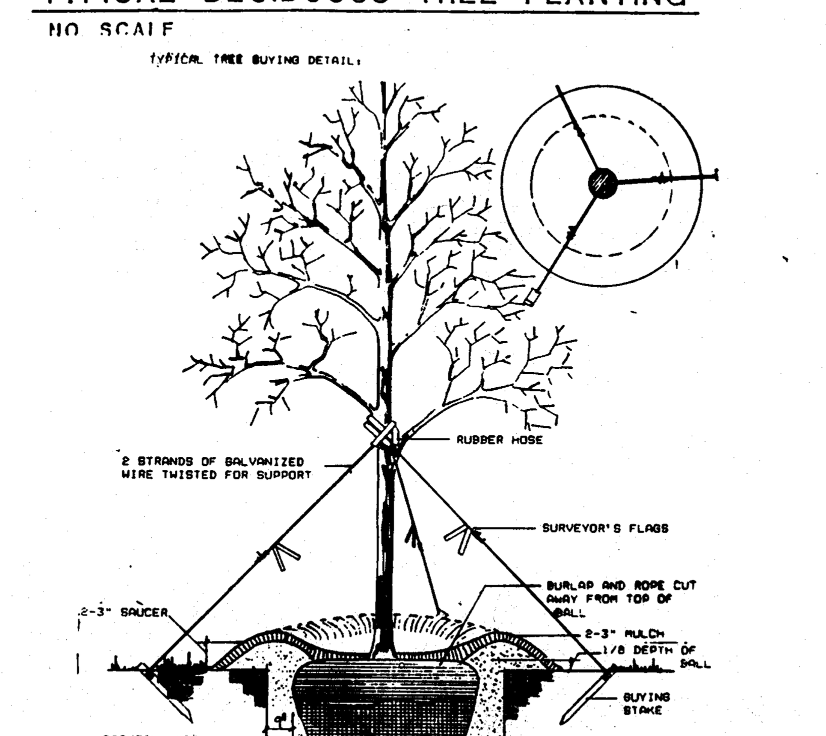
TYPICAL B&B SHRUB PLANTING
NO SCALE







TYPICAL DECIDUOUS TREE PLANTING
NO SCALE



PLANT LIST - PARCEL A

KEY	QUANTITY	NAME (BOTANICAL/COMMON)	SIZE	CONDITION
EH	6	Carpinus betulus fastigiata/ European Hornbeam	1¾"-2" Cal.	B&B
HL	4	Gleditsia triacanthos inermis "Skyline"/ "Skyline Honeylocust	2½"-3" Cal.	B&B
PC	14	Pyrus calleryana "Newport"/ "Cleveland" Pear	2½"-3" Cal.	B&B
PP	52	Prunus cerasifera "Thundercloud"/ Purpleleaf Flowering Plum	8"-10' Ht.	B&B
ZG	21	Zelkova serrata "Green Vase"/ "Green Vase" Zelkova	2½"-3" Cal.	B&B
ZV	42	Zelkova Serrata "Village Green"/ "Village Green" Zelkova	2½"-3" Cal.	B&B
	36	Picea abies/Norway Spruce	8' Ht.	B&B
	19	Picea abies/Norway Spruce	10' Ht.	B&B
	236	Ilex glabra "Compacta"/ Dwarf Inkberry	24" Spread	Cont.
	529	Juniperus chinensis "Parsonii"/ "Parsons" Juniper	24" Spread	Cont.

PLANT LIST - PARCEL B

KEY	QUANTITY	NAME (BOTANICAL/COMMON)	SIZE	CONDITION
WH	18	Crataegus viridis "Winter King"/ "Winter King" Hawthorn	2½"-3" Cal.	B&B
ZG	30	Zelkova serrata "Green Vase"/ "Green Vase" Zelkova	2½"-3" Cal.	B&B
	2	Picea abies/Norway Spruce	8' Ht.	B&B

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

Joyce M Boyd [signature] 2/26/96
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[signature] 2/29/96
Director — Date

[signature] 2/29/96
Chief, Division of Land Development and Research — Date

[signature] TC 2/27/96
Chief, Development Engineering Division — M.K. — Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

Prepared For:
The Howard Research and Development Corporation
10275 Little Patuxent Pkwy.
Columbia, Md. 21044
(410)992-6027

Landscape Specifications, Details & Plant List

Route 175 Commercial
Parcel "A"

6th Election District — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.: GT.		NT Commercial	95003
CHK.:	DATE: January 1996	TAX MAP No.: 36	SHEET: 5 of 13

SDP-96-79

578359

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John R. Robertson 2/20/96
Howard S.C.D. Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

[signature] 1/17/96
Signature of Developer/Builder Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia Engle 2/20/96
Natural Resources Conservation Service Date

Approved: For Public Water & Sewerage Systems Howard County Health Dept.
Joyce M Boyd per 8m 2/26/96
County Health Officer Date

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical 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] 1-17-96
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[signature] 2/29/96
Director Date

Gina Sivinnany 2/29/96
Chief, Division of Land Development and Research Date

[signature] TC 2/27/96
Chief, Development Engineering Division M.K. Date

For Sediment Control Only

OWNER / PREPARED FOR:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
PHONE: (410) 992-6027

GLW GUTSCHICK LITTLE & WEBER, P.A.
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TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186

DES.	DRN. G+.	CHK.

DATE	REVISION	BY	APP'R.

Sediment Control Plan
ROUTE 175 COMMERCIAL
PARCEL "A"
GUILFORD ELECTION DISTRICT No. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=50'	NT - COMMERCIAL	95003
DATE	TAX MAP No.	SHEET
January 1996	36	6 OF 13

SDP-96-79
SDP-96-79

Existing
Basin #2

Drainage Area	21.70 Ac.±
Storage Req.	78,120 c.f.
Storage Prov.	125,780 c.f.
Clean Out Elev.	371.81
Top of Dam	379.00
Bottom Elev.	371.00
Riser Crest Elev.	374.10
Permanent Pool	372.60

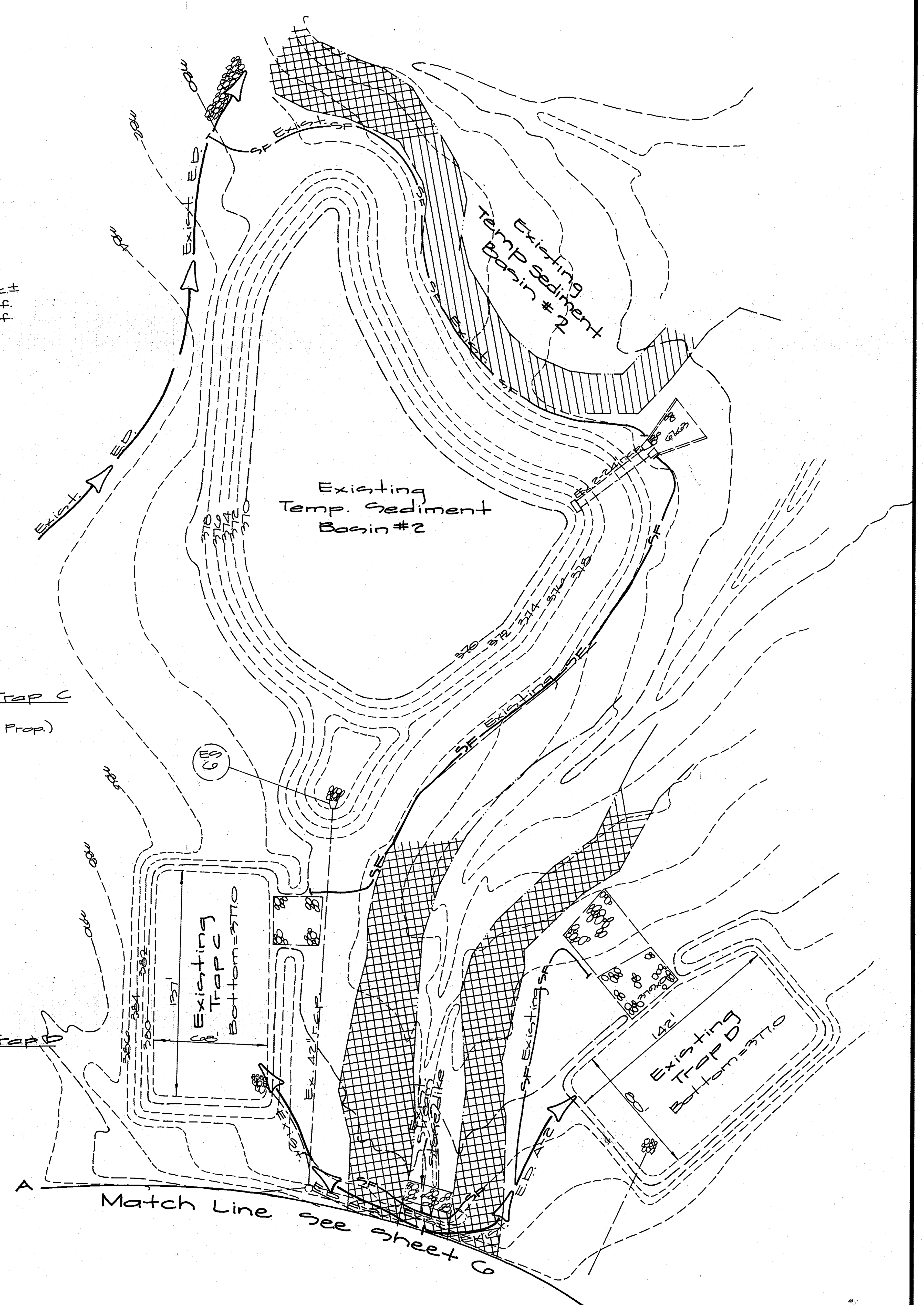
Existing Stone/
Rip Rap Outlet Sediment Trap C
ST-IV

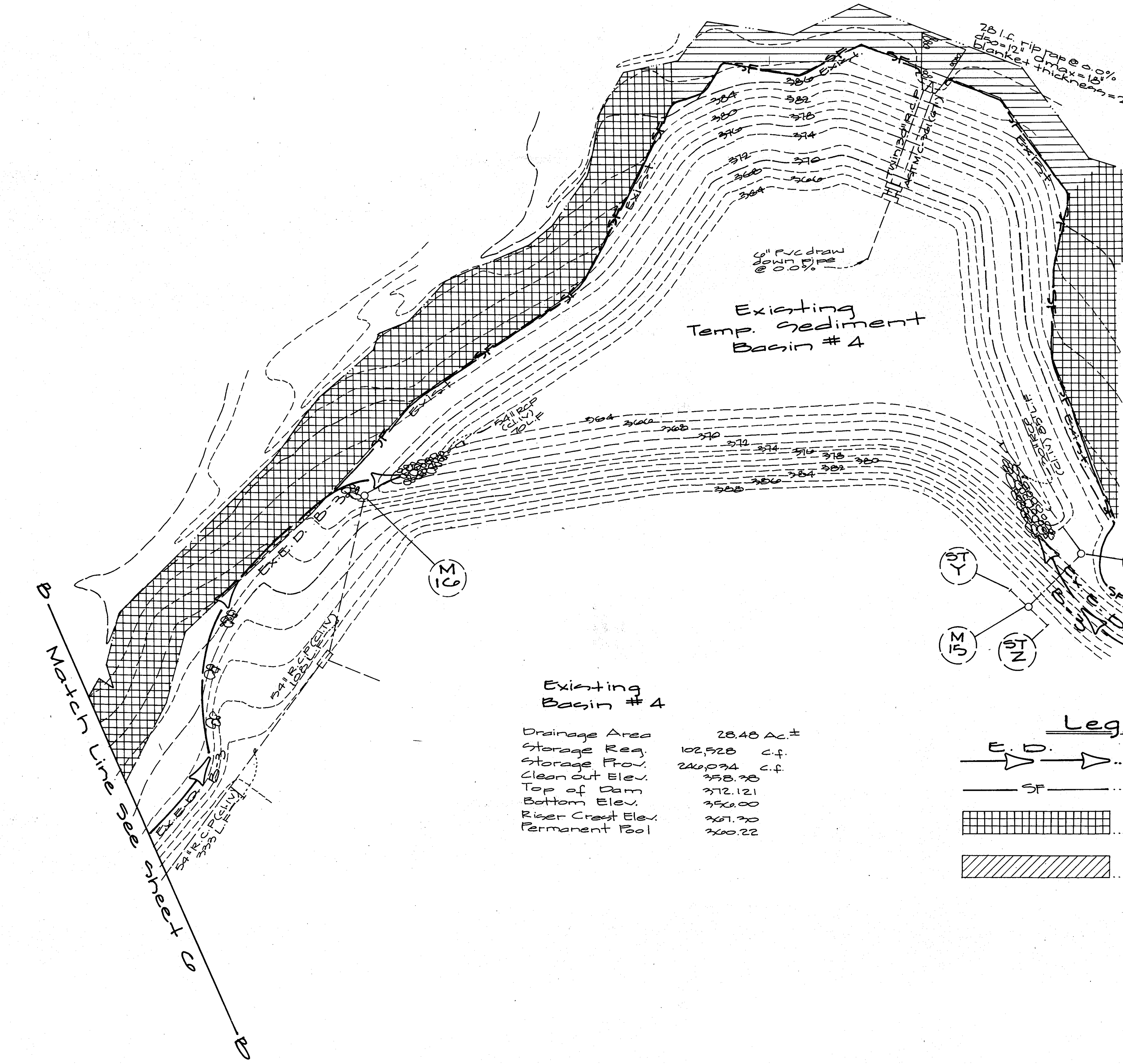
Drainage Area = 7.50 Ac. (Ex. & Prop.)
Storage Required = 27,000 c.f.
Storage Provided = 57,830 c.f.
Weir Length = 10'
Limit of Wet storage = 379.00
Limit of Storage = 382.00
Storage Depth = 5'
Clean Out Elev. = 378.00
Top of Dam Elev. = 383.0
Detail #10-A
Bottom Elev. = 377.00

Weir Crest Elev. = 382.00

Existing Stone
Rip Rap Outlet Sediment Trap D
ST-IV

Drainage Area = 9.8 Ac. (Ex.)
Storage Required = 35,280 c.f.
Storage Provided = 77,242 c.f.
Weir Length = 12'
Bottom Elev. = 377.00
Limit of Storage = 379.00
Storage Depth = 5.5'
Cleanout Elev. = 378.00
Top of Dam Elev. = 383.50
Detail #10-A
Limit of Wet storage = 379.00
Weir Crest Elev. = 382.5





Existing
Basin #4

Drainage Area	28.48 Ac.±
Storage Req.	102,528 c.f.
Storage Prov.	246,034 c.f.
Clean out Elev.	358.38
Top of Dam	372.121
Bottom Elev.	356.00
Riser Crest Elev.	367.30
Permanent Pool	360.22

Legend

E.D. .... Existing Earth Dike
SF .... Existing Silt Fence
.... Stream Buffer
.... Wetland Buffer

Approved: For Public Water & Sewerage Systems Howard County Health Dept.
Joyce M Boyd ... per ... 2/26/96
County Health Officer — Date

Approved: Howard County Department of Planning & Zoning
... 2/29/96
Director — Date
... 2/29/96
Chief, Division of Land Development & Research — Date
TC
... 2/27/96
Chief, Development Engineering Division — Date
M.K.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

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Signature of Developer/Builder — Date

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical 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."

... 1-17-96
Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia ... 2/20/96
Natural Resources Conservation Service — Date

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John R Robertson 2/20/96
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CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

DATE	REVISION	BY	APP'R.

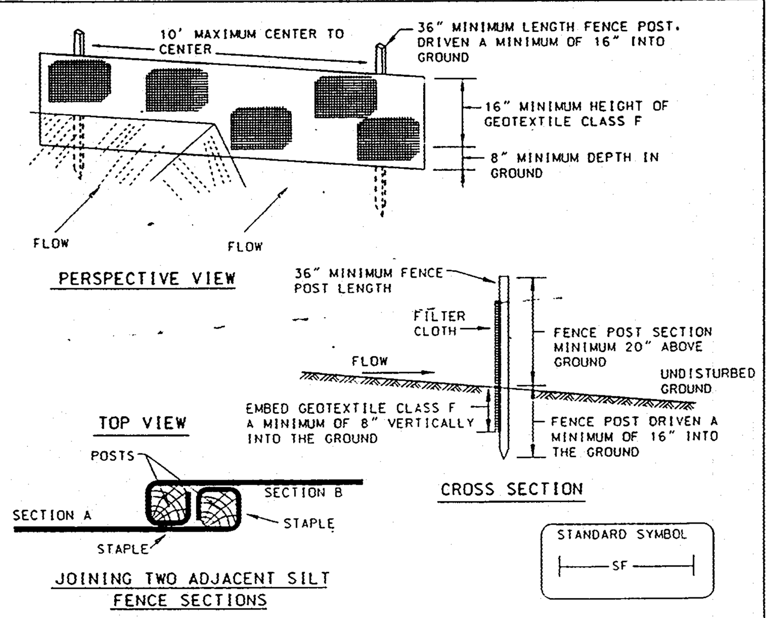
PREPARED FOR:
The Howard Research and Development Corporation
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044
Phone (410) 992-6027

Sediment Control Plan
Route 175 Commercial
Parcel "A"
6th. Election District — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.: WSJ/Gt.	1" = 50'	NT	95003
CHK.:	DATE	TAX MAP No.	SHEET
	January 1996	36	7 of 13

SDP-96-79

DETAIL 22 – SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

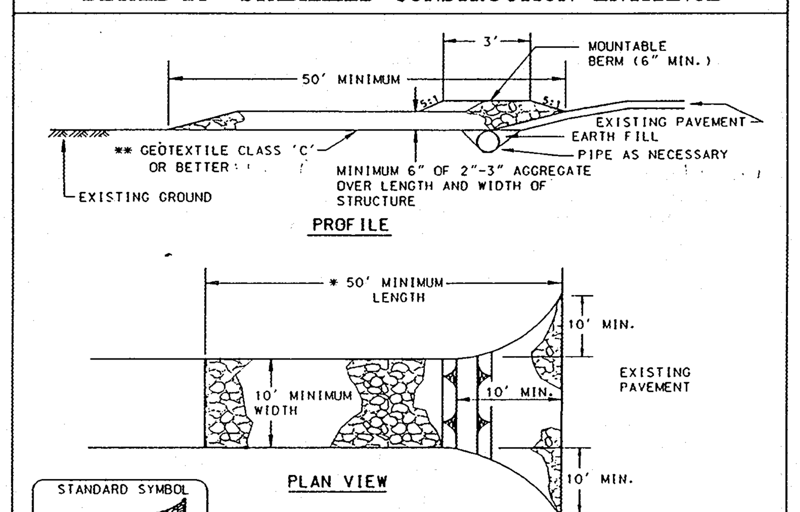
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 – STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length – minimum of 50' (*30' for single residence lot).

2. Width – 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

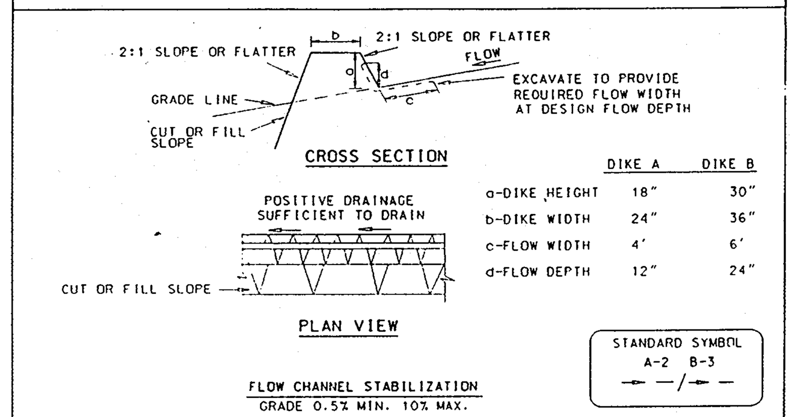
4. Stone – crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water – all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location – A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 – EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" – 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

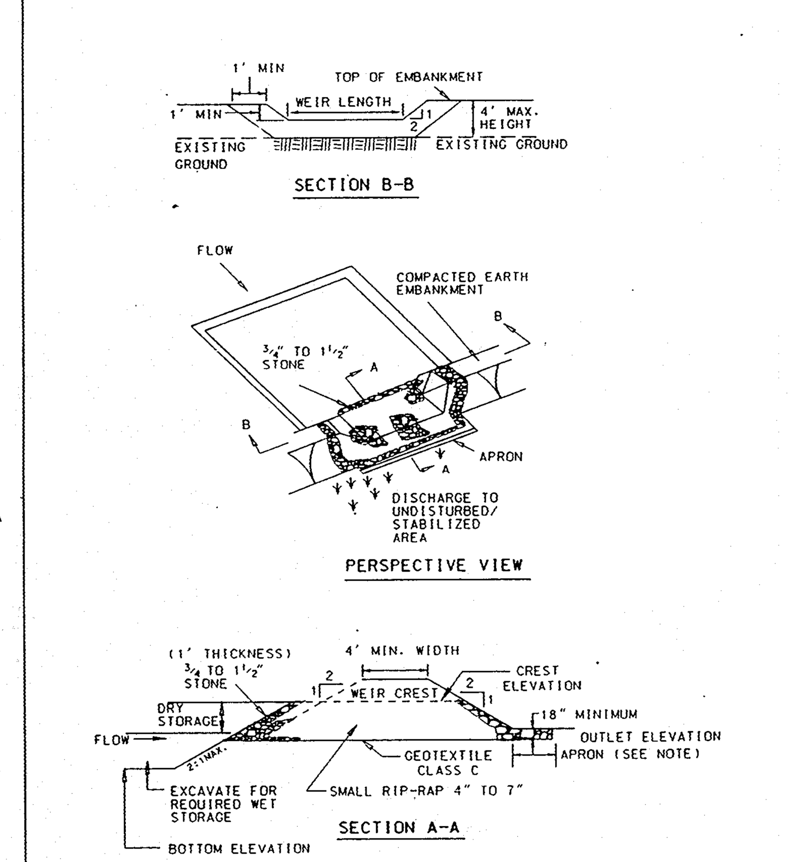
6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 10A – STONE / RIP-RAP OUTLET SEDIMENT TRAP – ST IV



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 16	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STONE / RIP-RAP OUTLET SEDIMENT TRAP – ST IV

Constuction Specifications

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.

2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.

3. All cut and fill slopes shall be 2:1 or flatter.

4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.

5. Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 9).

6. Geotextile Class C shall be placed over the bottom and sides of the outlet channelprior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.

7. 4" – 7" stone shall be used to construct the weir and 4" – 12" or Class I rip-rap shall be used to construct the outlet channel.

8. Outlet – An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.

9. Outlet channel must have positive drainage from the trap.

10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ of the wet storage depth of the trap (900 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

11. The structure shall be inspected periodically after each rain and repaired as needed.

12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 16A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit and arrange for pre-construction meeting with Sediment Control Inspector. (1 day)
2. Inspect and maintain Sediment Basins 2 and 4 as required. Inspect other existing sediment controls and conveyance devices indicated on the plans and maintain as required. (1 week)
3. Install stabilized construction entrances. (1 week)
4. Fine grade site. (1 month)
5. Construct building, utilities, curb and gutter and sidewalks. (1 year)
6. Base pave. (1 month)
7. Install landscaping and stabilize remaining areas with sod or grass seed and mulch. (2 weeks)
8. When area draining to sediment controls have been stabilized and permission has been granted by the Sediment Control Inspector, remove backfill or grade and stabilize as directed. (1 month)
9. Install surface course paving.
10. End construction.

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. (410) 313-1880

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 1994 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 and 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, Chapter 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL (Sec. G-20) for permanent seedings, sod, temporary seedings, and mulching. 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	: 17.4	Acres
Area Disturbed	: 17.4	Acres
Area to be roofed or paved	: 11.25	Acres
Area to be vegetatively stabilized	: 6.15	Acres
Total Cut	: 11,140	Cu. Yds.
Total Fill	: 11,140	Cu. Yds.
Off-site waste/borrow area location:		N/A

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 control 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.

PERMANENT SEEDING NOTES

Apply to graded or cleared area 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 (unless previously loosened).

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 feet) 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 unreaform 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 1-1/2 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 (unless previously loosened).

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 2-1/2 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 1-1/2 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

Joyce M Boyd md per [signature] 2/26/96
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

[signature] 2/29/96
Director — Date

[signature] 2/29/96
Chief, Division of Land Development and Research — Date

[signature] M.K. 2/22/96
Chief, Development Engineering Division — Date

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the HSCD."

[signature] 1/17/96
Signature of Developer/Builder — Date

ENGINEER'S CERTIFICATE

"I certify that this plan for erosion and sediment control represents a practical 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] 1-17-96
Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

John R Robertson 2/2/96
Howard S.C.D. — Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

Patricia England 2/8/96
Natural Resources Conservation Service — Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK – BURTONSVILLE, MARYLAND 20866
TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186 | DES. | DRN. G+ | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :
The Howard Research & Development Corporation
10275 Little Patuxent Parkway
Columbia, Md. 21044
(410) 992-6027

Sediment Control Details & Notes
Route 175 Commercial
Parcel "A"
6th Election District — Howard County, Maryland

SCALE	ZONING	G. L. W. FILE No.
—	NT	95003
DATE	TAX MAP No.	SHEET
January, 1996	36	8 of 13

SDP-96-79

Structure Schedule

No	Type	Top elev.	Inv. In.	Inv. Out	Std. Detail	Location
I-100	Single WR inlet	394.50	—	390.50	Ho. Co. STD 4.37	See Plan
I-101	Single WR inlet	395.00	390.60	390.50	" "	See Plan
I-102	A-10 inlet	397.00	Build inlet over existing pipe		Ho. Co. STD. 4.41	See Plan
I-103	" "	395.51	"	"	" (Modified) "	P&L Right sta 1+16.08
I-104	" "	386.87	Build inlet over existing pipe		" "	See Plan
M-100	Manhole	394.51	386.89	385.77	Ho. Co. G. 5.12	" "
M-101	"	397.62	387.27	387.11	" "	" "
M-102	"	396.50	388.44	388.09	" "	" "
M-103	"	401.00	390.29	389.10	" "	" "
M-104	"	397.55	389.35	389.25	" "	" "
M-105	"	397.85	390.81	390.52	" "	" "
M-106	"	397.78	391.69	391.59	" "	" "
M-107	"	397.78	392.35	392.25	" "	" "
M-108	"	397.89	—	392.99	" "	" "
M-109	"					

Utility Construction Responsibilities Legend

Group II Work .....The Howard Research & Development Corporation.
Group III Work .....The Site Development Contractor.
Group IV Work.....The Building Contractor.

Note:

Group IV Work includes cleanout.
C.P.P. indicates corrugated plastic double wall pipe.
(Hi-Q by Hancor or N-12 by ADS).

Storm Drain Profile

Scales
Horiz.: 1" = 50'
Vert. : 1" = 5'

Note: All storm drain indicated on this plan is to be privately maintained

Approved: for Public Water & Sewerage Systems, Howard County Health Dept.
Deputy Health Officer — Date 2/26/96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director — Date 2/29/96
Chief, Division of Land Development & Research — Date 2/29/96
Chief, Development Engineering Division M.K. — Date 2/27/96

GLW GUTSCHICK LITTLE & WEBER, P.A.
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DATE	REVISION	BY	APP'R.
2-26	Revised Str. schedule for Inlets I-102, I-103	KLP	

PREPARED FOR:
The Howard Research & Development Corporation
10275 Little Patuxent Parkway
Columbia, Maryland 21044
Phone: (410)992-6027

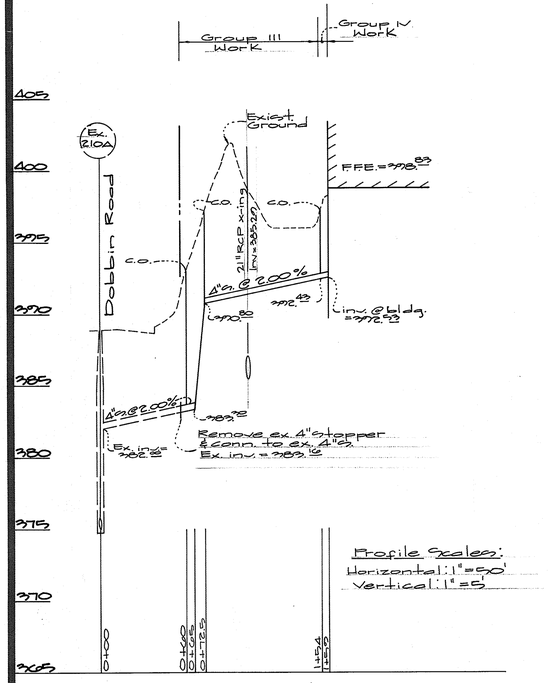
Storm Drain Profiles & Structure Schedule

Route 175 Commercial
Parcel "A"

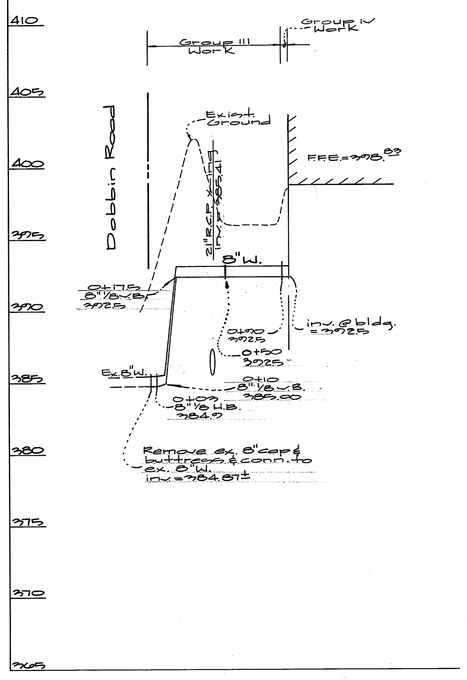
6th Election District — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.: G.T.	As shown	NT	95003
CHK.:	DATE	TAX MAP No.	SHEET
	January, 1996	30	9 of 13

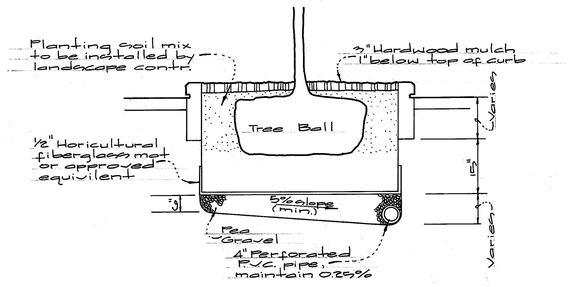
SDP-96-79



Sewer Profile

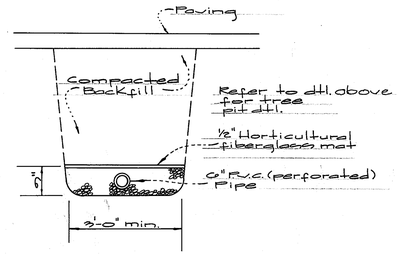


Water Profile



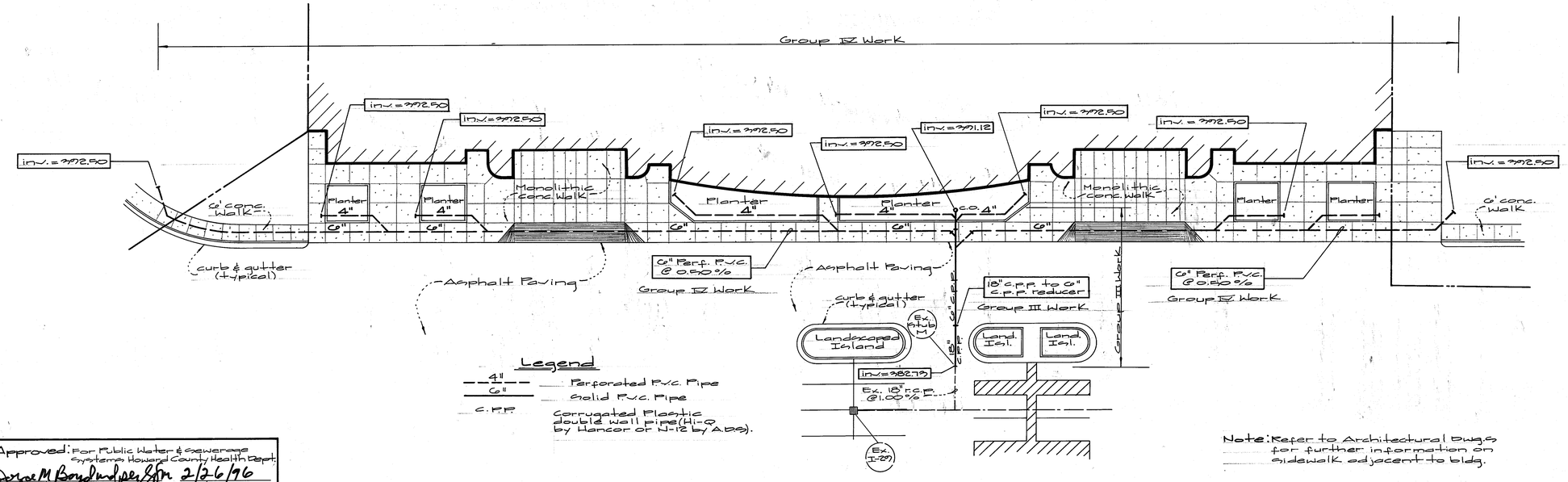
Planter Pit Detail

N.T.S.



Perimeter Drain

N.T.S.



Planter & Perimeter Drain Detail

Scale: 1"=20'

Note: Refer to Architectural Dwgs for further information on sidewalk adjacent to bldg.

Approved: For Public Water & Sewerage Systems, Howard County Health Dept.
County Health Officer — Date 2/26/96

Approved: Howard County Department of Planning & Zoning
Director — Date 2/29/96
Chief, Division of Land Development — Date 2/29/96
Chief, Development Engineering Division — Date 2/27/96

GLW GUTSCHICK LITTLE & WEBER, P.A.
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DATE	REVISION	BY	APP'R.

PREPARED FOR:
The Howard Research and Development Corporation
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044
(410)992-6027

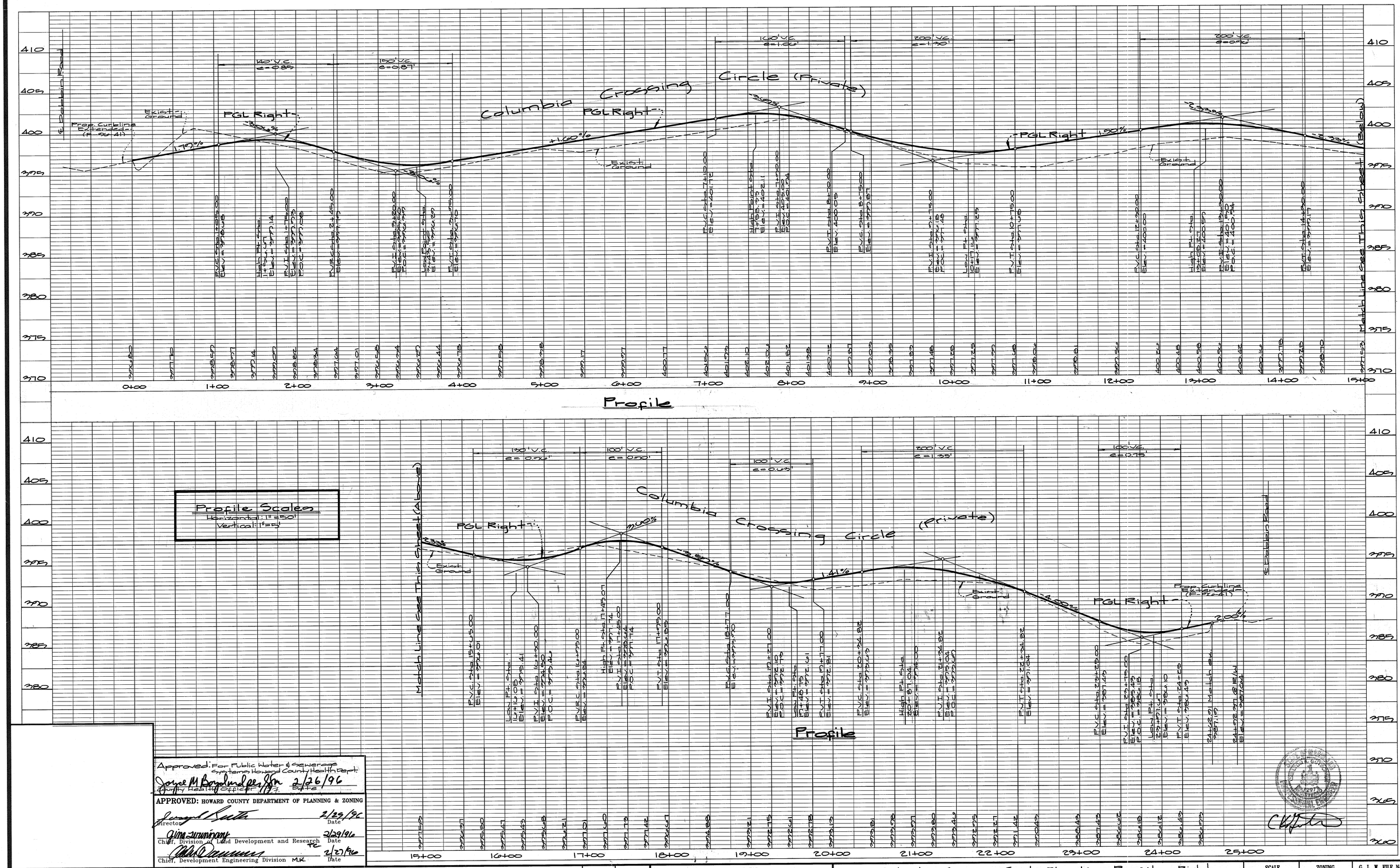
Water and Sewer Profiles, Planter and Perimeter Drain Detail

Route 175 Commercial
Parcel "A"

Guilford Election District No. 6 — Howard County, Maryland

DES.:	SCALE	ZONING	G.L.W. FILE No.
	As shown	NT	95-003
DRN.: W.S.J.	DATE	TAX MAP No.	SHEET
CHK.:	January, 1996	37	10 OF 13

SDP-96-79



Approved: For Public Water & Sewerage Systems Howard County Health Dept.

Joyce M Boyd Anderson 2/26/96
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director 2/29/96 Date

Chief, Division of Land Development and Research 2/29/96 Date

Chief, Development Engineering Division M.K. 2/27/96 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.

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DES.	DRN.	CHK.
MJT	WSJ	

DATE	REVISION	BY	APP'R.
8-96	Revised PGL from 7+00 to 24+25	KLP	

PREPARED FOR:

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
PHONE: (410) 992-6027

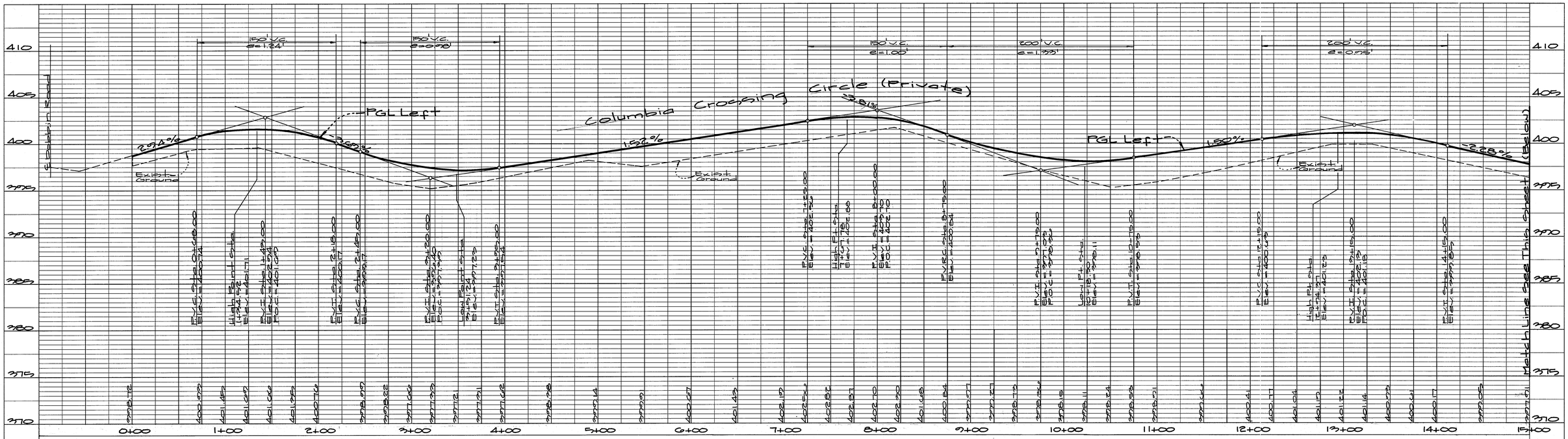
Columbia Crossing Circle Flow Line Profile - Right

ROUTE 175 COMMERCIAL
PARCEL "A"

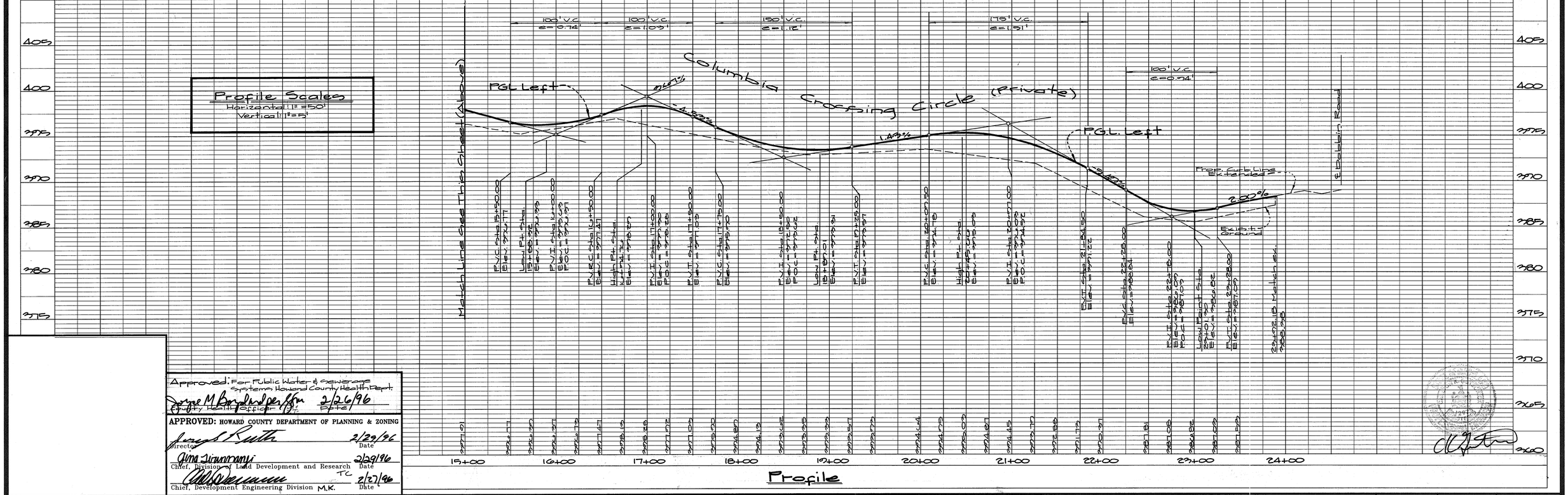
GUILFOFD ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT-COMMERCIAL	95003
DATE	TAX MAP No.	SHEET
January, 1996	36	11 of 13

SDP-96-79



Profile



Profile

Profile Scales
Horizontal: 1" = 50'
Vertical: 1" = 5'

Approved: For Public Water & Sewerage Systems, Howard County Health Dept.
Jayne M Boyden Gaffin — 2/26/96
Quality Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director — 2/29/96 Date
Chief, Division of Land Development and Research — 2/29/96 Date
Chief, Development Engineering Division M.K. — 2/27/96 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
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TEL: (301) 421-4024 NO. VA.: (301) 989-2524 BALT: (410) 880-1820 FAX: (301) 421-4186
DES. MJT | DRN. WSJ | CHK.

DATE	REVISION	BY	APP'R.
8-7-96	Revised PGL from 7+00 to 23+28	KLF	

PREPARED FOR :
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
PHONE: (410) 992-6027

Columbia Crossing Circle Flow Line Profile -- Left

ROUTE 175 COMMERCIAL
PARCEL "A"
GUILFOFD ELECTION DISTRICT NO. 6 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT-COMMERCIAL	95003
DATE	TAX MAP No.	SHEET
January 1996	36	12 of 13

SDP-96-79

PAVEMENT MARKING NOTES

1. ALL PAVEMENT MARKINGS TO BE APPLIED USING "SETFAST PREMIUM ALKYD TRAFFIC PAINT" BY SHERWIN WILLIAMS OR APPROVED EQUAL.
2. EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS FOR THIS CONTRACT WILL BE REMOVED BY THE CONTRACTOR BY ANY METHOD WHICH IS APPROVED BY THE ENGINEER.
3. EXACT LOCATION OF STOP LINES IS TO BE ESTABLISHED IN THE FIELD BY THE HOWARD COUNTY TRAFFIC DIVISION. CALL DIANE SCHWARZMAN AT 313-2490.

*STOP BARS & STOP SIGNS AT DOBBIN ROAD ARE PART OF F-02-41.

DOBBIN ROAD (80' R/W) (PUBLIC)

PT = 96+63.11
PC = 98+76.36
S 17°27'07" E 213.24'
R = 1040.00' L = 190.95'
30' BRL
R = 642.00' L = 39.67'
N 69°00'27" E 34.85
R = 65.00' L = 98.01'
N 17°23'17" W 25.41'
N 72°39'43" E 64.20'
S 62°10'41" W 72.28'

MD STATE GRID NAD '83

PARCEL "B" "ROUTE 175 COMMERCIAL" PLAT No. ZONED: NT - COMMERCIAL

PARCEL "A" "ROUTE 175 COMMERCIAL" 466,404 ± OR 10.7072 Ac. ZONED: NT - COMMERCIAL

OPEN SPACE LOT 1 "ROUTE 175 COMMERCIAL" PLAT No. ZONED: NT - OPEN SPACE

375.31'
374.31'
N 47°48'05" E
S 47°48'05" W
ROLLED CURB
TRANSITION FLUSH CURB
ROLLED CURB
EXIST. H.C. RAMPS TO BE REMOVED (TYP.)
EXIST. PLANTERS TO BE REMOVED (TYP.)
END 4'X10' WHITE SKIPS (SEE DT'L.)
EXIST. CURB
S 42°11'55" E 161.50'
STORE FRONT CURB
BOLLARDS (TYP.)
LIGHTS (TYP.)
S 42°11'55" E 78.42'
S 02°48'05" W 58.48'
S 72°39'43" E 111.06'
N 10°37'33" E 33.48'
R = 65.00' L = 42.17'
PC = 7+64.76
PT = 8+06.93
S 47°48'05" W 3.50
N 42°11'55" W
BEGIN 4'X10' WHITE SKIPS (SEE DT'L.)
PARCEL "B" "ROUTE 175 COMMERCIAL" PLAT No. ZONED: NT - COMMERCIAL
E 1,364,750
N 537,760
E 1,365,500
N 537,000
R = 65.00' L = 102.10'
PC = 17+41.41
N 42°11'55" W 636.84'
S 47°48'05" W 3.50
PT = 18+43.51
N 50°18'44" E 63.91
END 4'X10' WHITE SKIPS (SEE DT'L.)
BEGIN 4'X10' WHITE SKIPS (SEE DT'L.)
COLUMBIA CROSSING CIRCLE
ONLY
5'-0"
5'-9"
SEE (C)
(G) (H) H IS OPPOSITE VIEW
(I)
(D) (E) E IS OPPOSITE VIEW
PAVEMENT SYMBOLS
10' 30' 10'
4"
(A) - 4" X 10' WHITE SKIP
TYPICAL SPACING LONGITUDINAL PAVEMENT LINES

REDLINE NOTE:
REDLINE REVISIONS DATED 8-5-04 AND NOTED HEREON MEET THE CONDITIONS OF THE APPROVAL BY THE HOWARD COUNTY DPZ DATED 7-26-04.

DAVID THOMAS SCHROCK No. 10163 REGISTERED PROFESSIONAL ENGINEER STATE OF MARYLAND 8/6/04

PAVING LEGEND
P-2 PAVING
P-5 PAVING

LEGEND
(A) PAVEMENT LINES - 4" X 10' WHITE SKIP
(B) PAVEMENT LINES - 4" WHITE SOLID
(C) PAVEMENT SYMBOL - LEFT TURN ARROW
(D) PAVEMENT SYMBOL - RIGHT TURN ARROW
(E) PAVEMENT SYMBOL - ONLY
(F) PAVEMENT LINES - 4" YELLOW SOLID
(G) PAVEMENT SYMBOL - LEFT TURN AND THROUGH ARROW
(H) PAVEMENT SYMBOL - RIGHT TURN AND THROUGH ARROW
(I) PAVEMENT SYMBOL - THROUGH ARROW
(J) PAVEMENT LINES - 24" WHITE TRANSVERSE STOP LINE (SEE PMT. MARKING NOTE #3)

SIGNING NOTES
1. SIGN ERECTED AT THE SIDE OF THE ROAD SHALL BE MOUNTED AT A HEIGHT OF AT LEAST 7 FEET MEASURED FROM THE BOTTOM OF THE SIGN TO THE NEAR EDGE OF THE PAVEMENT.
2. ALL SIGNS TO BE MOUNTED ON 4"X4"X12' WOLMANIZED (PRESSURE TREATED) WOODEN POSTS.
3. SIGNS SHALL BE 12' TO 18' FROM EDGE OF SIGN TO CURB LINE. STOP SIGNS SHALL BE LOCATED 15' BACK FROM INTERSECTING STREET CURB LINE OR AS DIRECTED BY HOWARD COUNTY TRAFFIC DIVISION.

SIGNING DETAILS
(1) R4-7 24" X 30"
(2) R3-8 (FORMAT) 30"X 90"
(3) R3-8 (FORMAT) 36" X 30"
(4) R1-1 30" X 30"
ONLY ONLY
ONLY ONLY ONLY
STOP

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS HOWARD CO. HEALTH DEPT.
Jorge M Bonduber Jr. 2/26/96
Chief, Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director — Date 2/29/96
Chief, Division of Land Development and Research — Date 2/29/96
Chief, Development Engineering Division MK. — Date 2/27/96

OWNER / PREPARED FOR:
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
PHONE: (410) 992-6027

DATE	REVISION	BY	APP'R.
8-5-2004	REVISED STOREFRONT SIDEWALK, CURB, PLANTERS & BOLLARDS (BY URS CORPORATION)	DTM	

GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, SURVEYORS, PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE · SUITE 250 · BURTONSVILLE OFFICE PARK · BURTONSVILLE, MD. 20866
TELEPHONE: (301)421-4024 NO.VA. (301)989-2524 BALTO. (301)880-1820 FAX (301)421-4186

PAVING, SIGNAGE & PAVEMENT MARKING PLAN
ROUTE 175 COMMERCIAL
PARCEL "A"
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND

DES.:	SCALE	ZONING	G.L.W. FILE No.
DRN.:	1" = 50'	NT-COMMERCIAL	95-009
CHK.:	DATE January, 1996	TAX MAP No. 30	SHEET 13 OF 13

SDP-96-79